An Exploratory Investigation of Post Purchase Consumer Satisfaction Within a Cognitive Process Framework.

David Joseph Ortinau
Louisiana State University and Agricultural & Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_disstheses

Recommended Citation
https://digitalcommons.lsu.edu/gradschool_disstheses/3533

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Historical Dissertations and Theses by an authorized administrator of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or “target” for pages apparently lacking from the document photographed is “Missing Page(s)”. If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.

2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in “sectioning” the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.
ORTINAU, DAVID JOSEPH

AN EXPLORATORY INVESTIGATION OF POST PURCHASE CONSUMER SATISFACTION WITHIN A COGNITIVE PROCESS FRAMEWORK

The Louisiana State University and Agricultural and Mechanical Col. PH.D. 1980

University Microfilms International 300 N. Zeeb Road, Ann Arbor, MI 48106

Copyright 1980 by ORTINAU, DAVID JOSEPH

All Rights Reserved
PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark ✓.

1. Glossy photographs ______
2. Colored illustrations ______
3. Photographs with dark background ______
4. Illustrations are poor copy ______
5. Print shows through as there is text on both sides of page ______
6. Indistinct, broken or small print on several pages ✓
7. Tightly bound copy with print lost in spine ______
8. Computer printout pages with indistinct print ______
9. Page(s) ______ lacking when material received, and not available from school or author
10. Page(s) ______ seem to be missing in numbering only as text follows
11. Poor carbon copy ______
12. Not original copy, several pages with blurred type ______
13. Appendix pages are poor copy ______
14. Original copy with light type ______
15. Curling and wrinkled pages ______
16. Other ____________________________
AN EXPLORATORY INVESTIGATION OF POST PURCHASE
CONSUMER SATISFACTION WITHIN A COGNITIVE
PROCESS FRAMEWORK

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Marketing

by

David Joseph Ortinau
B.S., Southern Illinois University, Carbondale, 1970
M.B.A., Illinois State University, 1971
August, 1980
ACKNOWLEDGMENTS

I wish to thank my Major Professor and Chairman, Dr. Joe F. Hair, Jr., whose patience, guidance, and encouragement over the past three years have meant a great deal to me. His interest in and knowledge of my topic as well as his concern for my development as a scholar proved to be invaluable.

There is no appropriate way for me to express my thanks and sincere gratitude to Dr. Alvin C. Burns for his guidance, encouragement, knowledge and interest in my topic throughout this endeavor. Without the helpful conceptual and theoretical suggestions and positive comments of Dr. Burns, this project would have been much more difficult, if not impossible. Dr. Burns, offered constructive criticism and useful suggestions to solve those problems most frustrating in the conceptual and writing stages. Therefore, to him I express my indebtedness and thanks as a friend.

I am also indebted to Dr. Fred R. Endsley, Dr. Mary C. Harrison, and Dr. Edmund R. Gray for helpful suggestions and comments in the early stages of the research as well as their patience and encouragement throughout the study.

I also extend thanks to Louisiana State University in general and the Marketing Department within the College of Business Administration, whose three years of financial assistance directly and
indirectly related to this research will always be remembered and appreciated.

Special thanks goes to Mr. Charles W. Ancona, Sales Manager at Woodfin-Smith Pontiac, Inc., Baton Rouge, Louisiana. Without Mr. Ancona's kind cooperation in the sampling stage, the time and cost of doing the fieldwork would have been much greater.

I extend a very special thanks of appreciation to Ms. Mary Jo Brooks for her superlative typing of this manuscript. Without her self-sacrificing, energetic effort in the late stages, this research would not have been completed as scheduled. Her saintlike patience with me and diligent typing efforts will always be remembered and deeply appreciated.

Last but not least, I extend a personal thanks to my mother and family as well as my friends whose patience, love, and encouragement gave me added strength to complete this project.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xiv</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>xv</td>
</tr>
</tbody>
</table>

## I. A FOCAL POINT FOR EMPIRICAL RESEARCH ON CONSUMER POST PURCHASE SATISFACTION/DISSATISFACTION AS A COGNITIVE EVALUATIVE PROCESS

1. INTRODUCTION TO THE PROBLEM AREA
   - Problem Setting | 1
   - Background of the Problem | 2
   - TWO NECESSARY ALTERNATIVE CONCEPTUALIZATIONS
     - Similarities Between the Two Conceptualizations | 9
     - Differences Between the Two Conceptualizations | 10
   - JUSTIFICATION FOR DOING A DISSERTATION ON THE CONSUMER POST PURCHASE SATISFACTION EVALUATIVE PROCESS
     - Purposes of the Research Study | 12
     - Significance of the Research | 13
     - EXPECTED CONTRIBUTIONS | 14
     - SUMMARY OF CHAPTER ONE | 15

## II. THEORETICAL FOUNDATION FOR THE STUDY OF CONSUMERS' POST PURCHASE SATISFACTION IN A COGNITIVE FRAMEWORK

1. INTRODUCTION | 18
2. REVIEW OF THE LITERATURE
   - Introduction | 19
   - The Concept of Consumer Satisfaction | 20
   - Considerations About the Concept of Consumer Satisfaction | 24
   - Attitude Formulation and Change Processes | 25
   - Assimilation Theory | 29
   - Contrast Theory | 32
   - Supportive Empirical Research
     - Cardozo's Study | 33
     - Cohen and Goldberg's Study | 34
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment Multiplier</td>
<td>77</td>
</tr>
<tr>
<td>Involvement Multiplier</td>
<td>77</td>
</tr>
<tr>
<td>Operational Definitions of the Model's Components</td>
<td>78</td>
</tr>
<tr>
<td>Expected Satisfaction</td>
<td>78</td>
</tr>
<tr>
<td>Definition</td>
<td>79</td>
</tr>
<tr>
<td>Measurement</td>
<td>79</td>
</tr>
<tr>
<td>Actual Satisfaction</td>
<td>80</td>
</tr>
<tr>
<td>Definition</td>
<td>81</td>
</tr>
<tr>
<td>Measurement</td>
<td>81</td>
</tr>
<tr>
<td>Commitment to the Purchased Object</td>
<td>82</td>
</tr>
<tr>
<td>Involvement with the Purchased Object</td>
<td>83</td>
</tr>
<tr>
<td>RESEARCH QUESTIONS CONSIDERED IN THE STUDY AND STATEMENTS OF THE RESEARCH HYPOTHESES</td>
<td>85</td>
</tr>
<tr>
<td>Research Questions Considered in the Investigation</td>
<td>85</td>
</tr>
<tr>
<td>Statements of the Hypotheses Pertaining to the Study</td>
<td>87</td>
</tr>
<tr>
<td>Hypotheses Relating to the Commitment Variable</td>
<td>87</td>
</tr>
<tr>
<td>Hypotheses Relating to the Involvement Variable</td>
<td>90</td>
</tr>
<tr>
<td>Hypotheses Relating to Felt Satisfaction</td>
<td>92</td>
</tr>
<tr>
<td>RESEARCH METHODOLOGY AND METHODOLOGICAL CONSIDERATIONS</td>
<td>96</td>
</tr>
<tr>
<td>Introduction</td>
<td>96</td>
</tr>
<tr>
<td>A Description of the Field Survey</td>
<td>96</td>
</tr>
<tr>
<td>An Overview of the Research Procedure</td>
<td>96</td>
</tr>
<tr>
<td>Rationale Underlying the Use of a Survey Research Design</td>
<td>97</td>
</tr>
<tr>
<td>Selection of the Product and Product-Related Attributes</td>
<td>98</td>
</tr>
<tr>
<td>Selection of the Product</td>
<td>98</td>
</tr>
<tr>
<td>Selection of the Product-Related Attribute</td>
<td>100</td>
</tr>
<tr>
<td>Sample Design and Procedure Used in the Investigation</td>
<td>102</td>
</tr>
<tr>
<td>Definition of the Population</td>
<td>102</td>
</tr>
<tr>
<td>A Description of the Sampling Procedure</td>
<td>102</td>
</tr>
<tr>
<td>The Data Collection Instrument</td>
<td>105</td>
</tr>
<tr>
<td>The Self-Administered Questionnaire</td>
<td>105</td>
</tr>
<tr>
<td>Comments on the Measurement Methods Used in Assessing the Needed Information</td>
<td>106</td>
</tr>
<tr>
<td>Reliability Assessments of the Subjects' Responses and Measurements Scales</td>
<td>107</td>
</tr>
<tr>
<td>Reliability Assessment of the Commitment to, Involvement with, and Aggregate Satisfaction Measurement Scales</td>
<td>110</td>
</tr>
<tr>
<td>Final Comments on Reliability Assessments of the Scales</td>
<td>115</td>
</tr>
<tr>
<td>Demographic Characteristics of the Sample</td>
<td>116</td>
</tr>
<tr>
<td>The Average Purchaser of a 1978 Pontiac Grand Prix in the Sample</td>
<td>116</td>
</tr>
<tr>
<td>Representativeness of the Data Base</td>
<td>117</td>
</tr>
<tr>
<td>SUMMARY OF CHAPTER THREE</td>
<td>122</td>
</tr>
</tbody>
</table>
Chapter                                      Page

IV. ANALYSIS OF THE DATA                      124

INTRODUCTION                                  124
METHODOLOGICAL FRAMEWORK USED IN TESTING THE
HYPOTHESES: AN OVERVIEW                       124
Introduction                                   124
Analysis Procedure Used in the Study          125
Statistical Techniques Used to Analyze and
Test the Hypotheses                           126
Statistical Tests Used in the Analysis         127
Levels of Significance Used in Testing
Reporting Procedure of the Significant Findings 129
Rationale Behind Only Analyzing the Composite
Measures of Satisfaction                       130
Variables Used in the Analyses                130
Commitment-Related Variables                  130
Involvement-Related Variables                 132
Satisfaction-Related Variables                133

ANALYSES AND RESULTS OF THE COMMITMENT HYPOTHESES 135
Introduction                                   135
Hypothesis C1                                  135
Analysis of Purchasers' Desirability Toward
Owning Their Grand Prix Over Length of
Ownership                                     135
Results - Purchasers' Commitment to Their
Car Over Time of Usage Experience               136
Purchasers with Less than Six Months of
Experience                                      141
Purchasers With Seven to Twelve Months of
Experience                                      141
Purchasers With More than Twelve Months
of Experience                                   142
Hypothesis C2                                  142
Analysis of Grand Prix Purchasers' Present
Commitment to Derived Latitudes of
Satisfaction                                    142
Results - Purchasers' Present Commitment
and Derived Latitudes of Satisfaction          143
Aggregate Results                              143
Disaggregate Results                           146
Hypothesis C3                                  150
Analysis of Grand Prix Purchasers' Present
Commitment to Actual Satisfaction Attitudes    150
Results - Present Commitment to Actual
Satisfaction Attitudes                          151
Aggregate Results                              151
Disaggregate Results                           151
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of the Commitment Hypotheses' Findings</td>
<td>154</td>
</tr>
<tr>
<td>Hypothesis C1</td>
<td>154</td>
</tr>
<tr>
<td>Hypothesis C2</td>
<td>155</td>
</tr>
<tr>
<td>Hypothesis C3</td>
<td>155</td>
</tr>
<tr>
<td>ANALYSES AND RESULTS OF THE INVOLVEMENT HYPOTHESES</td>
<td>156</td>
</tr>
<tr>
<td>Introduction</td>
<td>156</td>
</tr>
<tr>
<td>Hypothesis INV1</td>
<td>156</td>
</tr>
<tr>
<td>Analysis of Purchasers' Instrumental Involvement with their Grand Prix</td>
<td>156</td>
</tr>
<tr>
<td>With Their Grand Prix Over Length of Ownership</td>
<td>156</td>
</tr>
<tr>
<td>Results - Purchasers' Instrumental Involvement with their Car over</td>
<td>157</td>
</tr>
<tr>
<td>Time of Ownership</td>
<td>157</td>
</tr>
<tr>
<td>Aggregate Results</td>
<td>157</td>
</tr>
<tr>
<td>Disaggregate Results</td>
<td>157</td>
</tr>
<tr>
<td>Hypothesis INV2</td>
<td>161</td>
</tr>
<tr>
<td>Analysis of Grand Prix Purchasers' Present Involvement to Derived</td>
<td>161</td>
</tr>
<tr>
<td>Latitudes of Satisfaction</td>
<td>161</td>
</tr>
<tr>
<td>Results - Purchasers' Present Involvement and Derived Latitudes of</td>
<td>162</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>162</td>
</tr>
<tr>
<td>Hypothesis INV3</td>
<td>165</td>
</tr>
<tr>
<td>Analysis of Present Instrumental Involvement to Present Commitment</td>
<td>165</td>
</tr>
<tr>
<td>Results - Purchasers' Present Instrumental Involvement and Perceived</td>
<td>165</td>
</tr>
<tr>
<td>Actual Commitment</td>
<td>165</td>
</tr>
<tr>
<td>Summary of the Involvement Hypotheses' Findings</td>
<td>165</td>
</tr>
<tr>
<td>Hypothesis INV1</td>
<td>165</td>
</tr>
<tr>
<td>Hypothesis INV2</td>
<td>167</td>
</tr>
<tr>
<td>Hypothesis INV3</td>
<td>167</td>
</tr>
<tr>
<td>ANALYSES AND RESULTS OF THE SATISFACTION HYPOTHESES</td>
<td>168</td>
</tr>
<tr>
<td>Introduction</td>
<td>168</td>
</tr>
<tr>
<td>Hypothesis Sxn1</td>
<td>169</td>
</tr>
<tr>
<td>Analysis of Purchasers' Post Purchase Felt Satisfaction Attitudes</td>
<td>169</td>
</tr>
<tr>
<td>Over Length of Ownership</td>
<td>169</td>
</tr>
<tr>
<td>Results - Changes in Purchasers' Post Purchase Felt Satisfaction and</td>
<td>169</td>
</tr>
<tr>
<td>Length of Ownership</td>
<td>169</td>
</tr>
<tr>
<td>Three Satisfaction-Oriented Subhypothesis</td>
<td>173</td>
</tr>
<tr>
<td>Introduction</td>
<td>173</td>
</tr>
<tr>
<td>Analysis of the Three Satisfaction Subhypotheses</td>
<td>173</td>
</tr>
<tr>
<td>Results - Differences in Purchasers' Latitudes of Satisfaction, Actual,</td>
<td>173</td>
</tr>
<tr>
<td>and Expected Satisfaction Attitudes Over Length of Ownership</td>
<td>174</td>
</tr>
<tr>
<td>Subhypothesis SxnS 1.1</td>
<td>174</td>
</tr>
<tr>
<td>Subhypothesis SxnS 1.2</td>
<td>176</td>
</tr>
<tr>
<td>Subhypothesis SxnS 1.3</td>
<td>179</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>Hypothesis Sxn2</td>
<td>181</td>
</tr>
<tr>
<td>Analysis of Purchasers' Felt Satisfaction</td>
<td>181</td>
</tr>
<tr>
<td>Attitudes and Behavioral Intentions</td>
<td>181</td>
</tr>
<tr>
<td>Results - Aggregate Relationships Between</td>
<td>181</td>
</tr>
<tr>
<td>Purchasers' Felt Satisfaction Attitudes</td>
<td>181</td>
</tr>
<tr>
<td>and Specific Behavioral Intentions</td>
<td>181</td>
</tr>
<tr>
<td>Changes in Felt Satisfaction and Complaints</td>
<td>182</td>
</tr>
<tr>
<td>About Major Problems</td>
<td>182</td>
</tr>
<tr>
<td>Changes in Felt Satisfaction and Complaints</td>
<td>183</td>
</tr>
<tr>
<td>About Minor Problems</td>
<td>183</td>
</tr>
<tr>
<td>Changes in Felt Satisfaction and Buying</td>
<td>183</td>
</tr>
<tr>
<td>Another Grand Prix</td>
<td>183</td>
</tr>
<tr>
<td>Two Behavioral Intention Subhypotheses</td>
<td>186</td>
</tr>
<tr>
<td>Introduction</td>
<td>186</td>
</tr>
<tr>
<td>Analysis of the Two Behavioral Intention Subhypotheses</td>
<td>187</td>
</tr>
<tr>
<td>Results - Differences in Purchasers' Behavioral Intention Patterns Relative to Changes in</td>
<td>187</td>
</tr>
<tr>
<td>Felt Satisfaction Attitudes</td>
<td>187</td>
</tr>
<tr>
<td>Subhypothesis SxnS 2.1</td>
<td>187</td>
</tr>
<tr>
<td>Major Problems and Behavioral Differences</td>
<td>187</td>
</tr>
<tr>
<td>Minor Problems and Behavioral Differences</td>
<td>190</td>
</tr>
<tr>
<td>Subhypothesis SxnS 2.2</td>
<td>193</td>
</tr>
<tr>
<td>Summary of the Satisfaction Hypotheses' Findings</td>
<td>196</td>
</tr>
<tr>
<td>Hypothesis Sxn1</td>
<td>196</td>
</tr>
<tr>
<td>Subhypothesis SxnS 1.1</td>
<td>196</td>
</tr>
<tr>
<td>Subhypothesis SxnS 1.2</td>
<td>196</td>
</tr>
<tr>
<td>Subhypothesis SxnS 1.3</td>
<td>197</td>
</tr>
<tr>
<td>Hypothesis Sxn2</td>
<td>197</td>
</tr>
<tr>
<td>Subhypothesis SxnS 2.1</td>
<td>198</td>
</tr>
<tr>
<td>Subhypothesis SxnS 2.2</td>
<td>198</td>
</tr>
<tr>
<td>SUMMARY OF CHAPTER FOUR</td>
<td>199</td>
</tr>
</tbody>
</table>

V. RESEARCH CONCLUSIONS AND FUTURE RESEARCH CONSIDERATIONS | 200 |

INTRODUCTION | 200 |

RESEARCHING CONSUMER SATISFACTION AS AN ATTITUDE:
AN OVERVIEW | 201 |
The Focus of the Empirical Research Study | 201 |
Methodologies Underlying the Research Design and Procedure | 203 |
IMPLICATIONS OF THE FINDINGS | 204 |
Implications of the Findings for the Commitment Hypotheses | 204 |
Hypothesis C1 | 204 |
Hypothesis C2 | 205 |
Hypothesis C3 | 206 |
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implications of the Findings for the Involvement</td>
<td></td>
</tr>
<tr>
<td>Hypotheses</td>
<td>207</td>
</tr>
<tr>
<td>Hypothesis INV1</td>
<td>207</td>
</tr>
<tr>
<td>Hypothesis INV2</td>
<td>207</td>
</tr>
<tr>
<td>Hypothesis INV3</td>
<td>208</td>
</tr>
<tr>
<td>Implications of the Findings for the Satisfaction</td>
<td></td>
</tr>
<tr>
<td>Hypotheses and Subhypotheses</td>
<td>209</td>
</tr>
<tr>
<td>Hypothesis Sxn1</td>
<td>209</td>
</tr>
<tr>
<td>Subhypothesis SxnS 1.1, 1.2, 1.3</td>
<td>211</td>
</tr>
<tr>
<td>Hypothesis Sxn2</td>
<td>213</td>
</tr>
<tr>
<td>Subhypotheses SxnS 2.1, 2.2</td>
<td>215</td>
</tr>
<tr>
<td>LIMITATIONS OF THE RESEARCH AND DISCUSSION OF THE RESULTS</td>
<td></td>
</tr>
<tr>
<td>Inherent Limitations of the Study</td>
<td>216</td>
</tr>
<tr>
<td>Summary Comments on the Research Questions</td>
<td>219</td>
</tr>
<tr>
<td>RESEARCH CONTRIBUTIONS AND POSSIBLE APPLICATIONS</td>
<td>226</td>
</tr>
<tr>
<td>Contributions to the Consumer Satisfaction</td>
<td></td>
</tr>
<tr>
<td>Research Area</td>
<td>226</td>
</tr>
<tr>
<td>Conceptual Development of an Attitude</td>
<td>226</td>
</tr>
<tr>
<td>Orientation</td>
<td>226</td>
</tr>
<tr>
<td>An Ongoing Cognitive Evaluation Process</td>
<td>227</td>
</tr>
<tr>
<td>An Alternative Method of Measuring Satisfaction</td>
<td>228</td>
</tr>
<tr>
<td>The Impact of the Concepts of Commitment and Involvement</td>
<td>228</td>
</tr>
<tr>
<td>Applications of the Research Findings</td>
<td>229</td>
</tr>
<tr>
<td>Theoretical and Methodological Applications</td>
<td>230</td>
</tr>
<tr>
<td>Potential Managerial Applications</td>
<td>231</td>
</tr>
<tr>
<td>FUTURE RESEARCH CONSIDERATIONS</td>
<td>232</td>
</tr>
<tr>
<td>Conceptual Research Questions</td>
<td>233</td>
</tr>
<tr>
<td>Modeling and Methodological Research Questions</td>
<td>233</td>
</tr>
<tr>
<td>Managerial Satisfaction Research Questions</td>
<td>234</td>
</tr>
<tr>
<td>Fact-Finding Research Questions</td>
<td>235</td>
</tr>
<tr>
<td>SUMMARY OF CHAPTER FIVE</td>
<td>235</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>237</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>250</td>
</tr>
<tr>
<td>VITA</td>
<td>269</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1</td>
<td>Stratification of the Defined Population</td>
</tr>
<tr>
<td>3-2</td>
<td>Actual Stratification Bases of Test Groups</td>
</tr>
<tr>
<td>3-3</td>
<td>Reliability Coefficients of the Measurement Scales for Subjects' Expected and Actual Beliefs and Importance of Beliefs Toward Automobile-Related Subdecisions</td>
</tr>
<tr>
<td>3-4</td>
<td>Two-Way Analysis of Variance Results and Computed Reliability Coefficients for the Expected and Actual Commitment, Involvement, and Satisfaction Single-Item Measurement Scales</td>
</tr>
<tr>
<td>3-5</td>
<td>Correlation and Guttman Split-Half Coefficient Values for Expected/Actual (Two-Item) Commitment, Involvement, and Satisfaction Composite Scales</td>
</tr>
<tr>
<td>3-6</td>
<td>Demographic Characteristics of the Data Base: Frequency Distributions and Percentages</td>
</tr>
<tr>
<td>4-1</td>
<td>Relationship Measures Between 1978 Pontiac Grand Prix Purchasers' Commitment Toward Owning Their Automobiles and Length of Usage Experience</td>
</tr>
<tr>
<td>4-2</td>
<td>Relationship Measures Between 1978 Pontiac Grand Prix Purchasers' Commitment Toward Owning Their Automobiles and Usage Experience Ranges</td>
</tr>
<tr>
<td>4-3</td>
<td>Aggregate Relationship Measures Between 1978 Pontiac Grand Prix Purchasers' Actual (Present) Commitment Toward Owning Their Automobile and Derived Latitudes of Satisfaction Toward The Car</td>
</tr>
<tr>
<td>4-4</td>
<td>Means and Standard Deviations of Perceived Latitudes of Satisfaction Analyzed By: Categorical Levels of Actual Commitment, Composite Measures of Derived Latitudes of Satisfaction</td>
</tr>
<tr>
<td>Table</td>
<td>Relationship Measures</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>4-5</td>
<td>Relationship Measures Between 1978 Pontiac Grand Prix Purchasers' Actual Commitment Toward Owning Their Automobile and Perceived Actual Satisfaction Towards The Automobile</td>
</tr>
<tr>
<td>4-6</td>
<td>Between Group Comparison of Composite Actual Satisfaction Mean Values for Categorical Levels of Actual Commitment Towards Owning a 1978 Pontiac Grand Prix</td>
</tr>
<tr>
<td>4-7</td>
<td>Aggregate Relationship Measures Between 1978 Pontiac Grand Prix Purchasers' Instrumental Involvement With Their Automobile and Length of Usage Experience</td>
</tr>
<tr>
<td>4-8</td>
<td>Relationship Measures Between 1978 Pontiac Grand Prix Purchasers' Instrumental Involvement With Their Automobile and Usage Experience Ranges</td>
</tr>
<tr>
<td>4-9</td>
<td>Aggregate Relationship Measures Between 1978 Pontiac Grand Prix Purchasers' Actual Instrumental Involvement With Their Automobile and Derived Latitudes of Satisfaction Toward Their Car</td>
</tr>
<tr>
<td>4-10</td>
<td>Overall Relationship Comparison Between Composite and Categorical Composite Measures of Derived Latitudes of Satisfaction and Categorical Levels of Present Instrumental Involvement</td>
</tr>
<tr>
<td>4-11</td>
<td>Relationship Measures Between 1978 Pontiac Grand Prix Purchasers' Present Commitment Toward Owning Their Automobile and Present Instrumental Involvement With The Car</td>
</tr>
<tr>
<td>4-12</td>
<td>Means, Standard Deviations and Standard Errors of Post Purchase Changes in Grand Prix Purchasers' Felt Satisfaction Attitude Toward their Car</td>
</tr>
<tr>
<td>4-13</td>
<td>Means, Standard Deviations and Standard Errors of Derived Latitudes Measures</td>
</tr>
<tr>
<td>4-14</td>
<td>Means, Standard Deviations and Standard Errors of Grand Prix Purchasers' Perceived Actual Satisfaction Attitude Measures</td>
</tr>
<tr>
<td>4-15</td>
<td>Means, Standard Deviations and Standard Errors of Grand Prix Purchasers' Perceived Expected Satisfaction Attitude Measures</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4-16</td>
<td>Aggregate Relationship Measures Between Felt Satisfaction and Post Purchase Behavioral Intentions</td>
</tr>
<tr>
<td>4-17</td>
<td>Aggregate Relationship Measures Between Perceived Actual Satisfaction Likelihood of Post Purchase Behavioral Intentions</td>
</tr>
<tr>
<td>4-18</td>
<td>Behavioral Intention Differences Toward Complaining About a Major Problem Between Purchasers Exhibiting a Positive and Negative Change in Their Felt Satisfaction Attitude (Categorical Composite Measure)</td>
</tr>
<tr>
<td>4-19</td>
<td>Behavioral Intention Differences Toward Complaining About a Minor Problem Between Purchasers Exhibiting a Positive and Negative Change in Their Felt Satisfaction Attitude (Categorical Composite Measure)</td>
</tr>
<tr>
<td>4-20</td>
<td>Behavioral Intention Differences Toward Buying Another Grand Prix Between Purchasers Exhibiting a Positive and Negative Change in Their Felt Satisfaction Attitude (Categorical Composite Measure)</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>A Conceptual Schematic Representation of the Post Purchase Satisfaction Model</td>
<td>65</td>
</tr>
<tr>
<td>3-1</td>
<td>Instrumental and Noninstrumental Automobile-Related Attributes Used in the Study</td>
<td>101</td>
</tr>
<tr>
<td>4-1</td>
<td>Graphical Representation of Composite and Absolute Composite Mean Values of Derived Measures of Latitudes of Satisfaction for Varying Categorical Levels of Actual Commitment</td>
<td>149</td>
</tr>
</tbody>
</table>
ABSTRACT

Consumer researchers, in an endeavor to further understand and explain consumers' market behavior, have devoted significant effort toward conceptualizing and empirically researching the socio-psychological phenomena of attitude formation and changes. One concept which has only recently emerged as a major topic of concern in the field of consumer research is that of consumer satisfaction. Although significant efforts in conceptualizing and empirically researching consumer satisfaction have emerged in the past few years, little progress has been made to crystalize the conceptual structure and understanding of consumer satisfaction. Most of the reported research on post purchase consumer satisfaction has viewed satisfaction from some type of measurement orientation rather than an attitude orientation. As a result, many researchers have recognized the lack of an adequate conceptualization of consumer satisfaction; yet, only a few have attempted to bring conceptual crystallization and understanding to the concept. Consequently, some researchers have expressed questionable methodological considerations to the appropriateness of the current measurement methods as well as research designs which are being used in studying consumer satisfaction.

Against this background, this empirical investigation is an attempt to provide insights about the concept of satisfaction
by investigating the concept as an attitude within an ongoing cognitive process orientation. More specifically, the study focuses on using an expectancy-attitude modeling approach to investigate four major areas of concern: (1) the formation and change constructs of satisfaction; (2) the impact of specific endogenous and exogenous variables on individuals' cognitive evaluation processes; (3) the measurement methodologies that should be used; and (4) the relationships between post purchase satisfaction attitudes and behavioral intentions.

The research involves studying the satisfaction attitudes, commitment levels, involvement levels, as well as the lengths of usage experiences of 250 purchasers of 1978 Pontiac Grand Prix automobiles from a local Pontiac Dealership in Baton Rouge, Louisiana, a southern metropolitan city. The sample was stratified into three test groups on the basis of equally interval time lengths of ownership. To gather the needed information, a carefully designed self-administered questionnaire was mailed to each of the specified Grand Prix purchasers.

A combination of direct and indirect scale measurements were designed to assess the subjects' past (at time of purchase) and present attitudes and behavioral intention feelings toward their 1978 Grand Prix. To assess the variability and sensitivity among subjects' attitudinal and intention responses, the scale measurements were designed having either ordinal, interval, or ratio scaling properties.
The reported findings demonstrate that purchasers' satisfaction attitudes toward their car have a propensity to change in either a positive or negative fashion as purchasers gain more usage experience. Additionally, the findings support the notion that satisfaction is a complex, multidimensional concept. Furthermore, the results provide evidence that, for the most part, purchasers try to maintain some level of cognitive-consistency behavior balance between their expected and actual satisfaction attitudes.

The findings demonstrated that the extent to which purchasers actually drove their cars was not significantly influenced by their desire to own the Grand Prix. Therefore, the concepts of involvement and commitment tend to measure significantly different dimensions of individuals' interaction with their automobiles. Additionally, aggregate findings demonstrate that satisfaction attitudes, at best, have only marginal influence on repeat purchase intentions and no significant influence on complaining intentions.

From this empirical endeavor, it can be concluded that the attitude and cognitive process orientation of investigating satisfaction serves as a vital alternative available to consumer satisfaction researchers. Also, the time, commitment, and involvement factors can play important roles in partial understanding the concept of satisfaction. Finally, more longitudinal research designs are needed to gain better insights and applications of satisfaction and its predictive powers on behavioral intentions.
CHAPTER I

A FOCAL POINT FOR EMPIRICAL RESEARCH ON CONSUMER POST PURCHASE SATISFACTION/DISSATISFACTION AS A COGNITIVE EVALUATIVE PROCESS

INTRODUCTION TO THE PROBLEM AREA

Consumer researchers, in an endeavor to further understand and explain consumers' market behavior, have devoted significant effort toward conceptualizing and empirically researching the socio-psychological phenomena of attitude formation and changes. This concentration of effort has been primarily based on the premise that attitudes in some manner influence behavior. This thought has been conceptualized in normative constructs of various comprehensive consumer behavior models such as: the Engel, Blackwell, Kollat (EBK) model (1977) and the Howard/Sheth model (1969).

As consumer researchers broadened their horizons and knowledge in motivation research, their conceptualizations of attitude formulation and change extended the constructs of theory beyond the scope of the consumer's pre-purchase decision process to include elements of post-purchase behavior. The growing interest to study consumers' attitudinal dimensions within the scenario of their post-purchase evaluative process has led to significant contributions in the development of new concepts, measurements, and theoretical insights for exploring and understanding relationships between consumers' attitudinal dimensions and explicit market behavior. One such concept,
which has long been in existence yet only recently has begun to emerge as a major topic of concern in the field of consumer research is that of "consumer satisfaction" (Hunt, 1976; Day, 1977).

A. Problem Setting

The concept of consumer satisfaction\(^1\) has long been a fundamental precept of marketing (Kotler, 1976) and acknowledged as: (1) serving as a basis for public interest program planning and evaluation (Hunt, 1975); (2) an important factor within most comprehensive models of buyer behavior (Howard and Sheth, 1969); and (3) a basis for strategic planning of marketing programs (Engel, Blackwell, Kollat, 1978). Yet, it has only recently been recognized as having increased importance within the consumer behavior research field. Hunt (1977), postulates that one explanation for the late recognition and slow conceptual development of consumer satisfaction and its measurement has been the lack of cross-fertilization of ideas among the researchers in the area. That is, as late as 1975, the lack of adequate conceptualization and measurement of consumer satisfaction appeared to be due, in part, to the fact that researchers and writers in the area were unaware of each other's works, each thinking that he or she was pioneering in the area (Hunt, 1977).

\(^1\)To simplify the discussion in the study, hereafter the term satisfaction will be used to refer to the consumer's perceived (or felt) attitudinal level of satisfaction or dissatisfaction towards a purchased object.
It is interesting to note that some of the active researchers\(^2\) recognized as pioneers contributing significant insights to studying this new frontier area have credited the impact of the consumerism movement and public policymakers' interaction with business as being the stimulating forces underlying the increased emphasis for studying the concept of consumer satisfaction, and not marketers' (or business') interests in satisfying societal needs and wants. For example, Day (1977) attributes the recent increase of measuring consumer satisfaction and dissatisfaction as a direct result of the dramatic growth in the consumerism movement over the past decade. He depicts the fact that:

\[
\text{the increased militancy of consumers has made all of the parties in the marketplace more aware of the existence of widespread and intense dissatisfaction with many goods and services (1977, p. 153).}
\]

Miller (1977) also gives support to this notion by delineating the fact that consumerism still is a very active force in society with increasing efforts by government regulatory agencies directed toward consumer protection and satisfaction; he concludes that:

\[
\text{it is important not only to ascertain the causes of consumer dissatisfaction and to develop quantifiable techniques for the measurement and analysis of dissatisfaction, but also to consider what makes dissatisfaction occur (1977, p.73).}
\]

\(^2\)Rolph E. Anderson, Alan R. Andreasen, Ralph L. Day, H. Keith Hunt, E. Laird Landon, Jr., John A. Miller, and Richard L. Oliver are recognized by current satisfaction researchers as being the initial advocates (through their pioneering-oriented efforts) in establishing consumer satisfaction research as an important area of study within consumer behavior.
For further support of the impact that the policymaking, consumerism, and consumer legislation areas have had on studying the concept and measurement of consumer satisfaction, the reader is referred to Hunt (1977, pp. 1-7).

Consumer researchers' interests in studying the concept have been stimulated by the need for better conceptualizations and measurements, as well as the recognition of the concept's potential impact on the theories of buyer behavior. Recent efforts to study consumers' post-purchase evaluative actions and the phenomena of consumer satisfaction, dissatisfaction, and complaining behavior\(^3\) have contributed some insights to identifying and, in some cases, understanding relationships between consumers' attitudinal dimensions and explicit market behavior. The study of post-purchase evaluative actions has been both conceptual and empirical in nature, and reported findings support the general notion that research on consumers' post-purchase evaluative actions has been stimulated by two necessary underlying premises. The first premise is: consumer satisfaction with a purchased object\(^4\) is likely to lead to repeat purchases (Howard and Sheth, 1969) and to acceptance of other products in the same company's

\(^3\) In the past two years, research efforts toward better understanding the concept of consumer satisfaction have enhanced the broadening of the concept to include elements of consumer dissatisfaction as well as complaining behavior patterns.

\(^4\) To simplify the discussion in this investigation, hereafter the term purchased object will be used to refer to the products and/or services that a consumer actually purchases.
product line (Cardozo, 1964), as well as, possibly more favorable product/brand images (Winter, 1974) or word-of-mouth publicity (Cardozo, 1965). Therefore, identifying and understanding those factors affecting consumer satisfaction becomes essential to marketers.

The other premise can be interpreted as being: consumer dissatisfaction with a purchased object is likely to stimulate some degree of consumer complaining behavior toward that purchased object; therefore, identification of causal factors leading to consumer dissatisfaction can enhance the understanding of evoked actions undertaken by consumers (Landon and Emery, 1974; Landon, 1977; Mason and Himes, 1973). This premise leads one to the belief that knowledge of consumer complaint behavior can aid not only marketers but also, public policymakers and consumerists in various dimensions of strategy and policy formulations (Anderson, 1973; Landon, 1977; Hunt, 1975).

As late as 1975, researchers in the area recognized two important issues: first, information on consumer satisfaction and dissatisfaction can be of great value to all parties in the marketplace and secondly, much less is known about how to define and measure consumer satisfaction than would be desirable. Although significant efforts in conceptualizing and empirically researching consumer satisfaction have emerged in the past three years, it appears that little progress has been made to crystalize the conceptual structure and understanding of consumer satisfaction. Support of
this notion is evidenced by H. Keith Hunt's\(^5\) closing comments at the Third Annual Consumer Satisfaction, Dissatisfaction, and Complaining Behavior Conference in Chicago, Illinois, 1978. Hunt delineated that:

> Those of us who are researching the phenomena of consumer satisfaction and dissatisfaction have gained meaningful insights in conceptualizing more appropriate measurements of satisfaction and the identification of factors which characterize satisfied and dissatisfied consumers; but we have not been able to agree on what consumer satisfaction really denotes.\(^6\)

Review of the satisfaction/dissatisfaction literature points out that the conceptual models reported by Pfaff (1977); Miller (1977); Whitney (1976); Leavitt (1977); Anderson (1973); Oliver (1977); and Samli (1977) have basically been concerned with methodologies for measurement of consumer satisfaction and dissatisfaction. An exception to this thrust is the model proposed by Ortinau (1978). The author presented a post purchase cognitive evaluative process model which suggested insights to studying the formulation of consumer satisfaction and changes that may occur through consumption experience. The major limitation to this conceptual model is that it has not been empirically tested to date.

\(^5\)H. Keith Hunt was the conference coordinator for the Third Annual Consumer Satisfaction, Dissatisfaction, and Complaining Behavior Conference held in Chicago, Illinois, October 1978. As such, he gave a closing overview of what was accomplished at the conference.

\(^6\)This paraphrase is this researcher's interpretation of the main thrust of Hunt's closing overview comments at the Third Annual Consumer Satisfaction, Dissatisfaction, and Complaining Behavior Conference.
Empirical research on post-purchase consumer satisfaction has focused on the evaluation of products and services with respect to perceived expectations and felt fulfillment of those expectations after usage of the products and services. The main thrust of laboratory studies (Cardozo, 1965; Anderson, 1973; Olshavsky and Miller, 1972) has been to relate satisfaction and dissatisfaction to various cognitive processes such as confirmation or disconfirmation of expectancies. In contrast, field studies on the topic (Gronhaug, 1977; Hughes, 1977; Handy, 1977; Kraft, 1977; Mason and Himes, 1973; Pfaff, 1972) have attempted, with varying success, to determine prevailing latitudes (or levels) of satisfaction, as well as the demographic/socio-economic characteristics identifying satisfied and dissatisfied consumers.

The concept of consumer satisfaction has a significant impact on all parties in the marketplace. However, before the concept can play a positive role in its envisioned applications, it must be based on adequate conceptualization and suitable measurement methodologies. For the most part, the methodologies for measurement do exist but an adequate conceptualization of consumer satisfaction is still lacking. Empirical research efforts are needed to: 1) determine what cognitive process(es) a consumer utilizes to formulate his or her attitudinal satisfaction dimensions, and 2) identify those endogenous and exogenous factors having significant impact on changes of an individual's satisfaction dimension.
B. Background of the Problem

The lack of an adequate conceptualization of consumer satisfaction can be attributed to several basic reasons. First, consumer satisfaction has only recently been recognized as a concept having an important impact on all parties in the marketplace. The infantile state of the topic adds complexity to current conceptualization efforts in that there is no apparent acceptable mainstream theoretical underpinning to guide research efforts. That is, a variety of socio-psychological theories are used to develop the underpinnings and propositions underlying the conceptualization and development of consumer satisfaction models. Thus, selection and usage of a particular socio-psychological theory appears to be dependent on how the individual researcher views consumer satisfaction. For example, Plummer (1976) suggests that Kelly's construct theory (1955) is appropriate in developing the conceptual framework for consumer satisfaction. Basically Kelly's construct theory postulates:

that people deal with the world around them in a manner quite similar to the way a scientist goes about dealing with understanding the world. . . . Kelly suggests that people in everyday life make predictions about the world around them based on their construct system, and then their subsequent experiences support or negate their predictions. In addition, the theory postulates two basic kinds of constructs which people use to predict the world around them: superordinate constructs, which are used in a wide variety of events and life roles . . . and subordinate constructs, which are specific to certain life roles and events (1976, pp. 391-392).
In contrast, Cardozo (1965) used the theoretical underpinnings of Festinger's (1957) Cognitive Dissonance Theory and Contrast Theory to develop the framework of his model.

Another reason for the lack of an adequate conceptualization relates to the circumstances under which some of the pioneering researchers (Hunt, Day, Andreasen, Oliver, Miller)\(^7\) became interested in studying consumer satisfaction. The rising concerns for researching consumer satisfaction were not a result of scholarly interest in consumer behavior theories, but because researchers were involved in public-policy affairs inside and outside of government and were either requested or told to do consumer satisfaction work. Given the circumstances, researchers could afford only a minimal effort to conceptualize consumer satisfaction before starting on the measurements to provide the requested output (Hunt, 1976). As a consequence, many researchers were plunging ahead with measurement problems prior to coming to grips with basic conceptual problems.

**TWO NECESSARY ALTERNATIVE CONCEPTUALIZATIONS**

Although the definitions and conceptualizations of consumer satisfaction have shown substantial variety, there appear to be two distinguishable conceptual expressions which are gaining increased understanding.

\(^7\)These researchers have acknowledged the fact that their interests in studying the phenomenon of consumer satisfaction were stimulated by their active interactions with the Federal Trade Commission (FTC).
confirmation from researchers in the area. One conceptualization which has received the most support is that advocated by Hunt (1977), who describes satisfaction as:

... a kind of stepping away from an experience and evaluating it. You may have a pleasurable experience and then be satisfied as you evaluate that experience. Satisfaction is not the pleasurableness of the experience, it is the evaluation rendered that the experience was at least as good as it was supposed to be ... so satisfaction/dissatisfaction isn't an emotion, it's the evaluation of an experience, and as such it becomes a quasi-cognitive construct (1977, p. 38).

An alternative conceptual expression of satisfaction that could have significant impact on empirical research efforts within the post-purchase scenario is that suggested by Czepiel and Rosenberg (1976). They postulate that:

Consumer satisfaction is an attitude in the sense that it is an evaluative orientation which can be measured. It is a special kind of attitude because by definition it cannot exist prior to the purchase or consumption of the attitudinal object ... the attitude is based on actual purchase/consumption experience. Perceptions of that experience are compared with the motivations which underlay the action and the expectations previously formed concerning the outcome of the experience, and are further modified by standards concerning desirable and normative outcomes ... it is an attitude that has meaning as a feedback concept for society, managers, and consumers (1976, p. 169).

A. **Similarities Between the Two Conceptualizations**

Interpretation of these two conceptualizations indicates that while similarities exist, they can be characterized as having distinguishable differences. The two conceptualizations are similar in that they both relate to the notion that satisfaction is an outcome based
on some sort of cognitive evaluative orientation or action. Secondly, they reference the notion that the evaluative action supervenes some type of recognizable experience. Finally, the conceptualizations imply that the outcome of the evaluative action may be either positive or negative in nature.

B. Differences Between the Two Conceptualizations

Differences can be noted in the two conceptualizations in that Hunt suggests that the evaluative action taken pivots around the overall experience, itself; whereas, Czepiel and Rosenberg view the action more as a comparison between perceptions of an experience with those motivational aspects which underlie taking action and previous expectations. Thus, the cognitive, affective, and conative dimensions making up an experience are, in part, subjected to an evaluative orientation. Czepiel and Rosenberg's conceptualization further implies that the perceived expectations of an attitudinal object can be modified or changed as consumption experience is gained; whereas, Hunt postulates that expectations, once established, are not affected over time or by increased consumption experience.

Another distinguishable difference relates to the type of measurement employed in the evaluative action. Hunt's conceptualization suggests that satisfaction can be measured by utilizing a unidimensional subjective measurement method; but, Czepiel and Rosenberg's expression indicates that the measurement of satisfaction is actually multidimensional in nature.
To date, there has been no published empirical research by marketers studying consumer satisfaction as an attitude, its formulation, and its change within the post-purchase scenario. Most studies on the topic, have implicitly or explicitly held the time/consumption experience dimensions static. They stop with the determination of satisfaction and give expression only to the relationships of the independent variables included in that study and do not go on to investigate nor suggest possible changes in either satisfaction or the associative relationships with the time/consumption experience dimensions.

JUSTIFICATION FOR DOING A DISSERTATION ON THE CONSUMER POST-PURCHASE SATISFACTION EVALUATIVE PROCESS

The concept of consumer satisfaction has been recognized as having greater importance than ever before to public policymakers, consumer groups, and marketers as well as consumer behavior researchers. As a concept, consumer satisfaction can act as a special type of feedback not only to marketers but to society and consumers as well. To date, research interests have been dominated by the quest for accurate measurements of satisfaction/dissatisfaction and the identification of descriptor-type factors of satisfied and dissatisfied consumers. In addition, the consumers' post-purchase evaluative scenario used to determine the "latitudes of satisfaction" has been viewed as a cognitive act rather than an ongoing cognitive process. That is, satisfaction has simply been viewed as a
cognitive comparative act between perceived expectations toward the purchased object and the performance following the actual purchase activity. The dynamics of time/consumption experience, for the most part, appear to have been interpreted as having little significance. As a consequence, little is known, or at least agreed upon, regarding what consumer satisfaction really means, or what factors contribute to its formulation, or what changes may occur, if any, during the post-purchase period of consuming the object (product) of concern. To date, none of the reported empirical research studies on consumer satisfaction has viewed the concept as an attitude as suggested by Czepiel and Rosenberg (1976) nor the post-purchase evaluative scenario as being an ongoing cognitive process, dynamic in nature. This proposed research represents an exploratory survey attempt to partially fill this apparent empirical vacuum by utilizing as one of its underlying propositions: the notion that consumer satisfaction is a special kind of attitude formulated and measured within the post-purchase scenario, characterized as a consumers' cognitive evaluative process.

A. **Purpose(s) of the Research Study**

More specifically the purposes of this exploratory research are to: (1) identify and examine, in a dynamic setting, the effects of increased usage experience on reported felt satisfaction attitudes among purchasers/users of a specific brand name automobile; (2) to identify and determine what impact, if any, an individual's perceptual commitment to and instrumental involvement with the specific automobile
has on their post-purchase cognitive evaluation process; (3) to
derive implications and draw inferences; and (4) to reach conclusions
regarding the relationships which may exist between usage experience,
commitment to, involvement with, and perceptual felt satisfaction/dissatisfaction toward a specific brand name automobile within the
post-purchase scenario. A post script for undertaking this exploratory study is one of hopefully gaining meaningful results which would
be supportive in the justification of developing a more comprehensive
conceptual consumer cognitive evaluative process model for better
understanding and measuring consumer's satisfaction attitudinal
dimensions and behavioral actions.

B. Significance of the Research

With the apparent need for more crystalized conceptualizations
and measurements of consumer satisfaction, further research of
the attitudinal dimensions of consumer satisfaction within a
cognitive process orientation can contribute valuable insights
toward better understanding: (1) the formulation and change of
constructs of satisfaction; (2) the impact of endogenous and exogenous
variables on an individual's evaluative process; (3) the measurement
methodologies that should be used; and (4) the preceding market behavior

---

8For a detailed discussion on the scope of pertinent conceptual
and measurement issues and problems confronting consumer satisfaction
researchers, the reader is referred to either Andreasen (1977), Pfaff
(1977), or Czepiel and Rosenberg (1977).
or consumer behavior outcomes which may be a direct or indirect result of some perceptual latitude of consumer satisfaction (i.e. specific repeat purchase patterns or some sort of complaining action.)

**EXPECTED CONTRIBUTIONS**

The potential benefits of enlightened consumer satisfaction/dissatisfaction evaluative research exist on many levels for the discipline of marketing. Perhaps the most obvious advantage resides under the general heading of marketing management. Market managers would realize greater refinement in the development, implementation, and control of the various marketing mix strategies and policies necessary for successful implementation of the marketing concept in today's complex societal environment. For example, the concept of consumer satisfaction has long been delineated as one of the "three pillars" of the marketing concept and interpreted as the instrumental factor that could determine an organization's long run fortune and stability (Kotler, 1972). As such, this exploratory study attempts to contribute possible insights toward strengthening the marketing concept in a market environment characterized, in part, as having increased pressures of consumer unrest.

Certainly another level of benefits to be derived through post-purchase satisfaction research is the valuable insight which would be afforded to marketing theorists searching for keys to better models of the post-purchase evaluative process, as well as, more precise measurement methodologies. For example, many of the current
measurement methods reported in the literature have been guided, in part, by the confirmation/disconfirmation of expectancies paradigm advocated by Anderson (1973). As a result, the latitudes of consumer satisfaction toward a purchased object have been simplistically interpreted as the disparity derived by measuring and comparing perceived product expectations at the time of purchase to postpurchase actual product performance. As a consequence, this interpretation tends to create some sort of mystical "black box" paradigm with respect to product consumption experience. By assuming satisfaction is a special kind of attitude, this research attempts to provide insights regarding the impact and influence that the dynamics of the time/consumption experience have on post-evaluative satisfaction. Such research would enable theorists to lessen the mystery of "black box" models by specifying the particulars of endogenous and exogenous consumption influence variables operating on the individual's post-purchase cognitive evaluation process.

Summarily, the present study attempts to integrate concepts from two disciplines, social-psychology and marketing, into a research method for the exploration and description of an empirical situation. This study further attempts to provide empirical insights into the attitudinal dimensions of consumer satisfaction to be used to extend present socio-psychological theories and marketing research designs for future post-purchase behavioral investigations of marketing problems. Finally, by undertaking the study of post-purchase satisfaction
in a dynamic setting researchers may be able to better identify and highlight those endogenous and exogenous variables which have greatest influence on the formulation and change of latitudes of post purchase consumer satisfaction, thus enabling a clearer interpretation and understanding of the impact of consumer satisfaction/dissatisfaction on more comprehensive models of consumer behavior theories.

**SUMMARY OF CHAPTER I**

This chapter served to acquaint the reader with an overview of the existence of consumer post-purchase satisfaction as a meaningful area of empirical investigation within the discipline of marketing. The current state of consumer satisfaction research and noteworthy conceptual problems were identified and discussion given to the background of the problems. Two distinguishable alternative conceptualizable approaches for investigating consumer satisfaction were contrasted and discussed, delineating their similarities and differences. Justification for investigating consumer satisfaction as a cognitive process and purposes of the research were outlined. Finally, the significance of the empirical research was discussed; delineating expected contributions to the area of consumer satisfaction research.
CHAPTER II

THEORETICAL FOUNDATION FOR THE STUDY OF CONSUMERS' POST PURCHASE SATISFACTION IN A COGNITIVE FRAMEWORK

INTRODUCTION

Chapter two is divided into three major sections, the first section presents a review of the literature salient to the study of consumer satisfaction and the psychological phenomenon of attitude formulation and changes. In this section the thoughts of marketing theorists depicting the theoretical and methodological considerations of the variables and concepts under investigation in this particular study are reviewed. Three noted psychological-oriented theories that have, in part, stimulated research in the area of consumer satisfaction are outlined and related empirical studies presented, as well as a discussion on the conceptual and methodological considerations of each. The second section continues this line of investigation by presenting an overview typology of four basic models of consumer satisfaction. The models' theoretical and methodological underpinnings are presented as well as related empirical studies. Each modeling approach is evaluated as to strengths and weaknesses. The final section of the chapter presents a conceptual overview of the researcher's specific post-purchase satisfaction model used in the study. Specific conceptual postulates used in the model are presented
and followed by a discussion of the theoretical and methodological considerations. The model is delineated mathematically in its aggregate structure and a schematic representation of the model is included in this section.

REVIEW OF THE LITERATURE

A. Introduction

An extensive search of the marketing literature indicated that marketing, as a field of study, has long recognized the concept of consumer satisfaction as an important fundamental precept within the marketing concept; yet it has been recognized only recently as having unprecedented interest among consumer behavior researchers as well as those researchers whose mainstream interests lie in the general areas of public-policymaking, consumerism activities, consumer legislation and regulatory matters. The increased interest among these researchers is due, in part, to their recognition of the importance of consumer satisfaction's influence on consumer behavior and decision-making activities within today's complex marketplace and their realization that so little is actually known about the concept.

Although considerable headway has been made in addressing the conceptual, methodological, and measurement problems which have hindered consumer satisfaction researchers, there still appears to be a lack of adequate understanding (or agreement) as to what is actually meant by consumer satisfaction. In addition, consumer satisfaction as a special type of attitude and the relationships and effects of the
dynamics of the time/consumption experience dimensions of consumers' post-purchase cognitive evaluation process have not been formally investigated by researchers. Likewise the magnitude of commitment to (an endogenous factor); and degree of involvement with (an exogenous factor) and the latitudes of post-purchase consumer satisfaction have not been empirically treated. This section reviews the literature relative to an understanding of these concepts and relationships.

B. The Concept of Consumer Satisfaction

In reviewing the marketing literature, one would have to conclude that there are many interpretations to the question: "What is consumer satisfaction?" Webster's Seventh New Collegiate Dictionary defines the term "satisfaction" in no less than four dimensional settings; the expressed definition most relevant to consumer satisfaction denotes it to be "the fulfillment of a need or want" (1972, p. 765). Some researchers think of consumer satisfaction as a global evaluative measurement of a recognizable experience and as such, view it as being a unidimensional cognitive construct. Others refer to consumer satisfaction as a evaluative comparison of product expectations to perceived product/service performance with the comparison being interpreted as multidimensional and subjective in nature. In studies of consumer satisfaction that have focused on post purchase evaluation of products and services, satisfaction has typically been defined as "the extent to which consumers feel subjectively pleased with their ownership and usage of products and services," (Westbrook and Newman, 1978; p. 456). Support for this notion of post-purchase
satisfaction can be drawn from the Howard/Sheth model (1969). Its authors refer to consumer satisfaction "as the degree of congruence between the actual consequences from purchase and consumption of a brand and what was expected from it by the buyer at time of the actual purchase," (1969, pp. 129-131).

Alternatively, consumer satisfaction is the "extent to which products and services are meeting clients' needs and wants so that they can enhance their own and/or society's well-being," (Andreason, 1977; p. 11). Consumer satisfaction does not singularly relate to the ultimate consumer in a market system but all parties in our societal environment. Consumer satisfaction represents the "results from the interaction of levels of expectations about anticipated performance," (Miller, 1977; p. 72). Hempel (1976) alludes to the notion that satisfaction is the "consumer's subjective evaluation of the benefits obtained from the consumption of a specific product or service." Handy (1977), on the other hand, takes an indirect approach to articulating consumer satisfaction by defining consumer dissatisfaction "as the gap or distance between the consumer's 'ideal' attribute combination of a product or service offered in the marketplace which comes closest to ideal," (1977, p. 217). An underlying precept to Handy's interpretation is that consumers, for the most part, have no choice but to purchase that product-attribute combination available in the marketplace which most nearly matches their ideal attribute combination, or to not purchase at all.
Further disparity can be seen in answering the simple question of: "What does consumer satisfaction mean?" Morris and Winter's (1975) approach has been to compare what societal norms and family norms dictate what should exist with what actually does exist in the housing market. They conceptualize consumer satisfaction in a housing scenario as:

... if housing falls short of the cultural or family norms with respect to some attribute, a deficit is noted. If the current dwelling exceeds the norms, a surplus is noted. Surpluses may be either desirable or undesirable ... If there is an undesirable deficit or an undesirable surplus, a dissatisfaction with that particular attribute will appear ... dissatisfaction can arise only when a deficit is (1) perceived by one or more members of the household and (2) salient to at least one member of the household. The overall level of satisfaction depends upon a weighted sum of individual satisfactions ... produces a propensity to move if the weighted average of all satisfaction were in the "dissatisfied portion ... range of satisfaction-dissatisfaction (1975, p. 80).

The authors' explanation of consumer satisfaction within the housing scenario points out further complexities of answering the satisfaction question by suggesting the notion that other family members or exogenous factors (i.e., societal or cultural norms) may well interject some form of direct influence on an individual's cognitive evaluation of expressing latitudes of satisfaction towards specific dwelling attributes. Thus, the individual's overall expression of satisfaction/dissatisfaction may not represent his (her) true evaluative feelings toward durable products. Support of Morris and Winter's notion on the effects of exogenous factors can be derived (at least indirectly) from the husband/wife decision-making
literature. See, for example, Davis' (1976) overview article or Burns and Granbois' (1977) study on resolution of preference conflicts in family automobile purchase decisions.

Hunt (1977), on the other hand, simply defines consumer satisfaction as a "kind of stepping away from an experience and evaluating it . . . satisfaction . . . is the evaluation rendered that the experience was at least as good as it was supposed to be . . . therefore, it isn't an emotion; it's a cognitive evaluation of an emotion," (1977, p. 38). An interpretation of consumer satisfaction which raises the issue of whether prior purchase or experience with the attitude object is a prerequisite to the cognitive evaluation taken by consumers to determine satisfaction is that expressed by Czepiel and Rosenberg (1976). They suggest that consumer satisfaction is "an attitude in the sense that it is an evaluative orientation which can be measured. It is a special kind of attitude because by definition it cannot exist prior to the purchase or consumption of the attitudinal object. In structural terms, the attitude is based on actual purchase and/or consumption experience," (1976, p. 169).

Czepiel and Rosenberg's definition of consumer satisfaction serves an important role within this proposed research. Therefore, further distinction of its potential implications is necessary. By interpreting satisfaction as an attitude instead of just the measurement of an emotion, the importance of viewing the dynamics of consumption experience on the formulation and change of satisfaction is enhanced. This interpretation supports, in part, the notion that
consumers may use some type of ongoing cognitive evaluative process to determine perceptual latitudes of satisfaction of a purchased object. From an intuitive standpoint, one is inclined to suspect that consumers’ attitudes toward being satisfied or dissatisfied with a purchased object may change as the individual gains experience through consuming that purchased object over time. Therefore, perceived expectations about a product or service at the time of purchase may be modified over time by increased consumption experience. Intuitively, if consumers go through some type of conscious or subconscious decision-making process to determine what kind of, when, where, how much, and how many products or services to purchase, then one might suspect that consumers also go through some type of conscious or subconscious evaluation process to determine (or formulate) their latitudes of satisfaction with that purchased object.

**Considerations About the Concept of Consumer Satisfaction**

Summarily, consumer satisfaction remains a mystical and complex concept to marketers and researchers. From the disparity of definitions and interpretations as to what is meant by consumer satisfaction, several keynotes can be drawn. First, determination of latitudes of post-purchase satisfaction requires some type of conscious or subconscious cognitive evaluative orientation on the part of consumers. Second, the cognitive evaluation includes at minimum a comparison between product expectations and perceived product performance. Third, the outcome of the evaluation may be either positive
or negative or neutral in nature. Fourth, the implications of better understanding consumer satisfaction are multidimensional in nature and important to all parties in today's complex market/societal system. Finally, key insights to clearly understand satisfaction may lie within the recognition that it is a special type of attitude with feedback implications. That is, investigations into its formulation and change, as well as identification of salient endogenous and exogenous factors and their influence on consumers post-purchase cognitive evaluative orientation, may hold the keys to unlocking more understanding of consumer satisfaction.

C. Attitude Formulation and Change Processes

In understanding individual or group attitude formulations (i.e. consumer satisfaction) and reasons for changes in attitudes, it should be noted that social-psychology has contributed much to the literature on the topic. The purpose of this section is not to give an in-depth expression of attitude formulation and change, but rather to related certain specifics from the wealth of literature that does exist and which the author considers pertinent to this proposed research. That is, the purpose for this overview on attitude formulation and change is to give support to: (1) the notion that consumer satisfaction can be viewed as an attitude; (2) that increased consumption experience, as well as specific endogenous and exogenous factors (i.e. commitment to and involvement with the purchased object), have influence on the attitudinal dimensions of
satisfaction; and (3) specific social-psychology theories which consumer behavior researchers can use to understand the phenomena of post-purchase satisfaction formulation and change.

Allport (1954) defines an attitude as "the evaluation of objects, ideas and people, and is a part of the repertoire of human behavior." Thus, consumer researchers must include attitude within their domains while studying more complex consumer or social behavior. An attitude is often a "predisposition to behave in a particular way toward a given object," (Carlson, 1956). An attitude has also been defined as "a predisposition of an individual to evaluate some symbol or object or aspect of their world in a favorable or unfavorable manner," (Katz, 1960). Further understanding of an attitude and its formulation can be derived from Wagner's (1969) interpretation of the nature of attitudes. He alludes to the notion that:

An attitude is composed of affective, cognitive, and conative components that correspond, respectively, to an individual's evaluations of, knowledge of, and predisposition to act toward the attitudinal object (1969, p. 3).

For example, if one were to consider a person's general attitude toward a given product (i.e. automobile), the affective component would refer to the person's evaluation of the automobile, such as how great it handles and how dependable it has been. The cognitive component would include the individual's knowledge or belief (correct or incorrect) about the automobile, such as the automobile is built with quality
workmanship or it is the best automobile on the road. Whereas, the conative component would refer to the individual's predisposition to act toward the automobile, such as keeping the automobile clean or telling friends about it.

To understand the phenomena of attitude formulation and change, it is necessary to make distinctions between an attitude and three related concepts with which it is often confused: opinions, beliefs, and values. Again, Wagner (1969) gives expression to this thought by alluding to the notion that:

. . . the difference between an attitude and an opinion is quite simple: An opinion is merely the verbal expression of an attitude . . . . The difference between an attitude and a belief is more complex: An attitude always includes evaluation of an object (the affective component), whereas a belief does not . . . . The difference between an attitude and a value is one of inclusiveness or scope: Attitude refers to an orientation toward one object, whereas value implies an orientation toward a series or class of related objects. Thus, a value is often a collection of attitudes . . . . (1969, p. 3).

The social-psychological phenomena of attitude formulation and changes can be expressed through various groups of theories such as: the cognitive-consistency theories (Harrison, 1975); the functional theories (Katz, 1960; Kelman, 1958, 1961); and persuasive communication theories (Holvand, Kiesler, Collins and Miller, 1969). Although each general group of theories examines and explains attitude formulation and changes, they do so under distinctively different environmental situations. For purposes of this study, the researcher is most concerned with an overview of the cognitive-consistency
workmanship or it is the best automobile on the road. Whereas, the conative component would refer to the individual's predisposition to act toward the automobile, such as keeping the automobile clean or telling friends about it.

To understand the phenomena of attitude formulation and change, it is necessary to make distinctions between an attitude and three related concepts with which it is often confused: opinions, beliefs, and values. Again, Wagner (1969) gives expression to this thought by alluding to the notion that:

. . . the difference between an attitude and an opinion is quite simple: An opinion is merely the verbal expression of an attitude . . . . The difference between an attitude and a belief is more complex: An attitude always includes evaluation of an object (the affective component), whereas a belief does not . . . . The difference between an attitude and a value is one of inclusiveness or scope: Attitude refers to an orientation toward one object, whereas value implies an orientation toward a series or class of related objects. Thus, a value is often a collection of attitudes . . . . (1969, p. 3).

The social-psychological phenomena of attitude formulation and changes can be expressed through various groups of theories such as: the cognitive-consistency theories (Harrison, 1975); the functional theories (Katz, 1960; Kelman, 1958, 1961); and persuasive communication theories (Holvand, Kiesler, Collins and Miller, 1969). Although each general group of theories examines and explains attitude formulation and changes, they do so under distinctively different environmental situations. For purposes of this study, the researcher is most concerned with an overview of the cognitive-consistency
theories and more specifically with constructs from cognitive-dissonance (or assimilation) theory.

The main theoretical constructs of attitude formulation and change through cognitive-consistency have evolved from three explicit theories. Cognitive-congruity (Osgood and Tannenbaum, 1955); cognitive-balance (Heider, 1946, 1958); and cognitive-dissonance (assimilation) (Festinger, 1957). The overall paradigm of these cognitive-consistency theories is based on the idea that people strive to see the world and its environment as being orderly and consistent. More specifically, each theory attempts to identify individual attitudes, then explain those attitudes through interpreting the various relationships among the affective, cognitive, and conative components that constitute the attitude in question. Due to the limited scope of this research, the theoretical constructs of both cognitive-congruity and balance theories, although important in understanding aspects of attitude formulation and change, are not considered relevant; therefore, for further discussion on these two social-psychological theories the reader is referred to Zajonc's (1960) excellent historical review of the development of consistency theories. As a consequence, only assimilation theory, contrast theory, and assimilation-contrast theory and their constructs will be further delineated at this point.
1. **Assimilation Theory**

Initially formulated by Leon Festinger in 1957, assimilation (cognitive-dissonance) theory is the most prominent member of the cognitive-consistency family. It examines the relationship between two or more items of information, or cognitions, viewed as any knowledge, opinion, or belief (expectation) about the environment, oneself, a purchased object, or one's own behavior. Further, these relationships can be one of two types: either consonant or dissonant. Aronson (1968), delineates the difference between consonance and dissonance relationships based on the degree to which an individual's cognition confirms his/her attitude toward a situation or purchased object. Aronson notes that:

A consonance relationship exists when one's cognition is confirmed to be positively related to their predisposition of the situation or object in question . . . . This type of relationship is most likely to exist when either two cognitions are logically consistent; thoughts, feelings, and actions are congruent with social customs; even a specific instance is consistent with more encompassing rules or principles; or a cognition is consistent past experience . . . . Whereas, a dissonance relationship exists when one's cognition is discovered to be negatively related to their predisposition of the situation or object in question . . . . Dissonance is likely when either the two cognitions are logically inconsistent; attitudes or actions violate social customs; a specific instance conflicts with more encompassing rules; or an event conflicts with past experience (1968, pp. 38-39).

Since cognitive relationships can involve more than two elements, Sherwood, Baron and Fitch (1969) suggest that the degree of dissonance varies as a function of the number and importance of the dissonance
conditions in proportion to the number and importance of consonance
cognitions. Mathematically this can be expressed as:

\[
D_T = \frac{\sum_{i=1}^{n} (\text{Imp}d_i)(d_i)}{m \sum_{i=1}^{m} (\text{Imp}C_i)(C_i)}
\]  

Where:

- \(D_T\) = Degree of dissonance
- \(\text{Imp}d_i\) = Importance Factor associated with \(d_i\)
- \(d_i\) = Specific dissonant cognition
- \(\text{Imp}c_i\) = Importance factor associated with \(C_i\)
- \(C_i\) = Specific consonant cognition
- \(n\) = Number of specific dissonant cognitions
- \(m\) = Number of specific consonant cognitions

Dissonance is actually an adverse state of being that an individual
tries to either avoid or reduce; this avoidance may involve the
changing of consonant cognition, changing the dissonant cognition,
or adding new cognitions to achieve a desirable balance.

The complexity of cognitive-dissonance increases with the
addition of the "Free-choice situation" paradigm or "Forced-compliance
situation" paradigm, (Harrison, 1976; p. 198). Brock (1963) concluded
that cognitive-consistency behavior becomes more difficult to measure
under a "Free-choice" situation because additional factors such as
similarity of alternative; relative attractiveness of each alternative,
or similarity of consequences among alternative selection must be included in the overall evaluation of consonance/dissonance cognitions. Whereas, Festinger and Carlsmith (1959) reported that in "Forced-compliance" situations, difficulty in measuring cognitive-consistency behavior arises due in part to the influence of such factors as the magnitude of potential rewards and counterattitudinal role playing. Holmes and Strickland (1970) have indicated that the individual's degree of personal responsibility to the situation and their perception of the real consequences involved also add complexity to the measurement problems.

In summary, the major underpinning of assimilation theory and its interrelatedness to post-purchase satisfaction can best be expressed through Anderson's (1973) interpretation of the theory's proposition that:

... if there is a disparity between expectations for a product and the objective performance of that product, the consumer is stimulated to reduce the psychological tension generated by changing his perception of the product to bring it more in line with his expectations (1973, p. 39).

That is, when the relationship between product expectations and actual product performance is characterized as being negative disconfirmation, consumers would tend to rate the product closer to their perception of product expectations by modifying their judgement of product performance to be better than what actually exists.
2. **Contrast Theory**

Another competing psychological theory that has been advocated to varying degrees by consumer satisfaction researchers in explaining confirmation-disconfirmation relationships between product expectations and perceptual performances is Contrast Theory. Antecedents to contrast theory can be traced back to social-psychology research efforts on attitude changes. The constructs of contrast theory have been used to explain, in part, attitude changes in situations where discrepancies (negative in nature) exist between expectations toward some object and perceptual performance; an individual tends to increase the magnitude of the disparity (away from their original expectations) rather than reducing the disparity.

In studying post-purchase consumer satisfaction, marketers have utilized contrast theory to explain the attitudes associated with negative disconfirmation of prior product expectations. In general, when expectations are not matched by actual product performance, the theory presumes that the surprise effect or contrast between expectations and outcomes will cause the consumer to exaggerate the disparity, (Anderson, 1973). For example, contrast theory predicts that if consumers' expectations of a product's performance are high, their ratings of that product's performance after use will be lower than if their expectations had been low. Therefore, one might conclude that high expectations tend to produce more disappointment than would lower expectations. Findings from early empirical endeavors by Cardozo (1965) and Cohen and Goldberg (1970) on confirmation-
disconfirmation of prior product expectations and product ratings (consumer satisfaction) were initially interpreted as being supportive of contrast theory's operation in nondurable products (i.e. ballpoint pens and instant coffee, respectively). But, later research has raised questions about these interpretations (Oliver, 1977).

**Supportive Empirical Research**

**Cardozo's Study on Customer Effort, Expectation, and Satisfaction**

Cardozo (1965) studied several postulated relationships between customer effort, product expectation (both independent in nature), and customer satisfaction (dependent). He employed an experimental laboratory design which measured the expectations of 107 college students for differently priced ballpoint pens. By manipulating perceived product expectation levels (high and low) through different degrees of stimulated shopping effort (high, low). Cardozo concluded that customer satisfaction with a product is influenced by the effort expended to acquire it and the expectations concerning it. Furthermore, he suggested that satisfaction with the product may be higher when customers expend considerable effort to obtain the product than when they use only modest effort. Also, customer satisfaction was found to be lower when the products did not come up to perceived expectations than when the product met prior
expectations. As a consequence, one could generalize Cardozo's findings as being supportive of contrast theory's applicability in explaining the apparent relationship between negative disconfirmation of product performance expectations and lower product ratings (customer satisfaction).

Cohen and Goldberg's Study on Post-Decision Cognitive Reevaluation of Instant Coffee

Cohen and Goldberg (1970) studied the effects and relationships of prior information resulting from brand familiarity and the quality nature of post-purchase evidence on the disparity of confirmation-disconfirmation product experience. They employed an experimental scenario of 128 college students and their perceptual post decision making process with a nondurable product class consisting of national brands and unmarked brands of instant coffee. The subjects were divided into high- and low-dissonance groups on the basis of the subject's post decisional ratings of predecisional conflict. Ratings of the selected brand of instant coffee were taken in each of the four states (decision, immediate post-decision, non-consumption, post-consumption) in the subject's post decision making process in order to determine the disparity of confirmation-disconfirmation product performance. Cohen and Goldberg concluded that a confirmation-disconfirmation experience was a salient factor in an individual's post-purchase reevaluation process. Their findings suggest that contrast theory is useful in explaining the
ratings of product performance of selected national brands of instant coffee for two of the post-decision reevaluation stages: immediate post decision and post-consumption. That is, subjects who expressed negative disconfirmation of product performance expectations tended to give lower product ratings than when perceptual performance and expectations were objectively perceived as being similar in nature. Cohen and Goldberg suggest that various types of exogenous variables (such as prior pre-purchase information) and endogenous variables (i.e. ego-involvement) have direct impact on an individual's post decision cognitive reevaluation process.

The supportive findings of Cardozo's and Cohen and Goldberg's studies on negative disconfirmation of expectations and the predictive powers of contrast theory have been questioned by Anderson (1973), Olshavsky and Miller (1972), Oliver (1977), and others. Major criticisms of Cardozo's findings relate to methodological scaling problems (Olshavsky and Miller, 1972); the study did not involve the use of decision, initial, commitment, and post decisional phases in the evaluation process (Cummings and Venkatesan, 1976); and the lack of investigation of the effects of "positive disconfirmation" (results that exceed expectation) on product ratings, or customer satisfaction (Engel, Kollat, Blackwell, 1973). Whereas, Cohen and Goldberg's study has been criticized for its failure to provide for different expectation levels, (Oliver, 1977).
3. **Assimilation-Contrast Theory**

Recognition of the inadequacies of assimilation theory and contrast theory to accurately explain the confirmation-disconfirmation of prepurchase performance expectations have stimulated consumer satisfaction researchers to consider Assimilation-Contrast Theory, (Hovland, 1957). This theory combines the constructs of both previously mentioned theories and suggests that minor discrepancies between expectations and product performance will result in the consumer assimilating his evaluation (product rating or satisfaction) towards original expectations, i.e. within a "latitude of acceptance." Furthermore, large degrees of either positive or negative disconfirmation will tend to be exaggerated by consumers away from (contrast) the original expectations. That is, the theory predicts that when the disparity between a consumer's expectations and his post-use evaluation of the product fails within a latitude of acceptance then assimilation theory will operate and the consumer will tend to upgrade (if negative disconfirmation) or downgrade (if positive disconfirmation) his evaluation of the product. On the other hand, when the disparity between expectations and actual performance falls outside the perceptual latitude of acceptance, then contrast theory will operate and the consumer will tend to rate the product performance more negative (positive) depending on the type of disconfirmation than would have been the case had expectations been lower (higher). For a more detailed discussion on assimilation-contrast theory, the
Supportive Empirical Research

Three key empirical studies (Olshavsky and Miller, 1972; Anderson, 1973; and Olson and Dover, 1975) have been reported in the marketing literature which have served as a basis for testing the predictive power of assimilation-contrast theory within a post purchase evaluative scenario of perceived product expectations and positive and/or negative disconfirmation of perceptual product performance. These three studies are summarized on the following pages.

Olshavsky and Miller's Study on Consumer Expectations, Product Performance and Perceived Product Quality

This study (1972) entailed an experimental design using male college students and a durable type product class consisting of a reel-type tape recorder. The subjects' perceived product performance expectation levels (high, low) were manipulated by changing the description of the recorder while product performances were manipulated (high, low) by varying the quality of the recording. Results indicated that subjects whose expectations were negatively disconfirmed rated the tape recorder performance higher than those subjects whose low expectations were confirmed. In contrast, subjects whose expectations were positively disconfirmed rated the tape recorder lower than those whose high expectations were confirmed.
As a consequence, Olshavsky and Miller concluded that performance evaluations (consumer satisfaction) tended to be assimilated toward manipulated expectations, whether positively or negatively disconfirmed. Further, Oliver (1977) in his review of Olshavsky and Miller's study noted that their conclusion depends on how one interprets the data. The results also show that if expectation is held constant, the positive disconfirmation experience of the high performance, low expectation group resulted in higher ratings than in the low performance, low expectation group; while the negative disconfirmation in the low performance, high expectation group yielded lower ratings than were obtained in the high performance, high expectation group; thus being supportive of the constructs of contrast theory (1977, p. 4).

Anderson's Study on Consumer Dissatisfaction

In Anderson's (1973) study of the effect of disconfirmed expectancy on perceived product performance, the author utilized a 2 x 6 factorial experimental design for college students evaluating unmarked ballpoint pens. He manipulated the subjects' expectation levels by randomly assigning them to one of five levels of persuasive product information or no product information at all. Results indicated in all cases, except that of an extremely high expectancy level subjects assimilated post experience ratings in the direction of the
expectation treatment. With the group which had extremely high expectations and experienced negative disconfirmation, ratings were lower than for the group who had low expectations toward the ballpoint pens. Anderson concluded that "the experiment revealed that there is a point beyond which consumers will not accept increasing disparity between product claims (expectations) and actual performance, at least for certain relatively simple or easily understood products." Therefore, when this threshold of negative disconfirmation is reached, consumers will rate the product lower than at a slightly lower level of expectation, thus causing a contrast effect. Anderson's evidence for the existence of a contrast effect under extreme disconfirmation conditions has since been questioned by later empirical research (see Olson, Toy and Dover, 1975).

**Olson and Dover's Study on Belief-Expectations of Cognitive Structure**

Olson and Dover's (1975) study represented an empirical attempt to partially fill an apparent void left by earlier studies on disconfirmation of product performance expectations. More specifically, the authors examined the process of expectancy creation and the subsequent effect of perceived beliefs on product evaluations following an expectancy-disconfirming experience. The study involved a longitudinal experimental design using of 38 adult women with an unfamiliar brand of coffee. The subjects' belief-expectancy of the "bitterness" attribute was manipulated by varying multiple exposures of prior information. Both the experimental group and the control group tasted a
very bitter blend of coffee. Results indicated that the experimental group evaluated the coffee more bitter than expected but less bitter than indicated by the control group. Olson and Dover concluded assimilation to be more appropriate in explaining the disparity between pretrial belief-expectations and post trial coffee ratings (consumer satisfaction) in those situations where disparity is of a negative disconfirmation nature. It was also concluded that expectations should best be considered as individual belief elements in a cognitive structure in opposition to the notion that expectations are nothing more than overall global product evaluations.

D. Considerations of the Empirical Evidence

It can be concluded that the five empirical studies discussed above can be considered as being keynote endeavors in giving direction to further conceptualizations and research in this area of consumer behavior. In sum, the findings of these specific studies have given insight and support to:

1) The notion that post-purchase consumer satisfaction is a derivative of comparing perceived pretrial product expectations to posttrial product performance;

2) the idea that post-purchase product performance disparity within a confirmation-disconfirmation paradigm can be explained, in part, by either assimilation, contrast or assimilation-contrast oriented models and theories, with assimilation models receiving the greatest attention; and

3) the recognition that exogenous factors (e.g. pre-purchase shopping or selection effort, prior product information), as well as, endogenous factors (e.g. ego-involvement) have varying degrees of influence on individuals' cognitive evaluations.
Short Comings of the Research Studies

Although these research studies have been recognized as having significant impact on the study of consumer satisfaction, considerations of the studies' general short-comings warrant further discussion. First, most of the studies have concentrated on the effects of a product usage experience that negatively disconfirms pretrial expectations which were created by providing consumers with product attributes and/or performance information prior to actual trial. As a consequence, the usual manipulation of product expectations involved a written communication about specific characteristics of the product. For example, Olshavsky and Miller (1972) presented their subjects with a list of features about reel-type tape recorders which included price, technical/performance attributes and brand name. Similar information manipulations of consumer expectations were used by Anderson (1973), Olson and Dover (1975) and Cardozo (1965). Thus, most studies neglected to give consideration to the possibilities of product expectations created by exposure to advertisements and word-of-mouth sources, by observation of the product, or through actual product usage/consumption experiences.

Second, in studying post-purchase consumer satisfaction in the confirmation-disconfirmation paradigm most studies utilized college students evaluating either simple nondurable products (i.e. ballpoint pens and coffee) or low involvement type durable products (i.e. reel-type tape recorders for college students). These sample frames manifest limitations to the generalizability of the research findings,
especially with respect to formulations and changes of post-purchase consumer satisfaction in real high involvement marketplace situations.

A third consideration relates to the notion that post-purchase consumer satisfaction can be measured by global evaluations of a product performance (an exception being Olson and Dover's interpretation). For instance, Cardozo used overall rating of product values; Cohen and Goldberg investigated overall product preference ratings; Olshavsky and Miller measured overall product performance; and Anderson was concerned with overall product rating based on an aggregated index from separate ratings of fifteen product attributes. As a consequence, this traditional way of viewing post-purchase consumer satisfaction might lead to misconceptions of what consumer satisfaction really means and how one should go about deriving and measuring it.

A final consideration is the fact that none of the studies investigate the possible impact of varying levels of actual post-purchase product usage/consumption experience on product performance expectations. That is, the expectancy manipulations and their position within the overall experimental procedures typically were somewhat artificial and transparent. For instance, in all the studies except Cohen and Goldberg (1970), subjects were given the informational material about the product immediately prior to the product usage experience which in turn was immediately followed by a post-trial questionnaire used to rate the product's performance. Consequently, such short time periods between experimental events are artificial in
nature, and also tend to increase the transparency of the experi-
ment's purpose. Demand characteristic artifacts are entirely possible.
More specifically, none of the studies investigate the impact and
relationships that may exist between actual product usage/consumption
experience and perceived attitudinal dimensions of satisfaction over
time. One might suspect that a consumer's expressed satisfaction
toward a product will change as he or she gains more product consump-
tion experience. Thus, consumption experience may have a causal effect
on prior expectancy modifications. Day (1977) has speculated that
"satisfaction may vary over time as a product is used" while Stover
(1972) found that satisfaction measured in terms of evaluation of
shirts, exhibited two patterns over time. That is, satisfaction
decreased monotonically over time for some shirts, but assumed a U-shaped
function for others, possibly due to changes in expectations.

Due to the exploratory nature of the current study and the
lack of any apparent marketing literature salient to the studying of
the concepts of commitment and involvement with respect to investi-
gating the concept of consumer satisfaction, the literature review
sections on the variables of commitment and involvement will serve
slightly different purposes than did the earlier review section on
the concept of consumer satisfaction. For the most part, the main
thrust of the literature review sections on commitment and involve-
ment will be one of justifying the inclusion of each of the respective
concepts into the investigation of post purchase consumer satisfaction.
E. The Concept of Commitment to the Purchased Object

In investigating the relationships between disparity of prior product expectations and the phenomenon of post-purchase consumer satisfaction, one psychological concept that has relevance to the area but has all but been overlooked by researchers using the confirmation-disconfirmation paradigm is the commitment concept. The importance of this concept to studying post-purchase consumer satisfaction can be derived through its linkages with dissonance (assimilation) theory and the attitude formulation and change literature. The concept of commitment has received the most attention within the assimilation (dissonance) and contrast literature and to a lesser extent in the brand loyalty and switching areas of the marketing literature. The most noted advocates of the commitment concept are Brehm and Cohen (1962) with their extensive research in "free" and "forced" compliance conditions. Their primary contribution was in their demonstration of the importance of commitment to the predictions of assimilation theory. Accordingly, "commitment provides a specification of the conditions under which one cognition follows from the obverse of another . . . a central kernel of assimilation theory . . . is the notion that a person will try to justify a commitment to the extent that there is information discrepant with that commitment," (Brehm and Cohen, 1962; p. 301). They interpret commitment very simply as a decision (to do or not to do something) or a choice (and thereby a rejection of unchosen alternatives) or active engagement in a given behavior. Extentions of the commitment concept can further be seen through the endeavors of Sherif
and Hovland (1964), Oshikawa (1970), Engel and Light (1968) and others on assimilation-contrast effects and attitude changes. For instance, Sherif and his colleagues (1961) discovered that the range of acceptable and unacceptable positions was dependent on the strength of commitment. That is, the more personally committed the individual is to his beliefs or actions, the greater is the latitude of rejection in relation to the latitude of acceptance, and the number of positions on which he remains noncommittal approaching zero. Commitment is "the determinant of the level of disparity necessary to produce maximum attitude. Low commitment implies a wide latitude of acceptance; thus, it is difficult to fall into the latitude of rejection with a communication message. With strong commitment, however, even information that is only moderately discrepant may fall outside the latitudes of acceptance," (Freedman, 1964). As a consequence, commitment refers to the strength of the individual's belief system with regard to a product or brand. Robertson (1976) states that the "perspective of low-commitment consumer behavior suggests that consumers for many products may not be particularly committed in their brand selection processes. When commitment is low and beliefs are not strongly held, brand purchase may reflect only the convenience inherent in repeat purchases rather than commitment to the brand purchase based on a well-developed attitudinal structure."
Although the commitment concept has not been investigated per se in any of the post-purchase consumer satisfaction literature to date, it should be apparent by now that commitment may have an important impact on the cognitive evaluation process(es) used by individuals in determining perceived latitudes of satisfaction toward a given purchased object. As Olson and Dover (1975) have alluded to in their research endeavors, product expectations at the time of purchase are really nothing more than the individual's perceived beliefs about product attributes and/or performance. The degree of importance associated with those selected product attributes (beliefs-expectations) might be determined, in part, by the individual's commitment to that product. Intuitively, one can speculate that commitment toward a purchased object is formulated through the individual's pre-purchase decision-making process. That is, as an individual goes through the decision process of selecting one specific product or brand from an evoked set of alternative choices, there is some type of commitment factor created toward the selected alternative. This pre-purchase commitment factor may be perceptual and/or instrumental in nature. Consequently, one is inclined to suspect that the commitment factor existing at the time of purchase also exists in the post-purchase scenario; thus having some type of impact on the individual's cognitive evaluation process and the confirmation-disconfirmation of attitudinal disparities toward the purchased object.
Definition of Commitment

For purposes of this research, commitment is simply viewed as the degree to which the respondent desires to own the purchased object (i.e., a brand name automobile—Pontiac Grand Prix); and will be regarded as an aggregate-endogenous variable which is a function of consumption (usage) experience.

F. Involvement With the Purchased Object

Another psychological concept which has received significant attention in recent years by researchers in consumer behavior and more specifically, by advertising researchers is that of involvement (i.e. ego-involvement), (Sherif and Cantril, 1947). The relevance of involvement to the studying of post-purchase consumer satisfaction can be seen through an overview of its antecedents from the social-psychology attitude change literature. The classic and most exhaustive analysis of involvement (referred to as ego-involvement) was made by Sherif and Cantril (1947). They examined only attitude, and defined high involvement attitudes as those which were incorporated in the individual's ego. The degree of ego-involvement determined how strongly the individual associated with his attitudes.

In addition to the work of Sherif and Cantril (1947), involvement has been defined in terms of its consequences as "attention to problem solving or concern with the general issue without necessarily taking a particular stand," (Festinger, 1957). Another view of
involvement is as the "general level of interest in an attitude object," (Day, 1973). Other traditional interpretations of involvement have been "interest in, concern about, or commitment to a particular position on an issue," (Freedman, 1964); "adherence to a prior behavior," (Greenwald, 1968); and "increased resistance to persuasion," (Ostrom and Brock, 1968). Ostrom and Brock specify three primary determinants of the magnitude of ego-involvement as being: 1) centrality of the attitudes to important values; 2) relatedness of the attitudes to the individual's values; and 3) the number of values engaged by the attitudes. Although much of the research on post-purchase consumer satisfaction entails the studying of product experience disparities (discrepancies) within the confirmation-disconfirmation paradigm, the concept of involvement has basically gone untreated.

Early research endeavors with the concept of involvement by Sherif and his colleagues led to the formulation of social judgement and assimilation-contrast theories, with the latter theory being recognized as a viable alternative to Festinger's (1957) assimilation (dissonance) theory and Bem's (1967) self-perception theory as an explanation to the reduction of psychological tensions (i.e. post-purchase product experience disparities). Sherif and Cantril (1947) basically utilized the effects of and the relationships between discrepant communications and differential involvement levels to
explain attitude changes. From this research paradigm, it was concluded that in general, low involved subjects changed their attitudes but not behavior more than did the high involved subjects, and the direction of the attitude change was in the hypothesized direction. For excellent reviews of the theoretical constructs of involvement the reader is referred to either Day (1973), or Kiesler, Collins and Miller (1969).

A more contemporary viewpoint of the concept is Krugman's (1965) in which he examined the notion of involvement as it applies to consumer behavior. Although Krugman's interpretation and research on the concept of involvement are not directly related to this proposed research, indirect inferences and implications can be drawn that are relevant to the study of the attitudinal dimensions of post-purchase consumer satisfaction. Basically Krugman adopted an involvement definition similar to that of Festinger. His concern was with those individuals who do not have a stand (e.g. brand loyalty) on an issue (e.g. product class), but rather a general concern for an issue (e.g. purchase). In his studies on learning without involvement or low involvement learning (1965, 1966), Krugman posited that most people have low involvement for televised consumer product advertisements. In this situation he postulated that people do not bother to put up perceptual defenses against the advertisements. Therefore, they may over time, change their ways of perceiving the products. Thus, changes in an individual's perceptions toward a product may lead to the product's purchase and later to the formulation of a modified
attitude towards that product. He concluded that in a low involvement situation, messages effect awareness, and then behavior; attitudes are effected as a result of the behavior taken. But in a high involvement situation, messages effect awareness and then attitudes; behavior is effected as a result of the changes in attitudes.

Expected Importance of the Involvement Concept

From this brief overview of the concept of involvement, it should be apparent that the relevance of involvement has mainly been explained in terms of some type of persuasive communication and its effects on attitude change. With respect to post-purchase consumer satisfaction, the involvement concept can take on significant importance when one views the formulation of the attitudinal dimensions of satisfaction within an ongoing cognitive process. That is, the post-purchase satisfaction literature has well documented the notion that satisfaction is a product of a cognitive evaluation orientation undertaken by an individual when judging the performance of a purchased object. As such, one could intuitively suspect that involvement with the purchased object has some type of causal (or conditional) effect on the individual's evaluative orientation used in judging the purchased object's performance. In addition, the concept of involvement may be instrumental (i.e. actual physical use of the product) and/or expressive (i.e. actual physical use of the product) and/or expressive (i.e. some type of psychological aspect, such as an indicator of status) in nature. Assume for example, that a married couple purchases a new
automobile as a second family car and that the wife is the primary
driver (high instrumental involvement) but the husband has the respon­
sibility for paying all the expenses associated with the operation of
and maintenance of it (high expressive involvement). Here, when asked
to evaluate the actual performance of the automobile based on a prior
given set of perceived product expectations, one is inclined to suspect
the existence of different latitudes of satisfaction depending on
which spuse is rating the product's performance and their involvement
with the product. As a consequence, an individual's involvement with
the purchased object after the actual purchase decision may have
significant implications on the cognitive evaluation process(es) used
in determining the latitude of satisfaction toward that product.

Definition of Involvement

In the present research primary interest will focus on inves­
tigating relationships and effects of the respondent's post purchase
instrumental involvement with the purchased object and their expressed
latitude of satisfaction; therefore, involvement can be simply defined
as the degree to which a respondent physically uses the purchased
object (e.g. Pontiac-Grand Prix); and will be viewed as an aggregate
exogenous variable. Formalized postulates of the relationships between
the commitment, involvement, and consumption experience variables and
product expectations, performance and satisfaction will be discussed
later in Chapter III.
A. Introduction

This section of the chapter discusses only those basic models of consumer satisfaction which have been recognized as pertinent in studying satisfaction in general. As a consequence, those conceptual and methodological models which have been formulated more specifically to study solely consumer dissatisfaction and/or complaining behavior will not be discussed. For a complete review of these models and selected empirical studies, the reader is referred to Hunt (1977); Day (1977); and Robinson (1978).

B. An Overview Typology of Four Basic Models of Consumer Satisfaction

In a review of recent research on consumer satisfaction and decision processes, Swan, Trawick and Carroll (1978) delineate four basic models of satisfaction which have provided the underpinnings of the more recent research on the topic. Their typology consists of: Model 1: Satisfaction Related to Product/Service Attributes and Performance; Model 2: Satisfaction Related to Consumer Characteristics; Model 3: The Classical Satisfaction Related to Expectation and Fulfillment of Expectation; and Model 4: Two Factor Models of Satisfaction.
1. **Satisfaction Related to Product/Service Attributes and Performance**

In this modeling approach, the basic theoretical underpinning has been the notion that satisfaction in the product's performance can be related to various product attributes (i.e., price of, dependability). Satisfaction with the dependability of a new automobile found that satisfaction was related to the number of repairs. Regarding price of products, Hughes (1977) analyzed satisfaction with specific items of general merchandise and found no relation between satisfaction and price paid as measured across different products. However, within a product category the more satisfied customer paid more than the average price of product, thus suggesting that satisfaction may be a function of product quality. Hughes also found that the number of service calls made is an important predictor of consumer satisfaction. In another study, Maddox (1977) identified six factors (employees, physical plant, hours/days, prestige, complaints, and goods) that contributed most to satisfaction with a supermarket, with the factors varying widely in their contribution toward overall satisfaction.

**Methodological Limitations of the Satisfaction Related Performance Model**

A major weakness of the product performance-satisfaction studies is that they have all been cross sectional and both satisfaction and perfect performance were measured at the same point in time.
Swan et al. allude to this weakness and suggest that the degree to which reporting on performance biases satisfaction scores or vice versa is not completely understood, and they suggest that it should receive attention in future studies. In some respects, the use of the product performance-satisfaction model alternative can be viewed as being more practitioner-oriented rather than theorist-oriented in studying satisfaction and consumer behavior. As a consequence, more accurate theory is needed to explain why an attribute is important as a determinant of satisfaction and how performance on different attributes are combined to determine satisfaction.

2. Satisfaction Related to Consumer Characteristics

This modeling approach is somewhat similar to the preceding one in that overall satisfaction with a product, service, or an experience (i.e. shopping experience) can be related to an individual’s demographic, socioeconomic, and/or personality characteristics. More specifically, this model’s underpinning is the use of demographic, socioeconomic and personality variables to identify or discriminate between individuals who are satisfied and those who are not satisfied. This modeling approach has gained recognition in research on dissatisfaction and complaining behavior within a post-purchase scenario and, to a lesser extent, in studies dealing with satisfaction in a pre-purchase decision process scenario.
With respect to studies relating the predictive power of demographic to product/service satisfaction, the findings are mixed. For example, Swan (1977), Swan and Longman (1974) and Wall, Dickey and Talarzyk (1977) found age to be significantly related to satisfaction, but Westbrook (1977) and Westbrook and Newman (1978) did not. Also, Wall et al., found no significant relationship between marital status, occupation of household head and knowledge or previous ownership of the product and product satisfaction while Westbrook and Newman reported a significant relationship between satisfaction and prior experience with and past information search for major appliances. Using a data base of 1800 respondents, Pfaff (1976) found that satisfaction varied across a large number of demographic variables, whereas Day (1977) reported that demographic variables are only weakly associated with satisfaction. He speculated that demographics may be an artifact of product use levels rather than satisfaction. In investigating satisfaction with a new retail store, Swan (1977) found that satisfaction was a function of both self-confidence and pre-shopping attitudes (personality variables). In studying major appliance purchases, Westbrook (1977) found moderate support for personality (competence), information search activity and involvement in the replacement decision as exploratory variables of satisfaction and dissatisfaction.
Methodological Limitations of the Modeling Approach

The inherent limitations to the consumer characteristic-satisfaction modeling approach are basically the same as were discussed for the product performance-satisfaction model approach. As a consequence, demographic variables appear to have little predictive power. Better theories are needed to explain the possible relationships between consumer's characteristics and product/service satisfaction. Again, implications for this type of modeling approach can be viewed as having relevance and importance from a practitioner-orientation rather than a consumer behavior theory-orientation. It appears that this modeling approach is more acceptable in those studies which focus more on product dissatisfaction and consumer complaining behavior (for example, see Robinson, 1978).

3. Classical Satisfaction Related to Expectation and Fulfillment of Expectation

As it was discussed in Chapter II, the theoretical basis of the expectation-satisfaction model approach is that post-purchase product performance (experience) will either confirm or disconfirm an individual's pre-purchase expectations about the product; with the disparity between expectations and perceived product performance/experience being interpreted as the latitude of consumer satisfaction. This approach utilizes the constructs of assimilation-contrast theory to explain the latitude of consumer satisfaction when there is an existence of a disconfirmation (positive or negative) condition.
In addition to the studies previously discussed in Chapter II which have utilized this approach, a study by Diener (1977) clearly showed the effects of negative disconfirmation on consumer dissatisfaction with a transaction and attitudes toward the perceived sponsor of a promotion. Subjects were shown an ad through which they could order a sample of skin care products for $1.00, and were asked to estimate the product sizes and rate the sponsor. Most subjects expected to receive at least one ounce of the samples. When told the samples were very small (1/30 ounce), attitudes toward the sponsor shifted from positive to quite negative; with the subjects' feelings being expressed in terms of anger and deception.

Other studies using this model have provided interesting results. Summers and Granbois (1977) and Morris and Winter (1975) found that the greater the difference between normative and predictive expectations (i.e. the gap between what ought to occur and what the consumer expects to occur), the greater the likelihood for dissatisfaction and subsequent complaining behavior. In another study, Allen et al. (1977) reported experimental evidence that post-transactional satisfaction measured by respondents evaluating the salesperson was highest where the subjects did not expect bargaining but the salesperson cut the price. In contrast, lowest satisfaction occurred where the subject expected the salesperson to bargain but he did not do so. They concluded that negative disconfirmation lowered satisfaction.
Methodological Limitations of the Modeling Approach

The major limitations confronting the expectation-satisfaction model approach are: (1) satisfaction has been interpreted, for the most part, as being some type of measurement (evaluation) construct; (2) most studies have considered the dynamics of actual consumption experience over time as being irrelevant; as a consequence, the model has been static in nature rather than analyzing the data within a true process framework; and (3) greatest emphasis has been on studying disconfirmation conditions of discrepancies rather than studying the formulation and change process.

4. Two Factor Model of Satisfaction

In an effort to overcome some of the recognized weaknesses of the expectation-satisfaction model approach, several researchers have investigated the possibility that satisfaction and dissatisfaction may be separate concepts or arise through different processes rather than being opposite points on a continuum. As a consequence, the two factor model of satisfaction is viewed as an adaptation of Herzberg's (1959) motivator-hygiene theory of job satisfaction; with its underpinnings focusing on a set of motivator (intrinsic) factors and a separate set of hygiene (extrinsic) factors. Swan and Combs (1976) tested a model which predicted that satisfaction would result when an item of clothing fulfilled expectations on both of the dimensions of performance: instrumental (i.e. the physical product per se
such as comfort) and expressive (i.e. the psychological level of performance such as styling). They found that for extreme satisfaction or dissatisfaction a lexicographic model, suggesting satisfaction depends on acceptable performance on all critical dimensions, described how most consumers sum up attribute performance rather than the normal universally accepted compensatory model. In another study, Leavitt (1977) tested a two-factor model which postulated that satisfaction with items intrinsic to the product (i.e. overall liking, appearance) should be correlated with overall satisfaction but not dissatisfaction; while extrinsic factors (i.e. price, advertising) should be correlated with dissatisfaction. Thus, the model assumed that satisfaction and dissatisfaction were two separate factors. However, Leavitt's findings were not supportive of the two-factor model, suggesting that satisfaction and dissatisfaction were opposite end points of a continuum.

**Methodological Limitations of the Modeling Approach**

The major weakness of the two-factor model approach focuses on data collection methods; it appears that this modeling approach can be validated only if the critical incident or sequence-of-events methodology are employed in either personal interviews or questionnaires (Leavitt, 1977).
AN OVERVIEW OF THE POST PURCHASE SATISFACTION MODEL USED IN THE CURRENT STUDY

In an attempt to overcome some of the inherent limitations of existing post-purchase consumer satisfaction modeling orientations, the conceptualization of satisfaction used in this empirical study represents a hybrid expectancy-value attitudinal modeling approach. The model combines various underpinnings from the classical expectation-fulfillment modeling approach with some of the constructs for measuring attitudes and expectations which have been suggested and tested by Fishbein (1963, 1975) and Rosenberg (1956). A more detailed discussion of the model (i.e. model assumptions, underpinnings, operational definitions of active model's variables); the formulation of concerned research questions; and formalized statements of testable hypotheses will be presented in Chapter III. But, here an overview will be presented delineating the model used in this study.

A. Major Postulates of the Model

There are two major postulates which serve as primary guidelines in the conceptualization of the post purchase expectancy-attitudinal satisfaction model:

Postulate 1: Post-purchase consumer satisfaction can be interpreted as a special kind of attitude that has an evaluative
orientation which can be measured as well as having
meaning as a feedback concept.

Conceptually, this postulate becomes instrumental in the development
of the proposed satisfaction model in that the traditional orientation
of belief-expectations toward product performance (Olson and Dover,
1975) can be reinterpreted in a broader dimension to mean "expected
satisfaction," (Howard and Sheth, 1969). That is, most objects of
choice, or attributes of those objects, contain both positive and
negative perceptions of possible outcomes. As a consequence, an
individual through his (her) prepurchase decision process either
consciously or unconsciously evaluates those perceptions which result
in belief-expectations toward the product's performance, prior to
actual consumption of the purchased object. This belief-expectancy
creation can be interpreted as the establishment of an "expected"
level of post-purchase product or attribute performance (satisfaction);
thus, it serves as a base for comparing (evaluating) post consumption
product performance (actual satisfaction). Another important impli-
cation that can be derived from the interpretation of belief-expec-
tation as "expected satisfaction" is that of gaining insights into
how the dimension of post-purchase consumer satisfaction attitude is
formulated.

Postulate 2: Post-purchase evaluation of a purchased object can be
viewed as an ongoing "cognitive process" undertaken
by consumers after the actual purchase transaction is made; as such, the time/consumption (usage) experience dimensions are necessarily dynamic in nature.

This postulate and its importance in studying post-purchase consumer satisfaction has received considerable conceptual attention from Day (1977); Miller (1977); Hunt (1977) and others. But, the notion has gone untreated empirically. In investigating post-purchase consumer satisfaction as an attitude, this second postulate has significant importance in that it allows the researcher to construct a multidimensional, dynamic type of satisfaction model that can be used to measure the satisfaction attitude over time and at varying consumption (usage) experience levels. This orientation affords the opportunity to investigate possible attitudinal changes, associated relationships of the model's variables, and their effects on consumer satisfaction.

From an intuitive standpoint, one is inclined to suspect that consumers' attitudes toward being satisfied or dissatisfied with a purchased object may change as an individual gains experience by consuming that object over time. Thus by formulating a model with capabilities of operating within a dynamic cognitive process framework, possible theoretical insights can be gained to better understand consumer satisfaction and potential linkages between expectations, satisfaction, and post-purchase consumer behavior. Another important
implication of the second postulate is that it allows a researcher to investigate and gain insights into possible changes in perceived product expectations. Plummer (1977) has given support to the notion of changes in consumers' expectations as well as to the influence of "rising expectations" on people's attitudes and opinions toward products and services.

B. The Satisfaction Model Used for the Study

The study's satisfaction model can be viewed simply as a multiplicative model where felt satisfaction in a given time period (or alternatively after a determined amount of consumption experience) is a function of: disparity between expected satisfaction and actual satisfaction; post purchase commitment to the purchase object; and instrumental involvement with the object. Mathematically it can be expressed as:

$$ S = f(d_{t+q}, C_{t+q}, INV_{t+q}) $$

where:

- $S$ = the derived attitude of felt satisfaction toward the purchased object at a given time (q) after the actual purchase action (t);
- $d_{t+q}$ = the disparity between actual satisfaction (AS) at time $t+q$ and expected satisfaction (ES) at time $t + (q-1)$;
\[ C_{t+q} = \text{the degree of commitment to the purchased object at the time of actual satisfaction (AS) evaluation}; \]
\[ \text{INV}_{t+q} = \text{the degree of instrumental involvement with the purchased object at the time of actual satisfaction (AS) evaluation}. \]

Further understanding of the model and its capabilities within a dynamic process framework as well as its potential value as a theoretical base in studying post purchase consumer satisfaction attitudes and possible behavioral outcomes can be drawn from a schematic representation of the model (see Figure 2-1). This schematic framework envisions aspects from both the "prepurchase decision" and "actual purchase decision" phases of an aggregate decision process approach. The satisfaction model for this empirical endeavor is represented by the schematic framework of the "post purchase decision process" phase.

C. Interpretation of the Model's Framework

Intuitively, one can interpret the model as an ongoing cognitive evaluation process used by individuals to determine the degree of "rightness" or "wrongness" of their selection and actual product purchase decisions. This process results in the formulation of an attitude of being satisfied or dissatisfied with their prior judgements, or expectations, about the purchased object. The model's schematic framework suggests that the formulation of the satisfaction
FIGURE 2-1
A CONCEPTUAL SCHEMATIC REPRESENTATION OF THE POST PURCHASE SATISFACTION MODEL

PRE PURCHASE DECISION PROCESS

The selection process of a particular product...
Formulation and evaluation of perceptions about the product/service

Magnitude of Commitment (C_t) towards the selected product

ACTUAL PURCHASE DECISION (ACTION)

Recognition of perceived product expectations (E_{pki}) and evaluation of their degree of importance (I_{ki})

Perceived "EXPECTED SATISFACTION" (ES_t) of product/service (i.e., attitude towards expected product performance—establishment of performance standards)

POST PURCHASE DECISION PROCESS (An Ongoing Cognitive Evaluation Process)

Consumption/usage of purchased object (i.e., experience)

Perceived "ACTUAL SATISFACTION" (AS_{t+q}) of product (i.e., evaluative response to perceived purchased object's performance—P_{ki})

Formulation of derived "latitude of satisfaction" towards purchased object [AS_{t+q} - ES_{t+(q-1)}]

Overall attitude of "FELT SATISFACTION" (S) towards purchased object

Yes -> Some type of OVERT post purchase behavioral action

No -> Re-evaluation of perceived product expectations and their importance

Attitude change in "EXPECTED SATISFACTION" towards expected product performance (ES_{t+q})—(i.e., re-establishment of acceptable performance standards)
attitude actually begins somewhere within an individual's prepurchase decision process. That is, within the prepurchase selection process an individual either consciously or unconsciously formulates and evaluates various perceptions about the product (service) under consideration. As commitment is made toward a particular product (service), one can interpret the formulated product perceptions as being cognitive recognitions of perceived product expectations, each having a measurable degree of importance. As a consequence, the perceived expectations can be redefined as an individual's perceived "expected satisfaction" toward the product (service) and interpreted as an initial attitude toward expected product performance prior to any consumption experience.

The proposed post purchase satisfaction model becomes operative as an individual begins to either psychologically consider or physically consume (or use) the product. By conceptualizing the individual's post purchase decision process as an ongoing evaluation of determining the latitude of "rightness" or "wrongness" of their prior product expectations (expected satisfaction), the model suggests that consumers may, either consciously or subconsciously, reevaluate their perceived "actual satisfaction" prior to recognition of an overall attitude of felt satisfaction towards the product. In addition to the possibility of changes in "actual satisfaction" due in part to consumption experience, the model suggests that the derived latitude of satisfaction toward the product may have a direct
impact on changes in an individual's perceived "expected satisfaction" level (performance standards).

Conceptually, the focal point of the proposed model is that of deriving the "latitude of satisfaction" or the disparity between an individual's attitude of "actual satisfaction" and his prior attitude of "expected satisfaction" toward product performance. Furthermore, the model suggests that a relationship exists between the "derived latitude of satisfaction" and the commitment factor (endogenous) as well as the involvement factor (exogenous). One is inclined to suspect that the commitment and involvement factors, as defined for purposes of this study, act as multipliers on the latitude of satisfaction and therefore have importance in formulating an overall attitude of "felt satisfaction" towards the product (purchased object). More specifically, the commitment and involvement factors can be interpreted as having a conditional effect with respect to the magnitude of the derived latitude of satisfaction. For example, one would suspect that a person who is more committed to owning the purchased object after gaining some amount of consumption (usage) experience would experience a smaller disparity between "actual satisfaction" and prior "expected satisfaction" than would the individual who felt less committed to the product. The involvement factor may have a reverse effect on the magnitude of disparity under similar conditions. That is, the more involved a person is with the physical consumption of the purchased object, the greater the
likelyhood of increased disparity between "actual satisfaction" and prior "expected satisfaction" than the person who is less involved with the physical usage of the product.

Verification of this model would infer that further research into consumer satisfaction, dissatisfaction and complaining behavior could be fruitful if it concentrated on the formulation and changes of satisfaction within an ongoing cognitive evaluation process framework, as well as the impact that salient endogenous and exogenous factors (i.e. commitment to and involvement with the product) have on this special kind of attitude. Research on the model will serve to better understand the important linkages between belief-expectancy, satisfaction, and post purchase behavioral responses.

SUMMARY OF CHAPTER II

This chapter furnished a review of the literature revelant to the concepts underlying the focus of the research study. Theoretical and conceptual underpinnings of the study's variables: consumer satisfaction, commitment, and involvement were investigated and expression given to the conceptual and methodological considerations of each. Three specific psychological-oriented theories relevant to researching post purchase consumer satisfaction and the phenomenon of attitude formulation and change were outlined followed by a critical evaluation of theoretical and methodological considerations for each theory. Next, five key-supportive empirical research studies were
reported and their findings and implications evaluated for weaknesses.
The second major section of this chapter reviewed four contemporary
consumer satisfaction modeling approaches. Theoretical underpinnings
for each modeling approach were presented as well as their methodologi­
cal limitations. Several supportive empirical studies for each
modeling approach were discussed followed by an assessment of their
strengths and short­comings. The final section furnished a thumbnail
conceptual overview of the post purchase satisfaction model used in
formulating the model were presented followed by a discussion of
theoretical and methodological considerations. The chapter concluded
with a mathematical delineation as well as a conceptual schematic
representation of the study's satisfaction model.
CHAPTER III

THE EXPECTANCY-ATTITUDE SATISFACTION MODEL AND RESEARCH METHODOLOGY

INTRODUCTION

This chapter presents a description of the specific satisfaction model, research hypotheses, and the research methodology used in investigating post-purchase consumer satisfaction of purchasers/users of a 1978 Pontiac Grand Prix automobile. The chapter is divided into three sections. The first section delineates the framework of the expectancy-attitude satisfaction model. Included in this section are the operational definitions of the various variables considered to be active in the model and methodological considerations for each. The next section presents the present study's hypotheses as logically derived from the expected influences of the proposed variables. The concluding section presents the description of the research methodology and delineates the rationale underlying the various techniques and methods used.

THE EXPECTANCY-ATTITUDE SATISFACTION MODEL

A. Introduction

Conceptually, the satisfaction model used in this study represents a cross-fertilization of suggested and tested theoretical
constructs from research reported in the attitude formulation and change literature as well as the consumer satisfaction literature. As such, its formulation should be viewed as an exploratory endeavor to provide researchers with an alternative theoretical framework and measurement approach for studying the attitudinal dimension(s) of post-purchase satisfaction within an ongoing cognitive evaluation process orientation.

B. Model Assumptions

The model is predicated on several critical suppositions. First, it assumes that anyone at the time of purchase of the selected product must have a net positive perception of that product and probable outcome for that perception. The time of purchase constitutes the last time the purchase is perceived as a set of expectations. Therefore, the cognitive evaluation process transforms expectations into perceived expected satisfaction. The buyer's perceptions are evaluations of the product's performance against prior expectations at any point after purchase. For a true measure of satisfaction, therefore, both an expectation measure (expected satisfaction) and a perceived performance measure (actual satisfaction) must be obtained. Second, the model assumes that an individual at the time of purchase possesses some feeling of commitment towards owning the selected product. This feeling of commitment has the characteristics of fluctuating in magnitude as he gains additional product consumption experience. Third, the model assumes that individuals will exhibit
different latitudes of satisfaction toward the purchase object as they go through a decision process of evaluating the "rightness" or "wrongness" of their purchase decision and the overall final worth of the product. That is, the model characterizes as individual's evaluation process as being continuous (ongoing) in nature. As such, one may actually evaluate the product's (service) performance a number of times prior to his determination of the product's final overall worth. Finally, the model assumes that performance evaluations prior to determination of overall felt satisfaction lead to a reevaluation of perceived product expectations and their importance (expected satisfaction). As such, possibly triggering a reestablishment of acceptable performance standards used in deriving the latitude of satisfaction towards the product at a later time.

C. Main Theoretical and Methodological Underpinnings of the Satisfaction Model

The development and operationalization of the model has been guided, in part, by several theoretical and methodological underpinnings which have been suggested by various research findings and concepts reported in the post-purchase satisfaction and behavior literature. These main propositions underlying the model are:

1. An individual strives to see the world and its environment as orderly and consistent; therefore, he constantly tries to maintain an acceptable cognitive-consistency balance.
2. Attitudinal outcomes derived from the cognitive evaluation process are dependent, in part, on the magnitude of the "latitude of satisfaction" derived in the evaluation process.

3. The individual's "latitude of satisfaction" toward the purchased object acts as a method for evaluating the attitudinal dimension of satisfaction, its formulation and/or change in a dynamic process framework.

4. Assimilation and/or contrast theory suggests possible explanations for perceptual differences in individuals' derived "latitudes of satisfaction."

5. The actual level of felt satisfaction at a given point in time is a function of the individual's derived satisfaction disparity, magnitude of commitment towards the product and degree of involvement with it (i.e. \( S = f(d_{t+q}, C_{t+q}, INV_{t+q}) \)).

6. An individual's perceived "expected satisfaction" towards product performance is a function of several types of perceived expectations and their respective degrees of importance which over time, have a propensity to change. The types of perceived expectations include both instrumental and noninstrumental product attribute dimensions.
7. The individual's desire for consistency requires comparison of his satisfaction attitude of the current time period to his attitude from a preceding evaluative point in time.

D. **Operational Delineation of the Model**

The following delineation of the model reflects the various operations of product expectations and perceived performance outcomes as well as the interrelatedness of selected endogenous and exogenous variables associated with the formulation and change of an individual's satisfaction attitude. Symbolically, the model can be expressed in general form:

\[ S_{xn} = [(AS_{xn})_{t+q} - (ES_{xn})_{t+(q-1)}] \cdot C_{m} \cdot INV_{m}^{t+q} \]  

(1)

where:

- \( S_{xn} \) = Post purchase attitude of an individual's felt satisfaction towards the purchased brand \( (x) \) of product \( (n) \).
- \( (AS_{xn})_{t+q} \) = Perceived actual satisfaction towards purchased brand \( (x) \) of product \( (n) \) at a moment in time after the purchase decision \( (t+q) \).
- \( (ES_{xn})_{t+(q-1)} \) = Perceived expected satisfaction of purchased brand \( (x) \) of product \( (n) \) prior to a post-purchase evaluation of the brand.
\[(AS_{x,n})_{t+q} - (ES_{x,n})_{t+(q-1)}\] = the derived latitude of satisfaction; a comparison of actual satisfaction (AS) in current time period \((t+q)\) and expected satisfaction of some specified \((t+(q-1))\) preceding evaluative time period.

\(C_{m_{t+q}}\) = The commitment multiplier at the time of evaluating actual post purchase satisfaction.

\(INV_{m_{t+q}}\) = The instrumental involvement multiplier at the time of evaluating actual post purchase satisfaction.

\(t = \) Time of actual purchase.

\(q = \) Time at which measurement of expected satisfaction occurs.

The variables of the model can be further delineated as:

**Expected Satisfaction:**

\[
ES_{x,n} = \sum_{i=1}^{r} (B_{x,n})_i \cdot I_i + \sum_{j=1}^{k} (H_{x,n})_j \cdot I_j |_{t+(q-1)}
\]  

where:

\((B_{x,n})\) = Belief of the ability of brand \((x)\) of product \((n)\) to satisfy the expectation of instrumental product performance criterion \((i)\).
\( I_i \) = Importance of instrumental product performance on criterion (i).

\( i = i^{th} \) instrumental product performance criterion.

\( r \) = Number of instrumental performance criteria.

and:

\( \left( H_{x,n} \right) \) = Belief of the ability of brand (x) of product (n) to satisfy the expectation of noninstrumental (expressive) product performance criterion (j).

\( I_j \) = Importance of noninstrumental product performance on criterion (j).

\( j = j^{th} \) noninstrumental product performance criterion.

\( k \) = number of noninstrumental performance criteria.

Actual Satisfaction:

\[
AS_{x,n} = \left[ \sum_{i=1}^{r} (PB_{x,n})_i \cdot I_i + \sum_{j=1}^{k} (PH_{x,n})_j \cdot I_j \right]_{t+q} (3)
\]

where:

\( (PB_{x,n})_i \) = The individual's evaluative response toward the instrumental product performance criterion (i).

\( (PH_{x,n})_j \) = The individual's evaluative response toward the noninstrumental product performance criterion (j).

\( I_i \) = Importance of evaluative response toward the instrumental product performance criterion (i).
$I_j = \text{Importance of evaluative response toward the noninstrumental product performance criterion (j).}$

**Commitment Multiplier:**

$$C_m^t = \frac{(C_{x,n})_{t+q}}{(C_{x,n})_{t+(q-1)}}$$

where:

$(C_{x,n})_{t+q} = \text{Perceived present (actual) commitment response toward brand (x) of product (n) at the time of evaluating actual satisfaction.}$

$(C_{x,n})_{t+(q-1)} = \text{Perceived prior (expected) commitment response toward brand (x) of product (n) from preceding evaluation of actual satisfaction.}$

**Involvement Multiplier:**

$$INV_m^t = \frac{(INV_{x,n})_{t+q}}{(INV_{x,n})_{t+(q-1)}}$$

where:

$(INV_{x,n})_{t+q} = \text{Degree of present (actual) instrumental involvement with brand (x) of product (n) at time of evaluating actual satisfaction.}$
\( \text{INV}_{x, n}^{t+(q-1)} \) = Degree of prior (expected) instrumental
involvement with brand \( x \) of product \( n \)
from preceding evaluation of actual
satisfaction.

**Operational Definitions of the Model's Components**

The intention of this section is to indicate the operational
definitions of the variables postulated within the expectancy-attitude
customer satisfaction model. Also, methodological and measurement
considerations are discussed for each variable.

A. **Expected Satisfaction**

A partial outcome of any individual's pre-purchase decision
process is that he formulates expectations about instrumental and
noninstrumental (or expressive) product attributes. As such, an
expectation can be viewed as being the individual's belief in the
purchased product's ability to satisfy the perception of a product
(or performance) criterion. As a consequence, the derivation of a
singular belief - expectancy value towards a product criterion will
be viewed as the product of two cognitive subfactors: (1) degree
of product criterion consideration and (2) the degree of importance
of the product criterion.
Operationalization of Expected Satisfaction

The attitudinal-oriented concept of expected satisfaction is a derivation of this belief-expectancy value orientation.

Definition: Expected Satisfaction

Expected satisfaction attitude toward a purchased object represents an individual's net evaluative-oriented cognition of a belief or set of beliefs about the purchased object prior to actual consumption experience of that object.

As such, a person's attitude of expected satisfaction toward a purchased object is indicated as a composite belief value of the degree of consideration given to instrumental and noninstrumental (expressive) product-related criteria and the degree of relative importance associated with each consideration.

Measurement of Expected Satisfaction:

1. Consideration Factor: This subfactor reflects the individual's belief that a given product criterion (i) is relevant in his selection of brand (x) of product (n). The degree of relevance that a person associates with his consideration of a product criterion is indicated as a position along a symmetrical six-point scale ranging from definitely agree to definitely disagree. The scale format allows the researcher to determine the relevance of the belief-expectancy
towards each product criterion as well as the establishment of a partial ranking scheme between the beliefs.

2. Importance Factor: This subfactor represents the expressed magnitude of the belief-expectancy toward a given product criterion \((i)\). As such, it reflects the importance of a given product criterion to an individual as a relevant consideration in selecting and purchasing brand \((x)\) of product \((n)\). The magnitude of importance of each belief-expectancy is indicated as a position along a six-point positively skewed scale ranging from not at all important \((to \ me)\) to extremely important \((to \ me)\).

Although the importance factor, itself, and the positively skewed scaling design are not new concepts to research on consumers' attitude formulations and changes, there still exists the unresolved methodological issue of whether or not the importance factor should be included in the derivation of an attitude through a belief-expectancy orientation. See Sheth and Talarzyk (1972) for a detailed delineation of this methodological issue.

B. Actual Satisfaction

A partial outcome of any individual's actual purchase decision is that he assesses the "rightness" or "wrongness" of their purchase action by evaluating (either consciously or subconsciously) the present (actual) performance of the object to some prior set of product criteria standards or belief-expectancies. Therefore, the individual's evaluative response of a product criterion
can be viewed as being the degree to which the purchased object is perceived to have actually confirmed (or disconfirmed) a prior belief about a product performance criterion. As a consequence, the derivation of an evaluative response toward a product criterion is viewed as the product of two cognitive subfactors: (1) degree of product criterion's actual performance and (2) the degree of importance of actual performance.

Operationalization of Actual Satisfaction

The attitudinal-oriented concept of actual satisfaction is a derivation of this evaluative belief-performance orientation.

**Definition: Actual Satisfaction**

Actual satisfaction attitude toward a purchased object represents an individual's evaluation of the "rightness" or "wrongness" of a prior belief or set of beliefs toward the purchased object.

An individual's attitude of actual satisfaction toward a purchased object is indicated as a composite of the evaluative belief-performance response given to the instrumental and noninstrumental product criteria and the degree of relative importance associated with each belief-performance response.

**Measurement of Actual Satisfaction:**

1. **Belief Performance Response:** This subfactor reflects the individual's belief that brand (x) of product (n) actually confirmed or disconfirmed his belief-expectancy of product criterion (i).
The degree of revelance that a person associates with his performance response of a product criterion is indicated as a position along a symmetrical six-point scale identical to the scale used in the assessment of the consideration factor for expected satisfaction. The rationale underlying the use of similar scales is that such a scaling scheme will enhance the researcher's opportunities to investigate possible cognitive changes in a person's attitude of satisfaction toward the purchased object over time.

2. Importance Factor: This subfactor represents the expressed magnitude of the actual belief-performance response towards a given product criterion (i). As such, it reflects the importance of the individual's assessment of "rightness" or "wrongness" to a belief-performance response of a given product criterion (i) for brand (x) of product (n). Again, the magnitude of importance of each belief-performance is indicated as a position along a six-point positively skewed scale ranging from not at all important (to me) to extremely important (to me).

C. Commitment to the Purchased Object

From a review of the commitment literature (Chapter II), it has been assessed that the concept of commitment with respect to researching post purchase satisfaction has been untreated empirically. As a consequence, the concept of commitment in this exploratory study is viewed simply as the purchaser/user's desire of owning the purchased brand (x) of product (n) over other alternative brands (y's) of product (n).
Operational Definition: Commitment

For any given purchase object, a purchaser/user's commitment may be reflected on an internal scale of intensity indicating the degree for which the individual desires to own the particular purchased object rather than some other similar (or competing) alternative product or object.

The individual's degree of commitment toward the given purchased object is indicated as a position along an eleven-point scale ranging from "I have no desire to own my (purchased object)" to "I very much like owning my (purchased object)." Scale clarity is enhanced by describing each scale point in internal increments of ten percentage points, thus equating "having no desire to own" as zero (0) percent and "very much like owning" as one hundred (100) percent.

In the present study; an individual's commitment towards the given purchased object is assessed in two different time frames: (1) at time of actual purchase and (2) a later time point after a specified amount of consumption (usage) experience. The assessment of an individual's degree of commitment toward the purchased object at different points in time enhances the opportunity to investigate changes in commitment and possible influences on the derivation of satisfaction attitudes.

D. Involvement with the Purchased Object

The potential influences that involvement has on attitude formulation and change and the concept's relevance in the
present research have been established in Chapter II. For purposes of this study on individual's involvement with the given purchased object is viewed simply as the degree to which the person instrumentally (or physically) uses the object.

**Operational Definition: Involvement**

For any given purchased object, a person's involvement may be reflected on an interval scale of intensity indicating the degree to which the individual actually uses the particular object rather than someone else.

Similar to commitment, the individual's degree of instrumental involvement with the given purchased object is indicated as a position along an eleven-point scale ranging from "use it all the time" (or one hundred (100) percent) to "never use it at all" (or zero (0) percent). Scale clarity is enhanced by designing each scale point in increments of ten percent points and as a ratio of individual's actual use to someone else's actual use of the object, (see questions #13 and #19 on the questionnaire in the Appendix).

For purposes of being able to investigate changes in instrumental involvement over time and its impact on the derivation of attitudes of satisfaction, involvement was assessed in two different time frames: (1) expected involvement at time of actual purchase; and (2) actual involvement at some later time point after a specified amount of consumption (usage) experience.
A. Research Questions Considered in the Investigation

This exploratory study endeavors to address the following set of research questions:

1. Can clear and meaningful insights for better understanding satisfaction and consumer behavior be gained by viewing consumer satisfaction toward a product (service) as an attitude formulated within a dynamic post-purchase process framework?

2. Does the proposed expectancy-value-attitudinal model provide satisfaction researchers a viable alternative for studying satisfaction within a post-purchase scenario?

3. To what extent do individuals actually strive to maintain a cognitive-consistency behavioral balance with respect to expected satisfaction (product expectations) and actual satisfaction (product performance) levels?

4. What impact does additional product consumption experience have on derived latitudes of satisfaction toward the purchased product (service)?

5. What impact do the commitment to and involvement with factors have on the formulation (determination) of latitudes of satisfaction?
6. What impact does the consumers' post-purchase commitment to, as well as, instrumental involvement with the purchased product have on their decision process of deriving their felt satisfaction attitude toward final worth of the purchased product?

7. Do more experienced persons exhibit different attitudes of satisfaction toward a given purchased product as compared to less experienced persons?

8. Do more committed persons exhibit different attitudes of satisfaction toward a given purchased product as compared to less committed persons?

9. Are there any distinguishable linkages between post-purchase product expectations, attitudes of satisfaction, and consumer behavior (i.e. intentions toward repeat purchase action)?

B. Statements of the Hypotheses Pertaining to the Study

To begin empirically addressing some of the research questions, there are several formal hypotheses concerning the variables postulated within the expectancy-attitude satisfaction model used in the present study. More specifically, the hypotheses formulated for this study are categorized into three areas; hypotheses relating to:
the "commitment to" variable;

2) the "involvement with" variable; and

3) the attitude of "felt satisfaction."

Due, in part, to the infancy of the topic, the hypotheses lack direct empirical support from previous research. But, they are not unfounded, for they represent the cross-fertilization of suggested and tested theoretical constructs from research in the attitude formulation and change literature as well as the consumer satisfaction literature.

1. Hypotheses Relating to the "Commitment to" Variable

Hypothesis Cl

1978 Pontiac Grand Prix car owners' commitment to owning their Grand Prix will decrease in intensity with increases in usage experience.

According to its conceptual development, the commitment variable represents the purchaser's desire to own his 1978 Grand Prix rather than some other brand name automobile. An inverse relationship is suspected to exist between an individual's intensity of commitment to his automobile and the amount of usage experience. That is, the longer one owns his Grand Prix the greater the likelihood that he might desire to own some other automobile. As a

9 The product used in this study is a 1978 Pontiac Grand Prix automobile. Justifications of this particular brand of automobile are delineated in the "Research Methodology" section of the chapter.
consequence, the dynamics of the time factor (product usage) will influence the intensity level of the Grand Prix owner's commitment to owning a Grand Prix. If the predicted inverse relationship holds, the commitment factor may act as a constraint on the magnitude of a person's overall felt satisfaction attitude towards his 1978 Grand Prix.

Hypothesis C2

Present (actual) commitment to owning the 1978 Pontiac Grand Prix automobile has an unimodal relationship with derived latitudes of satisfaction toward the car; such that low magnitudes of present commitment to the car will be related to wide ranges of derived latitudes of satisfaction and high magnitudes of present commitment to the car will relate to narrow ranges of derived latitudes of satisfaction.¹⁰

The rationale behind the postulated unimodal relationship and inverse direction between present (actual) commitment to and derived "latitudes of satisfaction" toward a 1978 Grand Prix are drawn, in part, from the theoretical constructs of assimilation-contrast theory as well as logic. From assimilation-contrast theory

¹⁰The term derived "latitudes of satisfaction" represents the measured difference between expected satisfaction and actual satisfaction. The literature has noted this term as being the disparity between expectations and fulfillment of expectations (Anderson, 1973). As such, "wide ranges" simply denote large differences between attitudes of expected satisfaction and actual satisfaction, while "narrow ranges" denote small differences.
researchers derived the concept of confirmation/disconfirmation of prior product expectations. As such, it should be noted that confirmation of prior expectations (expected satisfaction) exists when prior expectations are perceived as being fulfilled, meaning no disparity. Whereas, disconfirmation exists when there is a degree of disparity between prior expectations and reality. Further disconfirmation of expectations has been reported to be both positive and negative in nature (Anderson, 1973). As a result, one would suspect that a purchaser perceiving a high magnitude of commitment towards the Grand Prix will tend to assimilate his actual satisfaction attitude to his prior expected satisfaction attitude level. Therefore, the latitude of satisfaction is predicted to be narrow. On the other hand, a purchaser perceiving a low magnitude of actual commitment is predicted to have a wider attitudinal disparity range. If these predictions hold, the commitment could be viewed as having significant importance as a predictor in derived latitudes of satisfaction.

Hypothesis C3

There is a positive relationship between purchasers' present (actual) commitment to and their perceived "actual satisfaction" attitude toward the Grand Prix automobile.
It is expected that 1978 Pontiac Grand Prix purchasers who have a high desirability of owning their automobile will exhibit greater satisfaction with the performance of the automobile than will those who have low desirability. That is, the greater the commitment to the Grand Prix the more positive the individual's satisfaction with the car.

2. Hypotheses Relating to the "Involvement With" Variable

Hypothesis INV1

1978 Pontiac Grand Prix purchasers' instrumental involvement with their car is independent of the length of time of ownership.

Conceptually, the involvement variable was developed to represent a Grand Prix purchaser's actual physical interaction (driving time) with his automobile. Thus, instrumental involvement excludes, for the most part, any expressive interaction. For a product such as an automobile, one is inclined to suspect that purchasers' degree of perceived instrumental involvement with the product is determined during their prepurchase decision making process. As a consequence, it is predicted that purchasers' degree of instrumental involvement with their 1978 Grand Prix remains relatively constant over time. If this prediction holds, the involvement factor as conceptualized in the expectancy-attitude satisfaction model can be assessed as being independent and constant over time; therefore, having a true individual multiplier
effect in the measurement of purchasers' felt satisfaction attitudes toward their 1978 Grand Prix.

Hypothesis INV2

Purchasers' present instrumental involvement with their 1978 Grand Prix automobile is independent of their derived "latitudes of satisfaction" toward the car.

In assuming that purchasers' instrumental involvement with their car is relatively constant over time, one suspects that the actual amount of physical use (driving time) associated with the purchasers, themselves, does not influence their belief-performance evaluation of the car on a set of itemized product-related criteria. As such, one can predict that purchasers' physical interaction with their 1978 Grand Prixs are not a relevant determinant of changes in attitudes of satisfaction. If the prediction proves valid, the notion that the instrumental involvement variable has some type of multiplier effect in the expectancy-attitude satisfaction model of purchasers' felt satisfaction attitudes toward the car can be supported.

Hypothesis INV3

1978 Grand Prix purchasers' present instrumental involvement with and their perceived present (actual) commitment toward owning the automobile are independent.
The expectancy-attitude satisfaction model assumes that the involvement and commitment are independent in nature. As such, demonstrating that they are statistically independent of one another allows the researcher to speculate that purchasers' present instrumental involvement with their automobile have no influence on how purchasers perceive their present commitment toward the car. If this null relationship holds, one would believe that the two variables do relate to different dimensions of purchasers' interaction with their 1978 Grand Prix.

3. Hypotheses Relating to Felt Satisfaction

Hypothesis Sxn 1

Differences in 1978 Pontiac Grand Prix purchasers' post purchase felt satisfaction attitude toward their car will exist with increases in product usage experience.

It was postulated that individuals' perceived felt satisfaction attitudes toward their automobiles change within a dynamic evaluative process. As such, one is inclined to suspect that purchasers' perceived felt satisfaction attitudes toward their Grand Prixs are subject to change as they gain more product usage experience. The rationale behind this prediction stems from the premise that attitudes toward some object have the ability to change over time. Due in part to the lack of clear conceptualization of consumer satisfaction and the realization that satisfaction as an attitude can be either positive or negative in nature, any attempt to further specify the relationship would be misleading at this stage of the
investigation. Although no direction relative to the postulate changes is explicitly specified, support of this prediction can contribute meaningful insights to the research and measurement of consumer satisfaction within a dynamic process setting.

The following three subhypotheses are interrelated with the felt satisfaction hypothesis, Sxnl. These subhypotheses are designed to help further isolate and identify differences, if any, in purchasers' satisfaction attitude toward their 1978 Grand Prix. Similarities exist between the subhypotheses in the sense that the various satisfaction differences are postulated to exist as purchasers gain more product experience through ownership.

Subhypothesis Sxns 1.1

A difference exists in 1978 Grand Prix purchasers' derived "latitudes of satisfaction" toward the cars related with increased usage experience.

Subhypothesis Sxns 1.2

There is a difference in purchasers' perceived "actual satisfaction" attitudes toward their 1978 Grand Prix car related to increased usage experience.

Subhypothesis Sxns 1.3

There is a difference in purchasers' perceived "expected satisfaction" attitudes toward their 1978 Grand Prix cars related to increased usage experience.

Hypothesis Sxn 2

A relationship exists between 1978 Grand Prix purchasers' perceived felt satisfaction toward their car and their intentions to either buy another Grand Prix automobile (likelihood of repeat purchase) or complain about the car.
The notion that an individual's feeling of satisfaction toward a given product has some type of influence on his later behavior has been well documented in the literature. Research efforts of those studying consumer dissatisfaction and complaining behavior have offered clearer insights to relationships between dissatisfied consumers and their behavioral outcomes in handling their dissatisfactions, but many questions about the relationship(s) between the concept of satisfaction and future behavioral outcomes still remain unempirically addressed due in part to the novelty of the area. The present research is concerned not with behavioral outcomes per se but more with intentions and perceived felt satisfaction attitudes. As such, one suspects that some type of relationship does in fact exist between 1978 Grand Prix purchasers' felt satisfaction attitude toward their car and behavioral intentions toward either purchasing another Grand Prix automobile or complaining about the present automobile in general or specifics. Due, in part, to the lack of a clear conceptualization of consumer satisfaction and the realization that felt satisfaction is not the sole predictor of attitude or behavioral outcomes, any attempt to further specify the relationship would be misleading at this stage of the investigation. If the results from this study support some type of relationship between felt satisfaction attitudes and behavioral intentions, better understanding of to what extent felt satisfaction attitudes have an influence on post purchase behavioral intentions will result.
Utilizing the same line of investigation, two subhypothesis of Hypothesis \( S_xn \ 2 \) were formulated to investigate general differences between satisfied and dissatisfied 1978 Grand Prix purchasers and their likelihoods of purchasing another Grand Prix as well as their likelihoods to complain about their Grand Prix car. The first subhypothesis postulates that differences in likelihood of purchasing another Grand Prix exist between satisfied 1978 Grand Prix purchasers and dissatisfied ones. Whereas, the second subhypothesis postulates that differences in the likelihood to complain about product-related problems exist between satisfied and dissatisfied 1978 Grand Prix purchasers. The rationale behind these subhypotheses is similar to that presented for Hypothesis \( S_xn \ 2 \). Again, an attempt to further specify the relationships would be misleading at this stage of the investigation. The two subhypotheses are formally stated as follows:

**Subhypothesis \( S_xnS \ 2.1 \)**

A difference exists for post-purchase intentions to complain about some problem with the Grand Prix car between purchasers who exhibit a positive felt satisfaction attitude toward their Grand Prix car and those purchasers who exhibit a negative felt satisfaction attitude toward their car.

**Subhypothesis \( S_xnS \ 2.2 \)**

A difference exists for post-purchase intentions to buy another Grand Prix automobile between purchasers who exhibit a positive felt satisfaction attitude toward their present Grand Prix car and purchasers who exhibit a negative felt satisfaction (dissatisfaction) attitude toward their car.
RESEARCH METHODOLOGY AND METHODOLOGICAL CONSIDERATIONS

INTRODUCTION

This section presents a description of the research methodology and delineates the rationale underlying the various techniques and methods used. It begins with an examination of the direct mail survey method as the chosen data collecting technique. Rationale and comments on the choice of the product and product-related attributes will then be discussed, followed by an outline of the sample design and procedure used in the study. Next, the research procedure and data collection instrument are described. Finally, the reliability of subjects' responses and the measurement scales are summarized and the representativeness of the sample assessed.

A DESCRIPTION OF THE FIELD SURVEY

A. An Overview of the Research Procedure

Testing of the stated hypotheses and subhypotheses in this study required the measurement of:

1. respondents' perceived expected satisfaction attitudes at time of purchase and their perceived actual satisfaction attitudes toward a 1978 Pontiac Grand Prix automobile;

2. the relationships between commitment to and instrumental involvement with the Grand Prix and derived latitudes of satisfaction; and
3. the relationships between the degree of felt satisfaction and post-purchase behavior intentions within a dynamic process framework.

The research procedure used to collect the necessary data was a direct mail survey, characterized as being descriptive and exploratory in nature. First a specific cover letter was mailed to selected purchasers (owners) of a 1978 Pontiac Grand Prix automobile asking for their cooperation in the study. The true purposes of the study were disguised in an effort to prevent possible extraneous biases from entering the study. The initial cover letter was followed by a personal telephone call to ensure owners' participation as well as assure the legitimacy of the study. Within one day after the telephone call, a self-administered questionnaire carefully designed for the study was mailed to the respondents. In addition, a second cover letter and a stamped-return envelope were attached to the questionnaire (see appendix A for copies of the cover letters) in an attempt to further enhance owners' participation in the study.

B. **Rationale Underlying the Use of a Survey Research Design**

The decision to utilize a market survey design to collect the needed attitudinal and behavioral information rather than some other research design was due, in part, to several considerations. First and most important, the primary research objectives and stated hypotheses required obtaining attitudinal and behavior information
which extended over various time dimensions (past, present and future). The market survey method was viewed as having sufficient flexibility to permit the researcher to ask selective questions concerning the subjects' past feelings about their 1978 Grand Prix automobile as well as questions concerning the subjects' future behavioral intentions.

A second consideration focused on the desired sample size and the time and cost dimensions associated with collecting the necessary data. Ideally the researcher wanted everyone in the defined population to participate which meant approximately 406 subjects. As such, the direct mail market survey approach was viewed as being an appropriate method of reaching a large number of subjects within a relatively short time at a nominal cost.

A final consideration related to the administration time associated with filling out the actual questionnaire. A pre-test of the questionnaire indicated an average completion time of approximately thirty-five minutes and precluded the use of a telephone method. Due in part to the time needed to respond to all the questions on the questionnaire, the survey method was viewed most appropriate for allowing the subjects flexibility in completing the questionnaire.

**SELECTION OF THE PRODUCT AND PRODUCT-RELATED ATTRIBUTES**

A. **Selection of the Product**

Although the proposed satisfaction model has been conceptualized and developed capable of investigating consumer satisfaction
attitudes toward any type of product(s) and/or product class(es)—
durable or nondurable, the decision was made to design the investi­
gation around one specific brand name product—1978 Pontiac Grand
Prix, within one particular product class—automobiles.

The rationale for limiting the current research to investi­
gating only consumer satisfaction attitudes toward 1978 Pontiac
Grand Prix automobiles includes:

1) The product class of automobiles represents a large
durable good where purchasers in their pre-purchase
decision process are likely to formulate distinctive
perceptions toward the product and/or its attributes.
As such, it was assumed that a set of instrumental and
noninstrumental (expressive) product performance criteria
could be formulated to represent common perceived product
expectations among purchasers/users of an automobile
regardless of demographic (or socioeconomic) differences.

2) The decision to use one particular brand name automobile
allowed the researcher to develop a specific standardized
set of product performance criteria deemed relevant to
purchasers/users of the automobile. As a consequence,
the researcher would be able to measure and make inferences
about possible changes and/or relationships in satisfac­
tion attitudes toward the automobile of purchasers/users
having different degrees of product usage experience (length of ownership).

3) In addition, the use of one brand name of automobile allowed the researcher to measure and make inferences about possible changes and relationships in the subjects' perceived commitment to as well as their instrumental involvement with the automobile over different degrees of usage experience.

4) The 1978 Pontiac Grand Prix was selected as the specific automobile for purposes of survey control and data manageability.

5) Finally, the decision to use only 1978 Grand Prix purchasers/users in the study was due, in part, to the researcher's familiarity and personal interests with that automobile and a local Pontiac dealership.

B. Selection of the Product-Related Attribute

The determination of the fifteen instrumental/noninstrumental (expressive) product attributes in the study was arbitrary but not unfounded. The product attributes listed in Figure 3-1 are the result of several depth interviews with a local Pontiac Dealership's Sales Manager and three of his salespeople, analysis of several video tapes from previous focus group interviewing sessions with Pontiac automobile owners, and the researcher's content analysis results from an informal
pretest of the derived attributes with approximately 15 randomly solicited automobile owners.

FIGURE 3-1
INSTRUMENTAL AND NONINSTRUMENTAL AUTOMOBILE-RELATED ATTRIBUTES USED IN THE STUDY

Grand Prix is a trouble free automobile
Grand Prix has an acceptable MPG Rating
Grand Prix delivers smoothest ride
Grand Prix has a high resale value
Grand Prix represents my fashionable life style
Grand Prix has excellent craftsmanship
Grand Prix Dealer has the best deal
Grand Prix is a high quality product
Grand Prix relates to quick maintenance service
Grand Prix is a good investment
Grand Prix has an excellent warranty guarantee
Grand Prix has great styling features
Grand Prix is a very dependable car
Grand Prix represents owner's successful career to other people

The fifteen automobile-related attributes played an important role in the current study in that they were used in the construction of the indirect scale measurements of Grand Prix purchasers/users' expected and actual satisfaction attitudes toward their Grand Prix automobile. The indirect composite method of measuring Grand Prix purchasers/users' satisfaction attitudes toward their cars is one of the main premises of the post-purchase satisfaction model conceptualized in the current study.
SAMPLE DESIGN AND PROCEDURE USED IN THE INVESTIGATION

A. Definition of the Population

The population under study was defined as male and female adults who were purchasers/users of a 1978 Grand Prix automobile purchased new from a Pontiac dealership in the Baton Rouge, Louisiana Metropolitan Area (a southern metropolitan city). By defining the population as 1978 Grand Prix purchasers/users, control was maintained to avoid possible biases from yearly model changes. Since the Baton Rouge Metropolitan area had only one recognized Pontiac dealership, the decision was made to further restrict the defined population to 1978 Grand Prix purchasers/users from that Pontiac dealership. Consequently, the choice of a single dealership controlled for differences in dealership images, selling procedures, and/or special services offered to a customer.

B. A Description of the Sampling Procedure

From the defined population, 1978 Grand Prix purchasers/users were stratified into three test groups based on the length of usage experience (ownership) of their automobile. Judgement on the part of the researcher was used to establish the usage experience (ownership) criteria for stratification of the defined population. The "test" groups for the study can be interpreted as:
Test Group 1 — 1978 Grand Prix purchasers/users having ownership (usage) experience of six months or less (0-6,000 miles).

Test Group 2 — 1978 Grand Prix purchasers/users having ownership (usage) experience of more than six months but no more than twelve months (6,001-12,000 miles).

Test Group 3 — 1978 Grand Prix purchasers/users having ownership (usage) experience of more than twelve months but no more than nineteen months (12,001-19,000 miles).

In stratifying the sample into three test groups, it was assumed that variation within groups was relatively equal. In addition, the desired size of each strata was determined to be one hundred. The main reason for selecting test group sizes of one hundred 1978 Grand Prix purchasers/users was to reduce any parameter constraints in the present and future data analysis methods to be utilized.

With the aid of the local Pontiac Dealership and its sales record files, the following procedural steps were taken in selecting the subjects for the study:

**Step 1** -- determination of the number of sampling units within the defined population.

The dealership's sales records indicated that a total of four hundred and six new 1978 Grand Prix automobiles had been sold by the time of drawing the sample. Due, in part, to the size of the population and the desire to have large test group sizes,
the decision was made to attempt a census of the population rather than to randomly sample three hundred purchasers. Table 3-1 indicates the natural stratification base for the three test groups in the study.

TABLE 3-1
STRATIFICATION OF THE DEFINED POPULATION

<table>
<thead>
<tr>
<th>TOTAL NUMBER OF SAMPLING UNITS</th>
<th>406</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRATA FOR TEST GROUP 1</td>
<td>104</td>
<td>25%</td>
</tr>
<tr>
<td>STRATA FOR TEST GROUP 2</td>
<td>161</td>
<td>40%</td>
</tr>
<tr>
<td>STRATA FOR TEST GROUP 3</td>
<td>141</td>
<td>35%</td>
</tr>
</tbody>
</table>

Step 2 --- determination of the useable 1978 Grand Prix purchasers/users to be included in the study.

Preliminary analysis of the defined population revealed that eighteen 1978 Grand Prix purchasers were in the form of private businesses or public institutions. As a consequence, they were excluded from the population base. Another fifteen purchasers could not be contacted through either the initial direct-mailed cover letter or the follow up personal telephone call, thus were not mailed the survey questionnaire.

Of the three hundred and seventy-three useable subjects who were mailed the questionnaire two hundred sixty-three (70%) questionnaires were returned for purposes of coding and data analysis. Through the coding procedure, thirteen additional respondents were excluded from
the study for reasons of incompleteness. Table 3-2 represents the actual stratification bases of the test groups used in the study.

<table>
<thead>
<tr>
<th>TABLE 3-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTUAL STRATIFICATION BASES OF TEST GROUPS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL NUMBER OF RESPONDENTS</th>
<th>250</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRATA SIZE OF TEST GROUP 1</td>
<td>51</td>
<td>20%</td>
</tr>
<tr>
<td>STRATA SIZE OF TEST GROUP 2</td>
<td>100</td>
<td>40%</td>
</tr>
<tr>
<td>STRATA SIZE OF TEST GROUP 3</td>
<td>99</td>
<td>40%</td>
</tr>
</tbody>
</table>

THE DATA COLLECTION INSTRUMENT

A. The Self-Administered Questionnaire

The instrument used to collect the data necessary for the study was a detailed self-administered questionnaire designed to allow the respondent, himself, to read, interpret and response to each question in the comfort of his home in elude of any interviewer's presence, thus reducing the possibilities of any interviewer bias entering the investigation. The questionnaire included specific measurement methods (see Appendix for a complete copy of the questionnaire) with capabilities of assessing the following information:

1. Subject's overall perceived commitment to their 1978 Grand Prix at time of actual purchase.

2. Degree of the subject's expected instrumental involvement with their 1978 Grand Prix at time of actual purchase.
3. Belief ratings toward the relevance of each product criteria subdecision in selecting a Grand Prix automobile.

4. Degree of importance of each product criteria subdecision.

5. Subject's degree of commitment to owning their 1978 Grand Prix at the point in time when the subject's actual satisfaction attitude is measured.

6. Degree of the subject's actual instrumental involvement with their 1978 Grand Prix at the point in time when the subject's actual satisfaction attitude is measured.

7. Subject's length of ownership (or usage experience).

8. Belief ratings toward actual performance of each product criteria subdecision.

9. Importance of perceived performance of each product criteria subdecision.

10. Global ratings of the subject's perceived expected and actual satisfaction attitudes.

11. Post-purchase behavior outcomes—likelihood of complaining and intentions toward purchasing another Grand Prix automobile.

B. Comments on the Measurement Methods Used in Assessing the Needed Information

A combination of direct and indirect scale measurements were designed to assess the subject's past attitudes and behavioral intention feelings toward their 1978 Grand Prix at time of actual purchase
as well as their present beliefs, attitudes and behavioral intentions after some specified amount of usage experience with their 1978 Grand Prix. To assess the variability and sensitivity among subjects' attitudinal and intention responses, the scale measurements were designed having either ordinal, interval or ratio scaling properties (see Appendix).

The specific scale measurements used to assess the various attitudes toward the subjects' automobiles and product-related sub-decisions in the different time frames (actual purchase and present) were identical. The differences in the scale measurements existed mainly in the wording of the questions and instructions used in assessing the required information from one time frame to the next (see Appendix). That is, the researcher modified the various questions to fit the time frame of concern.

C. Reliability Assessments of the Subjects' Responses and Measurement Scales Used in the Study

Probably the most critical methodological consideration within any type of research design is the assessment of how reliable is the data from which inferences are to be drawn or hypotheses tested. It has been noted in the literature that the concept of reliability can be expressed with a variety of synonyms such as: dependability, stability, consistency, predictability, accuracy, and precision (Kerlinger, 1973). The concept of reliability is commendably assessed by Kerlinger in his summary comments on the topic:
Reliability, while not the most important facet of measurement, is still extremely important. . . .
High reliability is no guarantee of good scientific results, but there can be no good scientific results without reliability. In brief, reliability is a necessary but not sufficient condition of the value of research results and their interpretation (1973, p. 455).

Critical to the current study was the assessment of the reliability of four (fifteen-item) measurement scales designed to measure subjects' expected and actual automobile performance beliefs and their respective degrees of importance. In addition, there were six (single-item) measurement scales designed to measure subjects' expected and actual feelings on commitment to and instrumental involvement with their 1978 Grand Prix, as well as aggregate measures of their expected and actual attitude of satisfaction towards the automobile.

With the aid of the subprogram "RELIABILITY" available in the SPSS UPDATE Computer Package (Hull and Nie, 1979), separate coefficients of reliability were computed for the four multiple-item (15-item) scales. Reliability coefficients are widely recognized and accepted measures of evaluating the accuracy of multiple-item additive attitudinal scales (Peter, 1979). Table 3-3 reports the reliability coefficients associated with each of the four multiple-item measurement scales.
TABLE 3-3
RELIABILITY COEFFICIENTS OF THE MEASUREMENT SCALES FOR SUBJECTS' EXPECTED AND ACTUAL BELIEFS AND IMPORTANCE OF BELIEFS TOWARD AUTOMOBILE-RELATED SUBDECISIONS

<table>
<thead>
<tr>
<th>FIFTEEN-ITEM SCALE MEASURE</th>
<th>Reliability Coefficients (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPECTED BELIEF (ATP BLF) SCALE</td>
<td>.83</td>
</tr>
<tr>
<td>EXPECTED IMPORTANCE (ATP IMP) SCALE</td>
<td>.86</td>
</tr>
<tr>
<td>ACTUAL BELIEF (PT BLF) SCALE</td>
<td>.88</td>
</tr>
<tr>
<td>ACTUAL IMPORTANCE (PT IMP) SCALE</td>
<td>.87</td>
</tr>
</tbody>
</table>

In interpreting the results reported in Table 3-3, it should be remembered that the concept of measurement scale reliability simply refers to how consistent, on the average, the estimate of the true score is in a population of subjects (objects) to be measured. As such, if all the variation in the observed scores is due to errors of measurement, the reliability coefficient will equal zero. If there is no error of measurement, the reliability coefficient will equal a maximum of one. Based on the general interpretation of what the reliability coefficient measures, all four multiple-item scales were assessed having relatively high degrees of reliability. One can conclude that the variation in the observed belief and importance scores are due principally to other elements of the study and not to error in measurement scales, themselves.
RELIABILITY ASSESSMENT OF THE COMMITMENT TO, INVOLVEMENT WITH AND AGGREGATE SATISFACTION MEASUREMENT SCALES

The direct methods available for assessing reliability of the expected and actual measurement scales for subjects' commitment to their 1978 Grand Prix, instrumental involvement with the car and their aggregate level of satisfaction towards it proved to be inappropriate for two reasons:

1. All six measurement scales were designed as being single-item scales in nature; and
2. the overall research design provided for the collection of only cross-sectional data, thus eliminating any opportunity for utilization of the test-retest method for assessing the reliability of a single-item measurement scale.¹¹

Two data analysis methods were used in an attempt to investigate and indirectly assess reliability to the single-item measurement scales. First, using the underpinning of reliability theory that the mean and variance of any observed scale score (V observed) can each be divided into two parts: (1) true score, and (2) error score (Kerlinger, 1973), the reliability coefficient (r_{tt}) of the measurement scale can be logically derived by using the

¹¹ The reliability literature (see Kerlinger 1973, Nunnally, 1967) has noted that the Test-retest method is feasible approach for assessing the reliability of a single-item measurement scale. For problems associated with the test-retest method and ways of handling them, see Nunnally (1967, p. 215-220).
The error score can be estimated. As a consequence, a two-way analysis of variance, subjects x item, was performed for each of the six single-item measurement scales. Table 3-4 summarizes the respective sum of squares, degrees of freedom (d.f.), and means square values for the observed item score and error score of each of the six measurement scales as well as each scale’s computed reliability coefficient.

**TABLE 3-4**
TWO-WAY ANALYSIS OF VARIANCE RESULTS AND COMPUTED RELIABILITY COEFFICIENTS FOR THE EXPECTED AND ACTUAL COMMITMENT, INVOLVEMENT AND SATISFACTION SINGLE-ITEM MEASUREMENT SCALES

<table>
<thead>
<tr>
<th>Scale</th>
<th>Source Of Variation</th>
<th>Sum Of Squares</th>
<th>d.f.</th>
<th>Means Square</th>
<th>Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Commitment</td>
<td>Item</td>
<td>79893.6</td>
<td>9</td>
<td>8877.1</td>
<td>.43</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1222164.0</td>
<td>240</td>
<td>5092.3</td>
<td></td>
</tr>
<tr>
<td>Actual Commitment</td>
<td>Item</td>
<td>91258.9</td>
<td>9</td>
<td>10139.9</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1210799.0</td>
<td>240</td>
<td>5044.9</td>
<td></td>
</tr>
<tr>
<td>Expected Involvement</td>
<td>Item</td>
<td>94079.5</td>
<td>10</td>
<td>9407.9</td>
<td>.46</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1207978.0</td>
<td>239</td>
<td>5054.3</td>
<td></td>
</tr>
<tr>
<td>Actual Involvement</td>
<td>Item</td>
<td>122039.1</td>
<td>10</td>
<td>12203.9</td>
<td>.60</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1180018.0</td>
<td>239</td>
<td>4937.3</td>
<td></td>
</tr>
<tr>
<td>Expected Satisfaction</td>
<td>Item</td>
<td>29390.6</td>
<td>4</td>
<td>7347.7</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1272667.0</td>
<td>245</td>
<td>5194.6</td>
<td></td>
</tr>
<tr>
<td>Actual Satisfaction</td>
<td>Item</td>
<td>47245.8</td>
<td>7</td>
<td>6749.4</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1271612.0</td>
<td>242</td>
<td>5254.6</td>
<td></td>
</tr>
</tbody>
</table>
Interpretation of the computed reliability coefficients would lead the reader to believe that the commitment and involvement measurement scales were at best only marginally reliable (range .43 to .6) in their capabilities to accurately measure the subjects' expected and actual attitudes of commitment to (desire to own) their 1978 Grand Prix and instrumental involvement with the automobile. While the aggregate satisfaction measurement scales prove to be less reliable (range .22 to .29) in their capabilities to accurately measure the subjects' expected and actual satisfaction attitude toward their 1978 Grand Prix. However, the reason for the low to marginal reliability coefficients as well as the differences between each paired measurement scale [expected commitment (.43)/actual commitment (.50); expected involvement (.46)/actual involvement (.60); expected satisfaction (.29)/actual satisfaction (.22)] must not be attributed to the items, themselves. The writer is of the conviction that the values and differences are a reflection of the survey and questionnaire design. More specifically, the study's research design enhanced the collection of cross-sectional data at one particular point in time, but the testing of the hypotheses required the securing of attitudinal information across a dynamic time frame (past, present and future dimensions). The questionnaire was designed incorporating questions and measurement scales that asked the subjects to go back in time and recall what their specific attitudes were at a specific point in the past. In addition,
other questions and measurement scales were designed forcing
the subjects to project what their attitudes would likely be
at some point in the future.

Interpretation of the computed reliability coefficients is
further complicated with the possibility that subjects actually had
modified their original (at time of purchase) attitudes of commit­
ment, involvement and satisfaction toward their 1978 Grand Prix and
the actual measurement scales reflect those modifications (changes).

Another data analysis procedure was performed on the single­
item measurement scales to determine the degree of stability or
equivalence (Hull and Nie, 1979, p. 112-114) between the scales of
measurement for expected commitment, involvement and satisfaction
attitudes and those of the respective actual attitudes. Again
through the "RELIABILITY" subprogram in SPSS UPDATE, the expected
and actual single-item scales were combined into respective two-item
scales (expected/actual commitment; expected/actual involvement; and
expected/actual satisfaction) and subjected to Guttman's split-half
reliability test. Table 3-5 reports the correlation coefficient
between items and Guttman's reliability coefficient of the composite
scales.

The correlation coefficient is simply interpreted as the
measure of the extent to which the individual halves of the scale
measure the same thing or the stability of the two items (scales).
On the other hand, the Guttman split-half coefficient represents the
TABLE 3-5
CORRELATION AND GUTTMAN SPLIT-HALF
COEFFICIENT VALUES FOR EXPECTED/ACTUAL
(TWO-ITEM) COMMITMENT, INVOLVEMENT,
AND SATISFACTION COMPOSITE SCALES

<table>
<thead>
<tr>
<th>Scale</th>
<th>Correlation Coefficient</th>
<th>Split Half Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected/Actual Commitment</td>
<td>.34</td>
<td>.51</td>
</tr>
<tr>
<td>Expected/Actual Involvement</td>
<td>.88</td>
<td>.94</td>
</tr>
<tr>
<td>Expected/Actual Satisfaction</td>
<td>.42</td>
<td>.54</td>
</tr>
</tbody>
</table>

reliability coefficient of the two-item composite scale. The statistics reported in Table 3-5 indicate that the separate commitment scales only moderately (.34 correlation) measure the subjects' commitment to (desire to own) their 1978 Grand Prix, which as such, can be viewed as having only marginal stability over time. If the time factor is ignored, as is the case of the composite commitment scale, the accuracy of the measurement scale for commitment improves as is indicated by the Guttman split-half coefficient of .51.

Analysis of the correlation coefficient (.42) and Guttman split-half coefficient (.54) associated with the expected/actual satisfaction measurement scale leads one to similar conclusions about the marginal stability of the separate aggregate (single-item) satisfaction scales over time. As with the composite commitment scale,
the accuracy of the composite measurement scale for satisfaction improves when the time factor is ignored.

Finally, analysis of the table statistics associated with the expected/actual (two-item) involvement scale indicates a rather high level of stability (correlation coefficient of .88) between the separate involvement scales over time. While the composite scale with a split-half coefficient of .94, would indicate that the overall measurement of subjects' instrumental involvement with their 1978 Grand Prix was very accurate.

D. Final Comments on Reliability Assessments of the Scales

Although there are no direct procedures available for assessing the reliability of single-item measurement scales used in cross-sectional data collection research designs, the results from the indirect analysis procedures used in this study lead the writer to believe that the single-item scales designed to measure the subjects' attitudes toward commitment to, involvement with and satisfaction of their 1978 Grand Prix are moderately stable and accurate. The writer is of the conviction that the apparent instability in the single-item commitment and aggregate satisfaction measurement scales is not solely the result of improper scale design but rather a combination of:

1) the overall survey research design — collection of cross-sectional data;
2) question design in that the subjects were requested to recall their attitudes of a past time frame as well as project their attitudes of a future time period;

3) expressions of commitment to and aggregate satisfaction toward the 1978 Grand Prix are sensitive time dimensional changes or varying levels of actual usage experience;

4) the fact that commitment to (desire to own) was operationalized as being psychological or expressive in nature, thus possible sensitive to various situational-specific influences; and

5) the recognized fact that aggregate measures of satisfaction are strongly suspected of measuring more than what they are intended to measure.

DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

As the description of the sample procedure indicated, the method of securing subjects did include a conscious effort to ensure that the subjects in the study would mirror the defined population of 1978 Pontiac Grand Prix purchasers/users within a selected southern metropolitan city.

1. The Average Purchaser of a 1978 Pontiac Grand Prix in the Sample

In terms of summary statistics, the typical purchaser of a 1978 Pontiac Grand Prix automobile could be described as a married male averaging approximately thirty-five years of age, although the
mean exhibited a rather large standard deviation of approximately 10 years. The purchaser of a Grand Prix appears to be well educated, averaging approximately two years of college or specific trade school experience and is employed full time in some type of white collar-oriented job position. With his spouse also employed full time, gross earnings for the Grand Prix purchaser's household fall approximately in the $20,000--$30,000 range. Furthermore, the typical Grand Prix owner's household tends to be a multi-car family, averaging at least one additional car in the household. Approximately one dependent child currently living at home. Finally, the purchaser is somewhat of an experienced automobile buyer, having purchased two or three automobiles within the past five years on the average. Such measures of central tendency, unfortunately, fail to express the true diversity of the purchasers of 1978 Pontiac Grand Prix automobiles in the Baton Rouge Metropolitan Area. As a consequence, Table 3-6 indicates the range of values of the demographic characteristics as well as the corresponding percentages of the frequencies.

2. Representativeness of the Data Base

Inasmuch as the study incorporated a census procedure of the defined population, the data base of two hundred-fifty 1978 Grand Prix purchasers represents approximately seventy percent of the useable purchasers of the defined population. Although the data base is representative of the defined population, caution is urged as the
### TABLE 3-6
DEMOGRAPHIC CHARACTERISTICS OF THE DATA BASE: FREQUENCY DISTRIBUTIONS AND PERCENTAGES

A. **Sex of Purchaser**  \((N = 250)\)

<table>
<thead>
<tr>
<th></th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>73</td>
<td>29.2</td>
<td>29.2</td>
</tr>
<tr>
<td>Male</td>
<td>177</td>
<td>70.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

B. **Purchaser's Present Employment Status**  \((N = 250)\)

<table>
<thead>
<tr>
<th>Category</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Employed</td>
<td>24</td>
<td>9.6</td>
<td>9.6</td>
</tr>
<tr>
<td>Employed-Part Time</td>
<td>7</td>
<td>2.8</td>
<td>12.4</td>
</tr>
<tr>
<td>Employed-Full Time</td>
<td>219</td>
<td>87.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

C. **Purchaser's Present Marital Status**  \((N = 250)\)

<table>
<thead>
<tr>
<th>Status</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Widowed, Divorced or Separated</td>
<td>74</td>
<td>29.6</td>
<td>29.6</td>
</tr>
<tr>
<td>Married-Without Children</td>
<td>52</td>
<td>20.8</td>
<td>50.4</td>
</tr>
<tr>
<td>Married-With Children</td>
<td>124</td>
<td>49.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

D. **Spouse's Present Employment Status**  \((N = 176)\)

<table>
<thead>
<tr>
<th>Category</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Employed</td>
<td>66</td>
<td>37.5</td>
<td>37.5</td>
</tr>
<tr>
<td>Employed-Part Time</td>
<td>13</td>
<td>7.4</td>
<td>44.9</td>
</tr>
<tr>
<td>Employed-Full Time</td>
<td>97</td>
<td>55.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Non-Qualifying</td>
<td>74</td>
<td>--</td>
<td>100.0</td>
</tr>
</tbody>
</table>
### TABLE 3-6 (Continued)

#### E. Number of Children Under 18 Years of Age (N = 125)

<table>
<thead>
<tr>
<th>Number</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency %</th>
<th>Cumulative Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>29</td>
<td>23.2</td>
<td>23.2</td>
</tr>
<tr>
<td>One Child</td>
<td>52</td>
<td>41.6</td>
<td>64.8</td>
</tr>
<tr>
<td>Two Children</td>
<td>30</td>
<td>24.0</td>
<td>88.8</td>
</tr>
<tr>
<td>Three Children</td>
<td>13</td>
<td>10.4</td>
<td>99.2</td>
</tr>
<tr>
<td>Four Children</td>
<td>1</td>
<td>.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Non-Qualifying</td>
<td>125</td>
<td>--</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### F. Occupation of Purchaser (N = 250)

<table>
<thead>
<tr>
<th>Occupation Category</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency %</th>
<th>Cumulative Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional-Specialist</td>
<td>19</td>
<td>7.6</td>
<td>7.6</td>
</tr>
<tr>
<td>Professional-Technical</td>
<td>32</td>
<td>12.8</td>
<td>20.4</td>
</tr>
<tr>
<td>Professional-Business</td>
<td>25</td>
<td>10.0</td>
<td>30.4</td>
</tr>
<tr>
<td>Managerial-Supervisory</td>
<td>35</td>
<td>14.0</td>
<td>44.4</td>
</tr>
<tr>
<td>Supportive Staff</td>
<td>14</td>
<td>5.6</td>
<td>50.0</td>
</tr>
<tr>
<td>Sales-Personal Selling Rep.</td>
<td>25</td>
<td>10.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Subtotal White Collar</td>
<td>150</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>Secretarial-Clerical</td>
<td>27</td>
<td>10.8</td>
<td>70.8</td>
</tr>
<tr>
<td>Public Official-Servant</td>
<td>23</td>
<td>9.2</td>
<td>80.0</td>
</tr>
<tr>
<td>Craftman-Mechanics-Technicians-Blue Collar</td>
<td>24</td>
<td>9.6</td>
<td>89.6</td>
</tr>
<tr>
<td>Labor-Union</td>
<td>11</td>
<td>4.4</td>
<td>94.0</td>
</tr>
<tr>
<td>Subtotal Blue Collar</td>
<td>85</td>
<td>34.0</td>
<td></td>
</tr>
<tr>
<td>Domestics-Housewife-Mother</td>
<td>10</td>
<td>4.0</td>
<td>98.0</td>
</tr>
<tr>
<td>Student-not in labor force</td>
<td>2</td>
<td>.8</td>
<td>98.8</td>
</tr>
<tr>
<td>Retired-Retiree</td>
<td>3</td>
<td>1.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Range</td>
<td>Absolute Frequency</td>
<td>Adjusted Frequency</td>
<td>Cumulative Frequency</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Under 21</td>
<td>7</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>21 to 25</td>
<td>54</td>
<td>21.6</td>
<td>24.4</td>
</tr>
<tr>
<td>26 to 30</td>
<td>44</td>
<td>17.6</td>
<td>42.0</td>
</tr>
<tr>
<td>31 to 35</td>
<td>43</td>
<td>17.2</td>
<td>59.2</td>
</tr>
<tr>
<td>36 to 40</td>
<td>26</td>
<td>10.4</td>
<td>69.6</td>
</tr>
<tr>
<td>41 to 45</td>
<td>17</td>
<td>6.8</td>
<td>76.4</td>
</tr>
<tr>
<td>46 to 50</td>
<td>27</td>
<td>10.8</td>
<td>87.2</td>
</tr>
<tr>
<td>51 to 55</td>
<td>16</td>
<td>6.4</td>
<td>93.6</td>
</tr>
<tr>
<td>56 to 60</td>
<td>8</td>
<td>3.2</td>
<td>96.8</td>
</tr>
<tr>
<td>61 to 65</td>
<td>2</td>
<td>.8</td>
<td>97.6</td>
</tr>
<tr>
<td>Over 65</td>
<td>6</td>
<td>2.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

H. Educational Levels of Purchasers (N = 250)

<table>
<thead>
<tr>
<th>Levels</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some High School</td>
<td>5</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Completed High School</td>
<td>32</td>
<td>12.8</td>
<td>14.8</td>
</tr>
<tr>
<td>Some College or Trade School</td>
<td>96</td>
<td>38.4</td>
<td>53.2</td>
</tr>
<tr>
<td>Completed College</td>
<td>75</td>
<td>30.0</td>
<td>83.2</td>
</tr>
<tr>
<td>Graduate Studies or Advanced Degree</td>
<td>42</td>
<td>16.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

I. Purchaser's Family Income (N = 250)

<table>
<thead>
<tr>
<th>Range</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency</th>
<th>Cumulative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $8,000</td>
<td>5</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>$8,000 to $14,999</td>
<td>36</td>
<td>14.4</td>
<td>16.4</td>
</tr>
<tr>
<td>$15,000 to $24,999</td>
<td>67</td>
<td>26.8</td>
<td>43.2</td>
</tr>
<tr>
<td>$25,000 or more</td>
<td>142</td>
<td>56.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>
### TABLE 3-6 (Continued)

#### J. Race of Purchaser  \( (N = 250) \)

<table>
<thead>
<tr>
<th>Category</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency %</th>
<th>Cumulative Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>209</td>
<td>83.6</td>
<td>83.6</td>
</tr>
<tr>
<td>Black</td>
<td>41</td>
<td>16.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### K. Residence of Purchaser  \( (N = 250) \)

<table>
<thead>
<tr>
<th>Category</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency %</th>
<th>Cumulative Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baton Rouge</td>
<td>207</td>
<td>82.8</td>
<td>82.8</td>
</tr>
<tr>
<td>Out of Town</td>
<td>43</td>
<td>17.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### L. Number of Cars Purchased in Past 5 Years  \( (N = 250) \)

<table>
<thead>
<tr>
<th>Number</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency %</th>
<th>Cumulative Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Car</td>
<td>51</td>
<td>20.4</td>
<td>20.4</td>
</tr>
<tr>
<td>Two Cars</td>
<td>81</td>
<td>32.4</td>
<td>52.8</td>
</tr>
<tr>
<td>Three Cars</td>
<td>60</td>
<td>24.0</td>
<td>76.8</td>
</tr>
<tr>
<td>Four Cars</td>
<td>31</td>
<td>12.4</td>
<td>89.2</td>
</tr>
<tr>
<td>Five Cars</td>
<td>19</td>
<td>7.6</td>
<td>96.8</td>
</tr>
<tr>
<td>Six Cars or More</td>
<td>8</td>
<td>3.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### M. Number of Cars Presently Driven in Household  \( (N = 250) \)

<table>
<thead>
<tr>
<th>Number</th>
<th>Absolute Frequency</th>
<th>Adjusted Frequency %</th>
<th>Cumulative Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Car</td>
<td>79</td>
<td>31.6</td>
<td>31.6</td>
</tr>
<tr>
<td>Two Cars</td>
<td>129</td>
<td>51.6</td>
<td>83.2</td>
</tr>
<tr>
<td>Three Cars</td>
<td>22</td>
<td>8.8</td>
<td>92.0</td>
</tr>
<tr>
<td>Four Cars</td>
<td>16</td>
<td>6.4</td>
<td>98.4</td>
</tr>
<tr>
<td>Five Cars or More</td>
<td>4</td>
<td>1.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>
generalizability of the findings to a broader automobile-owner population might easily prove to be misleading. Despite this limitation, the final sample appears satisfactory for purposes of the present study.

**SUMMARY OF CHAPTER THREE**

This chapter delineated of the expectancy-attitude satisfaction model used in the study as well as several methodological considerations associated with the research study. The chapter began with a thumbnail sketch of the operational delineation of the model, including model assumptions and the major theoretical and methodological underpinnings. The discussion then itemized the model's components, and operational definitions were given for each of the variables postulated active within the model. The second section of the chapter dealt with specific research questions which the study addresses, followed by statements of the hypotheses included in the study. The last section centered discussion around the research methodology as well as methodological considerations associated with the study. Beginning with a description of the research procedure, the discussion then itemized the rationale behind the use of a survey design method. Next, the justification behind selection of a 1978 Pontiac Grand Prix automobile was outlined as well as the logic used to determine the specific group of product attributes. Discussion was then
given to the method of soliciting subjects, revealing the reasons for not using simple random sampling techniques. Following this discussion, a general description of the study's measurement instrument was given, followed by a detailed discussion of the reliability of the various multiple-item and single-item measurement scales used in gathering the necessary attitudinal-oriented information for the study. Finally, the demographic characteristics of the sample were summarized and expression given to its representativeness of the defined population of the study.
CHAPTER IV

ANALYSIS OF THE DATA

INTRODUCTION

This chapter presents the statistical analyses used in testing the hypotheses and subhypotheses which were formulated in Chapter Three. The chapter is divided into four main sections. The first provides an overview of the methodological framework outlining the statistical procedures and measures used in assessing and testing the various predicted relationships. Included in this section is a delineation of the rationale underlying the selected data measurements, analysis methods, as well as the statistical tests used in this study. The second section presents the analyses and results of the hypotheses' tests concerning the commitment variable. The next section focuses on the results of assessing the statistical relationships for the involvement hypotheses. The final section treats the results of the hypotheses' tests on Grand Prix purchasers' felt satisfaction attitudes and past purchase attitudinal intentions.

METHODOLOGICAL FRAMEWORK USED IN TESTING THE HYPOTHESES: AN OVERVIEW

Introduction

This section outlines the analysis procedure and delineates the rationale underlying the various statistical analysis methods.
used. It begins by describing the use of both aggregate and dis-aggregate analysis procedures. Rationale and comments on the choice of several specific analysis techniques will be discussed, followed by a delineation of the statistical tests and the significant levels used in assessing the predictions of the hypotheses. Next, a brief discussion will be presented on the rationale behind using only the composite measures of satisfaction in analyzing some of the hypotheses. Finally, several additional commitment, involvement, and satisfaction variables included in the analyses of the hypotheses will be defined.

A. Analysis Procedure Used in the Study

Based on the exploratory nature of the study's hypotheses and a preliminary analysis of the data structures of the original commitment, involvement, and satisfaction variables, it was deemed important to: (1) assess what types of relationships exist between the variables relevant to the hypotheses' predictions and (2) test the significance of these relationships. As such, some of the hypotheses required statistical analysis at the aggregate level while others needed additional analysis at the disaggregate level. As a result, the decision was made to use a general (aggregate) to specific (itemized) format with respect to the levels of analysis performed.
B. Statistical Techniques Used to Analyze and Test the Hypotheses

For those hypotheses which suggested statistical analyses at the aggregate level, correlation analysis and analysis of variance were used to assess and test the various hypothesized relationships. For each hypothesis, the appropriate measures were subjected to correlation analysis in order to: (1) determine the existence of associations as predicted in the hypothesis; (2) measure the magnitude of the associations; (3) identify the directions relative to the relationships; (4) identify the type of relationship existing between the data structures (i.e. linear versus nonlinear, monotonic versus nonmonotonic); and (5) serve as a partial indicator in assessing the need for additional analysis of the associations predicted in the hypotheses. As a result, Pearson product moment correlation coefficients were analyzed to test for the degree of linearity in the postulated data relationships. Whereas, Spearman rank order correlation coefficients were used to test for the existence of significant monotonic relationships.

Analysis of variance was the statistical technique used to test for significant differences in those hypotheses which predicted specific multiple, between-group relationships. More specifically, some of the hypotheses required the stratification of the total sample of 1978 Pontiac Grand Prix purchasers into three pre-described cost groups on the basis of length of ownership. As such, analysis of variance served to: (1) test for significant differences between
the variables relative to the hypotheses and (2) act as an indicator for assessing the need for additional disaggregate analysis of the hypothesized relationships.

For those hypotheses in which the test results indicated a need for disaggregate analysis, the means, standard deviations, and standard errors were analyzed and tested for significant differences.

C. Statistical Tests Used in the Analysis

Selection of the appropriate statistical tests with respect to the hypothesized relationships was guided by two factors: (1) the scaling assumptions of the variables included in analysis, and (2) the type of statistical relationship assumed. Consequently, t-tests were used to evaluate the significance of the aggregate data relationships demonstrated through both the Pearson product moment and Spearman rank-order correlation coefficients. The F statistic was used to test the significance of the aggregate data relationships results generated by analysis of variance.

With respect to the data patterns investigated through disaggregate analysis techniques, Tukey's HSD (Honestly Significant Difference) method\textsuperscript{12} and standardized Z-tests were the statistical procedures used to test for significant differences among the paired group mean results.

\textsuperscript{12}The Tukey HSD method is a known and accepted multiple range testing procedure that is used to test for significant differences among paired group means for unequal group sizes at the .05 and .01 levels of significance.
D. Levels of Significance Used in Testing the Hypotheses

In testing the various hypotheses and subhypotheses of the study, the .1 level of significance was arbitrarily selected as the minimum critical value to determine whether or not the results supported the respective postulated relationships of the hypotheses. The rationale to use the .1 level as a minimum critical value in all the statistical tests, except the Tukey HSD method, rather than the more traditional .05 level included:

(1) The investigation of 1978 Grand Prix purchasers' satisfaction toward their automobiles through an attitudinal orientation represented an exploratory endeavor to gain new insights to the concept of consumer satisfaction.

(2) The hypotheses were designed to test various components of the expectancy-attitude model used in the study. With recognition that not all the model's components had equivalent importance, or impact, on the operation of the model, the .1 level of significance was regarded as an acceptable minimum critical value for evaluating the existence of significant relationships as well as interpreting the components' impact relative to the operation of the model.

(3) The decision as to what is too unlikely to be attributed to sampling error, for all practical purposes, is totally arbitrary on the part of the researcher (Henkel, 1976). Therefore in light of the stated purposes of this current study, the researcher regarded the risk factor associated with the .1 level of significance to be
nominal with respect to obtaining insights to the concept of consumer satisfaction.

(4) All the statistical procedures, except the Tukey HSD method, used to test the various predicted relationships had the capabilities of yielding exact significant levels relative to the relationship assessments. As such, knowledge of the exact significance levels made it feasible to use the .1 level as the minimum critical value for which to accept or reject the stated hypotheses. In summary, the decision to use the .1 level as the minimum critical value enhanced the researcher's opportunities to evaluate the constructs of the expectancy-attitude model as well as obtaining insights into studying the concept of consumer satisfaction.

E. Reporting Procedure of the Significant Findings

Although the .1 level of significance was used as the critical value for either accepting or rejecting the hypotheses of the study, those relationships which supported the hypotheses at the more traditionally accepted significance levels of .05 and .01 also were reported in the findings. The rationale behind reporting those relationships which proved to be significant at the .05 and .01 levels was to demonstrate, where possible, the probability of Type I error.
F. **Rationale Behind Only Analyzing the Composite Measures of Satisfaction**

Originally, the research design incorporated two separate sets of measurements on purchasers' expected and actual satisfaction attitudes toward their 1978 Grand Prix automobile. One set was a pair of direct single-item measurement scales, while the other set of scales were composite scales focusing on the summation of two corresponding multiple-item scales (one relating to various beliefs and the other to the importance of the beliefs). Nevertheless, the decision was made to only include the composite measurements of expected and actual satisfaction in analyzing those hypotheses which required the assessment of satisfaction. The rationale for limiting data analysis to only the composite measures of satisfaction was based on the reliability results reported and discussed in Chapter III.

G. **Variables Used in the Analyses**

In investigating the hypotheses and subhypotheses, it was necessary to create several additional commitment, involvement, as well as satisfaction-related variables. These variables and their definitions will be briefly described to clarify discussion of the results presented in the remaining sections of the chapter.

1. **Commitment-related variables**

   **ATP COMMIT**: Refers to the original aggregate measure of purchasers' perceived expected
commitment level toward their 1978 Grand Prix at time of actual purchase. The data maintain interval scaling assumptions.

**PT COMMIT:** Represents the original aggregate measure of purchasers' perceived actual commitment level toward their 1978 Grand Prix at some specified point in time after the actual purchase. Again, the data maintain interval scaling assumptions.

**NPT COMMIT:** This is the descriptor name on some of the tables which redefines PT COMMIT into new categorical levels of actual commitment which are ordinal in nature. That is, the interval data of PT COMMIT were collapsed into four ordinal categories for purposes of describing relative magnitudes of actual commitment; (Low Commitment = 0%-30%; Moderate Commitment = 31%-60%; High Commitment = 61%-89%; and Very High Commitment = 90%-100%).

**COMCHG:** Refers to the relative change in purchasers' commitment levels. This is simply interpreted as the difference between actual
commitment (PT COMMIT) and expected
commitment (ATP COMMIT). This variable
meets interval scaling assumptions.

**COMMULT:**
Denotes the relative change in purchasers'
perceived commitment as an index, using
expected commitment at the time of actual
purchase as the base point (denominator).
This variable meets ratio scaling
assumptions.

(2) **Involvement-related variables**

**ATP INV:**
Refers to the original aggregate measure of
purchasers' perceived *expected instrumental
involvement* level with their 1978 Grand
Prix at time of actual purchase. The data
maintain interval scaling assumptions.

**PT INV:**
Represents the original aggregate measure
of purchasers' perceived *actual instrumental
involvement* level with their 1978 Grand Prix
at some specified point in time after the
actual purchase. Again, the data maintain
interval scaling assumptions.

**NPT INV:**
This is the descriptor name on some of the
tables which redefines PT INV into new cate-
gorical levels of present instrumental
involvement which are ordinal in nature. That is, the interval data of PT INV were collapsed down into four ordinal-oriented categories for purposes of describing magnitudes of actual instrumental involvement; (Low Involvement = 0%-30%; Moderate Involvement = 31%-60%; High Involvement = 61%-89%; Very High Involvement = 90%-100%).

INVCHG: Refers to the relative change in purchasers' instrumental involvement levels. As such, it is simply interpreted as the difference between actual involvement (PT INV) and expected involvement (ATP INV). This variable contains interval scaling assumptions.

INVMULT: Denotes the relative change in purchasers' perceived instrumental involvement as an index, using expected involvement at the time of purchase as the base point (denominator). As such, it maintains ratio scaling assumptions.

(3) Satisfaction-related variables

COMLTSAT: Refers to the difference between the composite multiple-item measure of purchasers' satisfaction used in formulating and describing the four ordinal ranks of PT COMMIT and PT INV was similar to the logic used in interpreting the construct of a coefficient of determination.
actual satisfaction attitude and their expected satisfaction attitude (composite latitude of satisfaction). COMLTSAT meets interval scaling assumptions.

**DLATSAT:**
DLATSAT represents the redefining of the fractional values of COMLTSAT, through data manipulation techniques, into positive and negative integers. It retains interval scaling assumptions.

**ACOLSAT:**
Represents the absolute values of the composite difference between actual and expected satisfaction attitudes. Interval scaling assumptions are also associated with this variable.

**COMFLSAT:**
Refers to the composite measure of change in purchasers' post purchase felt satisfaction attitudes. Again, this variable is derived through the workings of the expectancy-attitude model using COMLTSAT, COMMULT, and INVMULT as the specified input variables. COMFLSAT also meets interval scaling assumptions.

**NCOMASAT:**
Represents the composite, multiple-item measure of purchasers' perceived "actual
satisfaction" attitudes toward their 1978 Grand Prixs. NCOMASAT meets interval scaling assumptions.

NCOMESAT: Refers to the composite, multiple-item measure of purchasers' expressed "expected satisfaction" toward their 1978 Grand Prixs at time of purchase. The variable meets interval scaling assumptions.

ANALYSES AND RESULTS OF THE COMMITMENT HYPOTHESES

Introduction

This section of the chapter presents the analyses and statistical test results of the three commitment-oriented hypotheses. For each hypothesis, the statistical analysis techniques used to assess and test the postulated data relationships are described. Then discussion is given to the significant findings.

A. Hypothesis C1: 1978 Pontiac Grand Prix car owners' commitment to owning their Grand Prix will decrease in intensity with increases in usage experience.

1. Analysis of Purchasers' Desirability Toward Owning Their Grand Prix Over Length of Ownership

To evaluate and test for support of the hypothesized relationship between 1978 Grand Prix purchasers' degrees of desirability (commitment toward owning their present Grand Prix over time) the aggregate data structures of five commitment measures -- (1) ATP COMMIT; (2) PT COMMIT; (3) NPT COMMIT; (4) COMCHG; and (5) COMMULT--
were compared to the aggregate-categorial time measurement of purchasers' length of ownership through Pearson's product moment and Spearman's rank order correlation analysis techniques. The resulting correlation coefficients, or aggregate data associations, were tested for significance using one-tailed t-tests.

2. **Results - Purchasers' Commitment to Their Car Over Time of Usage Experience**

Table 4-1 presents a summary of the aggregate association measures between the commitment measurements and the aggregate-categorial measurements of usage experience interpreted through the correlation coefficients. Also included in the table is the level of significance for each of the reported aggregate association measures.

The resulting correlation coefficients indicate an absence of any significant association, at least at the aggregate level, between any of the measures of purchasers' commitment toward their automobile and amount of usage experience. That is, in all cases none of the commitment measures demonstrated a significant correlation at the .05 level. While the Spearman coefficient (-.11) demonstrates the existence of an association between the aggregate-categorial measure of commitment and the aggregate-categorial measure of usage experience at the .1 level of statistical significance, the association is considered unimportant (Kerlinger, 1973; p. 200). One is inclined to suspect that the large sample size of 250 Grand Prix purchasers might well have attributed, in part, to the coefficient's significance. As a result of the correlation findings, one might reject the
TABLE 4-1
RELATIONSHIP MEASURES BETWEEN 1978 PONTIAC GRAND PRIX PURCHASERS' COMMITMENT TOWARD OWNING THEIR AUTOMOBILE AND LENGTH OF USAGE EXPERIENCE*

<table>
<thead>
<tr>
<th>Measures of Purchasers' Usage Experience</th>
<th>PEARSON PRODUCT MOMENT CORRELATION</th>
<th>SPEARMAN RANK ORDER CORRELATION</th>
<th>SAMPLE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate</td>
<td>Categorical</td>
<td>Aggregate</td>
<td>Categorical</td>
</tr>
<tr>
<td>ATP COMMIT-</td>
<td>-.002</td>
<td>-.035</td>
<td>250</td>
</tr>
<tr>
<td>Expected Perceived Commitment Level at Time of Purchase</td>
<td>(.49)</td>
<td>(.29)</td>
<td></td>
</tr>
<tr>
<td>PT COMMIT-</td>
<td>-.043</td>
<td>-.090</td>
<td>250</td>
</tr>
<tr>
<td>Actual Perceived Commitment Level</td>
<td>(.25)</td>
<td>(.08)</td>
<td></td>
</tr>
<tr>
<td>NPT COMMIT-</td>
<td>**</td>
<td>-.110</td>
<td>250</td>
</tr>
<tr>
<td>Categorical Levels of Actual Commitment</td>
<td></td>
<td>(.04)</td>
<td></td>
</tr>
<tr>
<td>COMCHG-</td>
<td>-.036</td>
<td>-.043</td>
<td>250</td>
</tr>
<tr>
<td>Change in Perceived Commitment Level</td>
<td>(.29)</td>
<td>(.25)</td>
<td></td>
</tr>
<tr>
<td>COMMULT-</td>
<td>.015</td>
<td>-.050</td>
<td>250</td>
</tr>
<tr>
<td>Commitment Index</td>
<td>(.41)</td>
<td>(.21)</td>
<td></td>
</tr>
</tbody>
</table>

*Significance test (value) represents one-tailed test

**Pearson Product Moment correlation coefficient and its significance level would be misleading to report due to the associated scaling assumptions.

aSignificant at the .1 level.
hypothesis that commitment decreases over length of usage experience. Prior to final evaluation of the support of the results to the hypothesis, it was deemed necessary to evaluate the various commitment measures on a disaggregated "length of ownership" dimension.

Consequently, the data for the two variables were further analyzed by segmenting the total sample of 250 Grand Prix purchasers into three groups stratified on the basis of six months usage experience intervals. As previously discussed, the decision to use six-month intervals rather than some other time length was judgmental on the part of the researcher but not unfounded. Again, the various commitment measures and the new categorical usage experience measures were analyzed using the Pearson and Spearman correlations.

Table 4-2 presents a summary of these association measures between the various commitment measurements and the categorical measurements of usage experience. Again, the level of significance for each association measure is included in the table. A one-tailed t-test for significance was used to compute the reported significance values.

Interpretation of the results reveals several weak but significant patterns of association between the various commitment measures and the categorical measures of usage experience:

(a) With respect to purchasers' expected desire to own their 1978 Grand Prix (ATP COMMIT), there is a weak but significant positive linear relationship with usage


<table>
<thead>
<tr>
<th>Commitment Measures</th>
<th>Categorical Levels of Usage Experience</th>
<th>Experience Range 1 (3-6 mo.)</th>
<th>Experience Range 2 (7-12 mo.)</th>
<th>Experience Range 3 (13-19 mo.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson</td>
<td>Spearman</td>
<td>Pearson</td>
<td>Spearman</td>
</tr>
<tr>
<td>ATP COMMIT-</td>
<td>.242</td>
<td>.283</td>
<td>.018</td>
<td>-.003</td>
</tr>
<tr>
<td>Expected perceived</td>
<td>(.04)a</td>
<td>(.02)b</td>
<td>(.43)</td>
<td>(.49)</td>
</tr>
<tr>
<td>Commitment Level at Time of Purchase</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT COMMIT-</td>
<td>.135</td>
<td>-.037</td>
<td>.102</td>
<td>.088</td>
</tr>
<tr>
<td>Actual Perceived</td>
<td>(.17)</td>
<td>(.40)</td>
<td>(.16)</td>
<td>(.19)</td>
</tr>
<tr>
<td>Commitment Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPT COMMIT-</td>
<td>**</td>
<td>.082</td>
<td>**</td>
<td>.099</td>
</tr>
<tr>
<td>Categorical Levels of Actual Commitment</td>
<td></td>
<td>(.29)</td>
<td></td>
<td>(.16)</td>
</tr>
<tr>
<td>COMCHG-</td>
<td>-.101</td>
<td>-.337</td>
<td>.070</td>
<td>.057</td>
</tr>
<tr>
<td>Change in Perceived Commitment Level</td>
<td></td>
<td>(.24)</td>
<td>(.24)</td>
<td>(.29)</td>
</tr>
<tr>
<td>COMMULT-</td>
<td>-.032</td>
<td>-.333</td>
<td>.025</td>
<td>.039</td>
</tr>
<tr>
<td>Commitment Index</td>
<td>(.41)</td>
<td>(.01)b</td>
<td>(.40)</td>
<td>(.35)</td>
</tr>
</tbody>
</table>

Sample Size = 51 Sample Size = 100 Sample Size = 99

*Significance test (values) represent one-tailed test

**Reporting Pearson Correlation would be misleading due to the associated scaling assumptions

aSignificant at the .1 level
bSignificant at the .05 level
cSignificant at the .01 level
experience among those purchasers having owned their car no more than six months. But there is no significant linear nor monotonic relationship between expected commitment and usage experience for purchasers having owned their Grand Prix for more than six months.

(b) With respect to purchasers' actual desire to own their Grand Prix (PT COMMIT), there is a weak but significant positive linear relationship with usage experience among those purchasers having owned their automobile for more than twelve months. But the actual commitment measure fails to demonstrate a significant correlation at the .1 level with usage experience among those purchasers having owned their Grand Prix for no more than twelve months.

(c) Possibly the most relevant commitment measure to the first hypothesis is the measurement of change between purchasers' expected and actual perceived commitment toward their Grand Prix car (COMCHG). If the postulated association between commitment and usage experience holds, then correlation analysis should indicate the existence of a negative relationship between changes in commitment and usage experience within each stratified group of purchasers. As the results in Table 4-2 indicate, interpretation of the findings is somewhat confusing
and contradictory. The findings will therefore be discussed by usage experience grouping one at a time.

(1) **Purchasers with less than six months of experience**

With respect to those purchasers having owned their Grand Prix for no more than six months, the average Pearson product moment correlation coefficient shows a weak negative linear relationship (-.101) between the change in purchasers' commitment level and usage experience although is not significant at the .1 level of significance. But the average Spearman coefficient demonstrates the existence of a weak negative monotonic relationship (-.34) between change in commitment and usage experience which is statistically significant at the .05 level. Since the Spearman coefficient makes a correction for tie ranks in the data and the Pearson coefficient does not work with ranks, one would be inclined to accept the hypothesized relationship between commitment and usage experience as being monotonic in nature for at least the time range of six months or less.

(2) **Purchasers with seven to twelve months of experience**

With respect to those purchasers having owned their Grand Prix for a time period of between seven and twelve months, none of the correlation coefficients demonstrate a significant association between change in commitment and usage experience. Thus, it can be concluded that there is no apparent systematic pattern between change
in commitment and usage experience for these subjects. Therefore, the stated hypothesis would be rejected.

(3) Purchasers with more than twelve months of experience

Finally, interpretation of the reported statistics concerning those purchasers having owned their car for more than twelve months indicates the existence of a weak positive linear relationship (.23) between change in commitment and usage experience which is statistically significant at the .05 level. Similarly, the Spearman correlation coefficient indicates the existence of a weak positive monotonic relationship (.33) between the change in commitment and usage experience significant at the .01 level. The problem within this group is that the direction of the association between change in commitment and usage experience is opposite of the negative association predicted in the hypothesis.

Overall, it must be concluded that there is no systematic negative linear of monotonic relationship between 1978 Grand Prix purchasers' desire in owning their car and length of time of usage experience (ownership).

B. Hypothesis C2: Present Commitment to Owning the 1978 Pontiac Grand Prix Car has an Unimodal Relationship with Derived Latitudes of Satisfaction toward the Car; Such that Low Magnitudes of Present Commitment will Relate to Wide Ranges of Latitudes of Satisfaction and High Magnitudes of Commitment to Narrow Ranges.

1. Analysis of Grand Prix Purchasers' Present Commitment to Derived Latitudes of Satisfaction

Both aggregate and disaggregate analysis techniques were used to test the hypothesized inverse associations between Grand Prix
purchasers' present commitment toward owning their car and changes in their attitude of satisfaction. More specifically, the aggregate-categorical measure of commitment (NPT COMMIT) and several composite measures of changes in purchasers' attitudes of satisfaction (COMLTSAT, DLATSAT, ACOLSAT) were analyzed through Pearson's and Spearman's correlations to determine the existence of an association between the variables. If a significant association is demonstrated at the aggregate level, then the mean values and standard deviations of the satisfaction latitude measures would be analyzed across the categorical measure of present commitment using the Tukey HSD procedure to identify and test the postulated association.

2. Results - Purchasers' Present Commitment and Derived Latitudes of Satisfaction

(a) Aggregate Results

Table 4-3 presents the summary of the associations between the three composite-oriented measures of latitudes of satisfaction and the categorical measure of present (actual) commitment. One-tailed t-tests were computed to determine the level of significance relative to each of the reported association measures.

Interpretation of the Pearson correlation coefficients shows a weak-to-moderate linear relationship between the measures of latitude of satisfaction and present (actual) commitment. In all cases, the reported relationship is statistically significant at the .005 level.
TABLE 4-3
AGGREGATE RELATIONSHIP MEASURES BETWEEN 1978 PONTIAC GRAND PRIX PURCHASERS' ACTUAL (PRESENT) COMMITMENT TOWARD OWNING THEIR AUTOMOBILE AND DERIVED LATITUDES OF SATISFACTION TOWARD THE CAR*
(Sample Size = 250)

<table>
<thead>
<tr>
<th>Composite Measures of Latitude of Satisfaction</th>
<th>Aggregate Categorical Measure of Actual Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aggregate Categorical Measure of Actual Commitment</td>
</tr>
<tr>
<td></td>
<td>Pearson Product Moment Correlation</td>
</tr>
<tr>
<td>COMLTSAT</td>
<td>.344</td>
</tr>
<tr>
<td>DLATSAT</td>
<td>.326</td>
</tr>
<tr>
<td>ACOLSAT</td>
<td>-.290</td>
</tr>
</tbody>
</table>

*All the reported associations were significant at p < .005.
A closer look at the signs associated with the Pearson correlation coefficients reveals an interesting piece of information. One may initially conclude that the hypothesis should be rejected on the basis that the signs associated with COMILTSAT, and DLATSAT are opposite of what was anticipated in the prediction of the stated hypothesis. This would lead to a Type II error. There are two specific reasons why the direction of the reported associations appears to be incorrect:

1. The concept of latitude of satisfaction represents the difference between expected and actual attitudinal values of satisfaction. As such, the disparity can be positive or negative in nature (an adaption of the confirmation/disconfirmation concept presented by Anderson, 1973).

2. Most of the average disparity values were negative.

Further analysis will clarify this second reason.

When analyzing only the relative absolute magnitudes of the changes in Grand Prix owners' satisfaction toward their car, as is the case with the ACOLSAT measure, the predicted negative direction appears. Similarly, the Spearman coefficients reveal a significant monotonic correlation between present commitment and derived latitudes of satisfaction which is statistically significant at the .005 level. Interpretation of these coefficients supports the results of the average Pearson correlation coefficient. The smaller magnitudes of the significant associations are due to correcting procedures within the Spearman technique for handling tie rankings.
The aggregate level association results between present commitment and latitude of satisfaction clearly suggest the need for further disaggregate analysis of the latitude mean values and standard deviations across the within group measures of commitment.

(b) Disaggregate Results

Table 4-4 presents the summary of the means and standard deviations of the composite latitude of satisfaction measures within the intervally-ordinal categories of actual commitment. Also included in the table is a delineation of the scale transformation measures used in constructing the new categorical composite measures as well as the absolute latitude measures.

Interpretation of the within group mean latitude values suggests that 1978 Grand Prix owners exhibiting very high commitment toward their present car tend to demonstrate significantly smaller changes in their satisfaction attitudes toward their Grand Prix than do those owners exhibiting lower magnitudes of commitment. With specific reference to latitudes (changes) in Grand Prix owners' satisfaction attitudes toward their present 1978 Grand Prix (the COMLTSAT measures in Table 4-4), for example, the Tukey (HSD) test demonstrates that the magnitude of the attitude changes, or the latitude range, (mean = .30) of Grand Prix owners who exhibit a very high level of commitment toward their car is smaller at the .05 level of significance than the magnitudes of the attitude changes associated with those owners exhibiting either high (mean = -.75), or low (mean = -1.68) levels of actual commitment. Furthermore, the
TABLE 4-4
MEANS AND STANDARD DEVIATIONS OF PERCEIVED LATITUDES OF SATISFACTION
ANALYZED BY: CATEGORICAL LEVELS OF ACTUAL COMMITMENT, COMPOSITE MEASURES OF
DERIVED LATITUDES OF SATISFACTION

<table>
<thead>
<tr>
<th>Measures of Derived Latitudes of Satisfaction</th>
<th>Composite Measure (COMLTSAT)</th>
<th>Categorical Measure (DLATSAT)</th>
<th>Absolute Measure (ACOLSAT)</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorical Measures of Actual Commitment</td>
<td>Mean  S.D.  Difference</td>
<td>Mean  S.D.  Difference</td>
<td>Mean  S.D.  Difference</td>
<td></td>
</tr>
<tr>
<td>Very High Commitment</td>
<td>.30  1.32  SD</td>
<td>.29  1.17  SD</td>
<td>1.18  .51  SD</td>
<td>143</td>
</tr>
<tr>
<td>High Commitment</td>
<td>-.33  1.27  SD</td>
<td>-.41  1.33  SD</td>
<td>1.20  .39  NSD</td>
<td>59</td>
</tr>
<tr>
<td>Moderate Commitment</td>
<td>-.75  1.71  SD</td>
<td>-.66  1.49  NSD</td>
<td>1.50  .72  SD</td>
<td>32</td>
</tr>
<tr>
<td>Low Commitment</td>
<td>-1.68  3.13  NSD</td>
<td>-1.13  1.89  SD</td>
<td>1.88  .96  SD</td>
<td>16</td>
</tr>
</tbody>
</table>

Commitment Scale: Very High Commitment (90%-100%); High Commitment (61%-89%); Moderate Commitment (31%-60%); Low Commitment (0%-30%)

Categorical Scale Measures: (Interval) -3 = (LE -2.5); -2 = (GT -2.5 and LE -1.5); -1 = (GT - 1.5 and LE -.5); 0 = (GT -.5 and LE .5); 1 = (GT .5 and LE 1.5); 2 = (GT 1.5 and LE 2.5); 3 = (GT 2.5)

Absolute Scale Measures: (Interval) 0 = no Lat. Sat; 1 = Narrow Range (1ST Dev.); 2 = Moderately Wide Range (2 ST Dev.); 3 = Sign Wider Range (3 ST. DEV.); 4 = Unusually Wider Range (4 ST. DEV.).

*Significant Difference: The Tukey HSD method at the .05 level was used to test the significant differences between the latitude mean values of each commitment category. SD should be interpreted as meaning the mean value is significantly different from all other mean values of the .05 level. Whereas, NSD indicates that the mean value is not significant from the mean value of the commitment category monotonically preceding it.
reported mean latitude values demonstrate that the very highly committed owners tend, on the average, to be slightly more satisfied with the purchase of their Grand Prix car than they had expected to be at the time of purchase. Whereas, those owners exhibiting lower degrees of actual commitment toward their 1978 Grand Prixs tend, on the average, to be less satisfied with their car than they had expected to be at the time of purchase.

Interpretation of the mean values of the absolute composite latitude measures for each commitment group of owners (ACOLSAT) demonstrates basically the same results as were discussed earlier. That is, the relative absolute attitude changes in satisfaction of very highly committed owners (mean = 1.18) and highly committed owners (mean = 1.19) were not significantly different at the .05 level. But, these mean values tested to be significantly different from the mean absolute attitude changes relative to those owners exhibiting moderate (mean = 1.50) and low (mean = 1.88) levels of present commitment. Furthermore, the test results demonstrate that the mean absolute attitude changes of the moderate and low commitment groups of Grand Prix owners are significantly different at the .05 level.

Figure 4-1 presents a graphical representation of the significant monotonic relationship that exists between the mean latitudes of satisfaction of 1978 Grand Prix owners demonstrating different ordinal levels of actual commitment. By mirroring the significant test results of the COMLTSAT and ACOLSAT measures on the same Figure, one can obtain a visual of the existing unimodal
CATEGORICAL LEVELS OF ACTUAL COMMITMENT

FIGURE 4-1
GRAPHICAL REPRESENTATION OF COMPOSITE AND ABSOLUTE COMPOSITE MEAN VALUES OF DERIVED MEASURES OF LATITUDES OF SATISFACTION FOR VARYING CATEGORICAL LEVELS OF ACTUAL COMMITMENT

Very High Commitment

High Commitment

Moderate Commitment

Low Commitment

Derived Measures of Latitudes of Satisfaction

+ - Composite Measure (COMLTSAT); mean values of Latitudes of Satisfaction

. - Absolute Composite Measure (ACOLSAT); Absolute Mean Values of Latitudes of Satisfaction

--- (Equivalent to Standard Deviations)
pattern in the overall data structure. As a result, the findings tend to support the postulated inverse association between purchasers' commitment toward their Grand Prix automobile and the magnitude of their latitudes of satisfaction.

C. Hypothesis C3: There is a Positive Relationship Between Purchasers' Present (Actual) Commitment to and Their Perceived "Actual Satisfaction Attitude Toward the Grand Prix Automobile.

1. Analysis of Grand Prix Purchasers' Present Commitment to Actual Satisfaction Attitudes

In an attempt to gain clearer insights regarding the impact of commitment on degree of satisfaction, the existing relationship between purchasers' present commitment toward their automobile and their perceived actual satisfaction attitude was investigated at the aggregate and disaggregate levels.

In determining the existence of the postulated positive relationship between present commitment and actual satisfaction at the aggregate level, the commitment and satisfaction measures were subjected to Pearson and Spearman correlation analyses and the coefficients tested for significance. If a significant association resulted at the aggregate level, then the mean values and standard deviations of the actual satisfaction measures derived through a one-way analysis of variance procedure would be tested to identify the existence of any significant within-group patterns in the data.
2. Results - Present Commitment to Actual Satisfaction Attitudes

(a) Aggregate Results

Table 4-5 presents the summary of the aggregate associations between present commitment and actual satisfaction. Also included in the Table are the level of significance for each association computed using a one-tailed t-test.

The findings show a moderate-to-strong positive relationship between present commitment and satisfaction at the aggregate level. In all cases, the reported linear relationship is statistically significant at the .005 level of significance. As such, the results tend to support the predicted association between Grand Prix purchasers' perceived level of commitment toward owning their car and actual satisfaction toward the automobile.

(b) Disaggregate Results

Table 4-6 offers the findings relative to the disaggregate analysis of between group commitment levels and differences in the composite measure of actual satisfaction. Also included in the table are the composite satisfaction ratings, means and standard deviations for each of the four ordinal commitment levels, and the results of the significant mean tests. The findings tend to support the aggregate results of the significant mean tests. The findings tend to support the aggregate results with respect to the positive relationship that exists between present commitment and actual satisfaction.
TABLE 4-5
RELATIONSHIP MEASURES BETWEEN 1978 PONTIAC GRAND PRIX PURCHASERS'
ACTUAL COMMITMENT TOWARD OWNING THEIR AUTOMOBILE AND PERCEIVED
ACTUAL SATISFACTION TOWARDS THE AUTOMOBILE*
(Sample Size = 250)

<table>
<thead>
<tr>
<th>CATEGORICAL MEASURE OF COMMITMENT</th>
<th>PEARSON PRODUCE MOMENT CORRELATION</th>
<th>SPEARMAN RANK ORDER CORRELATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite Measure of Actual Satisfation</td>
<td>.576</td>
<td>.571</td>
</tr>
<tr>
<td>Categorical Composite Measure of Actual Satisfation</td>
<td>.564</td>
<td>.569</td>
</tr>
</tbody>
</table>

*All the correlation coefficients tested to be significant at the .005 level using a one-tailed t-test.
TABLE 4-6
BETWEEN GROUP COMPARISON OF COMPOSITE ACTUAL SATISFACTION MEAN VALUES
FOR CATEGORICAL LEVELS OF ACTUAL COMMITMENT TOWARDS OWNING A 1978
PONTIAC GRAND PRIX

CATEGORICAL LEVELS OF THE COMPOSITE ATTITUDE MEASURE OF ACTUAL SATISFACTION

<table>
<thead>
<tr>
<th>Categorical Levels of Actual Commitment</th>
<th>Actual Count</th>
<th>Definitely Strong Feeling of Satisfaction</th>
<th>Definitely Weak Feeling of Satisfaction</th>
<th>Mixed Feeling of Satisfaction</th>
<th>Row Total</th>
<th>Mean Value</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme Commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.86</td>
<td>1.10</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>94</td>
<td>44</td>
<td></td>
<td>143</td>
<td>5.86</td>
<td></td>
</tr>
<tr>
<td>High Commitment</td>
<td>1.4</td>
<td>65.7</td>
<td>32.9</td>
<td></td>
<td>57.2</td>
<td>4.81</td>
<td>.82</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>9</td>
<td>48</td>
<td></td>
<td>59</td>
<td>4.41</td>
<td>1.16</td>
</tr>
<tr>
<td>Moderate Commitment</td>
<td>3.4</td>
<td>15.3</td>
<td>81.4</td>
<td></td>
<td>23.6</td>
<td>4.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.8</td>
<td>3.6</td>
<td>19.2</td>
<td></td>
<td>3.6</td>
<td>3.50</td>
<td>1.37</td>
</tr>
<tr>
<td>Low Commitment</td>
<td>5</td>
<td>5</td>
<td>22</td>
<td></td>
<td>32</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15.6</td>
<td>15.6</td>
<td>68.8</td>
<td></td>
<td>12.8</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0</td>
<td>2.0</td>
<td>8.8</td>
<td></td>
<td>2.0</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td></td>
<td>16</td>
<td>3.50</td>
<td>1.37</td>
</tr>
<tr>
<td></td>
<td>50.0</td>
<td>0.0</td>
<td>50.0</td>
<td></td>
<td>6.4</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.2</td>
<td>0.0</td>
<td>3.2</td>
<td></td>
<td>0.0</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>5.28</td>
<td>100.0</td>
<td></td>
<td></td>
<td>1.29</td>
<td></td>
</tr>
</tbody>
</table>

Source:

<table>
<thead>
<tr>
<th></th>
<th>D.F.</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>136.09</td>
<td>45.36</td>
<td>39.87</td>
<td>0.00</td>
</tr>
<tr>
<td>Within Groups (Error)</td>
<td>246</td>
<td>279.87</td>
<td>1.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>249</td>
<td>415.96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a — Significantly different from other within groups at confidence interval level p = .1
b — Significantly different from other within groups at confidence interval level p = .01
More specifically, those purchasers who demonstrate a very high level of commitment toward their Grand Prix also tend to exhibit a significantly greater attitude of being satisfied (mean = 5.86) with their car than purchasers exhibiting a lower level of commitment. Purchasers demonstrating a low level of commitment tend to exhibit a fairly weak attitude of satisfaction (mean = 3.50) which is significantly different from all the other purchasers' attitudes at the .1 level of significance. The findings indicate that there is no significant difference in the attitudes of satisfaction between those purchasers who demonstrate moderate commitment and those who are seen as having high commitment toward their Grand Prix. As a result, the findings tend to support the postulated direct association between purchasers' present commitment toward their Grand Prix and their attitude of perceived actual satisfaction with the performance of the car.

D. Summary of the Commitment Hypotheses' Findings

(1) Hypothesis C1: The aggregate and disaggregate data analysis results failed to demonstrate empirical support that 1978 Grand Prix car owners' commitment to owning their present Grand Prix decreases in intensity with increases in usage experience. As such, it must be concluded that there is no systematic negative linear or monotonic relationship between 1978 Grand Prix purchasers' desire in owning their car and length of time of usage experience (ownership).
(2) **Hypothesis C2**: At the aggregate level, statistical
tests of the Pearson and Spearman correlation coefficients revealed
the existence of a significant weak-to-moderate linear relationship
between 1978 Grand Prix purchasers' actual commitment toward owning
their present Grand Prix cars and their latitudes of satisfaction
toward the cars. Disaggregate analysis indicated that Grand Prix
purchasers who demonstrated very high levels of commitment toward
their Grand Prixs also exhibited significantly smaller latitudes of
satisfaction than did those purchasers' who demonstrated monotonically
lesser degrees of commitment. But, those Grand Prix owners with low
levels of commitment toward their 1978 car showed greater changes
(latitudes) in their attitudes of satisfaction toward their Grand
Prix cars.

Overall, on the basis of the evidence presented it must be
concluded that the sample data demonstrated empirical support of
the postulated relationships in the hypothesis.

(3) **Hypothesis C3**: The significance test results of the
correlation coefficients clearly supported the existence of a moderate-
to-strong positive linear relationship between present commitment and
satisfaction at the aggregate level. Additionally, the results at
the disaggregate level indicated that purchasers who demonstrated a
very high level of commitment toward their Grand Prix also tended
to exhibit a significantly stronger attitude of being satisfied with
their car, at the .01 level, than purchasers exhibiting a monotonically
lower level of commitment. Furthermore, purchasers who demonstrated a low level of commitment tended to exhibit a fairly weak attitude of satisfaction which was significantly different from all the other purchasers' attitudes at the .1 level. Consequently, the findings tended to support the postulated direct association between present commitment and actual satisfaction.

ANALYSES AND RESULTS OF THE INVOLVEMENT HYPOTHESES

Introduction

This section of the chapter presents the analyses and statistical test results of the three involvement hypotheses. The format used to describe and discuss the analysis techniques as well as reporting the significant findings relevant to the involvement hypotheses is similar to that used for the commitment hypotheses.


1. Analysis of Purchasers' Instrumental Involvement with their Grand Prix Over Length of Ownership.

In testing for the postulated independence of Grand Prix purchasers' instrumental involvement with their present Grand Prix car over time, the aggregate measures of five involvement variables—(1) ATP INV; (2) PT INV; (3) NPT INV; (4) INVCHG; and (5) INVMVLT—were compared first to the overall aggregate-categorical time measurement of the total sample of Grand Prix owners and then against three disaggregate ownership time measurements. The existing relationships
between the involvement and length of ownership measures were computed and analyzed through Pearson and Spearman correlation analysis techniques. The resulting correlation coefficients were tested for significance using two-tailed T-tests.

2. Results - Purchasers' Instrumental Involvement With Their Car Over Time of Ownership

(a) Aggregate Results

Table 4-7 presents a summary of the aggregate association measures between the involvement-oriented variables and the aggregate-categorical measurement of length of ownership. Also included in the table is the level of significance relative to each of the reported aggregate association measures.

Interpretation of the resulting correlation coefficients demonstrates an absence of any significant association between any of the aggregate measures of purchasers' involvement with their automobile and length of ownership. As a result of the correlation findings, support is given to the hypothesis (at the aggregate level) that there is no significant relationship between purchasers' instrumental involvement with their car and length of ownership.

(b) Disaggregate Results

Table 4-8 offers a summary of the association measures between the involvement variables and the categorical measures of length of ownership as well as the significance value for each association measure. At the .05 level of significance, the findings coincide with the earlier results. That is, within all three
<table>
<thead>
<tr>
<th>Involvement Measures</th>
<th>Aggregate Categorical Time Factor</th>
<th>Pearson Product Moment Correlation</th>
<th>Spearman Rank Order Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATP INV - Perceived Involvement Level at Time of Purchase</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>PT INV - Actual Perceived Involvement Level</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>NPT INV - Categorical Levels of Actual Involvement</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>INVCHG - Change in Perceived Involvement Level</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>INVMULT - Involvement Index</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

*Significance Test (Values) represent a Two-Tailed T-test.

**Pearson Product Moment Correlation Coefficient and its significance level would be misleading to report due to the scaling assumptions.
TABLE 4-8
RELATIONSHIP MEASURES BETWEEN 1978 PONTIAC GRAND PRIX PURCHASERS' INSTRUMENTAL INVOLVEMENT WITH THEIR AUTOMOBILE AND USAGE EXPERIENCE RANGES*

<table>
<thead>
<tr>
<th>EXPERIENCE RANGE 1 (1-6 MO.)</th>
<th>EXPERIENCE RANGE 2 (7-12 MO.)</th>
<th>EXPERIENCE RANGE 3 (13-19 MO.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATP INV-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Involvement Level at Time of Purchase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEARSON CORRELATION</td>
<td>SPEARMAN CORRELATION</td>
<td>PEARSON CORRELATION</td>
</tr>
<tr>
<td>.135 (.34)</td>
<td>1.75 (.22)</td>
<td>-.061 (.55)</td>
</tr>
<tr>
<td>PT INV-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual Perceived Involvement Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEARSON CORRELATION</td>
<td>SPEARMAN CORRELATION</td>
<td>PEARSON CORRELATION</td>
</tr>
<tr>
<td>.117 (.41)</td>
<td>.120 (.40)</td>
<td>-.073 (.47)</td>
</tr>
<tr>
<td>NPT INV-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Categorical Levels of Actual Involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEARSON CORRELATION</td>
<td>SPEARMAN CORRELATION</td>
<td>PEARSON CORRELATION</td>
</tr>
<tr>
<td>** (.08)</td>
<td>-.245 (.08)</td>
<td>** (.08)</td>
</tr>
</tbody>
</table>
TABLE 4-8 (Continued)

CATEGORICAL LEVELS OF USAGE EXPERIENCE

<table>
<thead>
<tr>
<th>EXPERIENCE RANGE 1 (1-6 MO.)</th>
<th>EXPERIENCE RANGE 2 (7-12 MO.)</th>
<th>EXPERIENCE RANGE 3 (13-19 MO.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTRUMENTAL INVOLVEMENT MEASURES</td>
<td>PEARSON CORRELATION</td>
<td>SPEARMAN CORRELATION</td>
</tr>
<tr>
<td>INVCHG- Change in Perceived Involvement Level</td>
<td>.091 (.53)</td>
<td>.089 (.54)</td>
</tr>
<tr>
<td>INVMULT-</td>
<td>-.282 (.06)(^a)</td>
<td>-.251 (.08)(^a)</td>
</tr>
</tbody>
</table>

SAMPLE SIZE = 51

SAMPLE SIZE = 100

SAMPLE SIZE = 99

*Significance Test (Values) represent a Two-Tailed Test.

**Pearson Coefficients not reported because of the associative scaling assumptions.

\(^a\) -- Significant at the .1 level.
subgroupings there is no significant relationship (at the .05 level) between purchasers' instrumental use of their Grand Prix and the length of time they have owned it. However, the findings do show several weak negative monotonic relationships between both the NPT INV and the INVMULT measures of involvement and the one to six months interval time period as well as in the thirteen to nineteen months time frame. Although these relationships are significant at the .1 level significance, their respective magnitudes are so weak that the relationships are considered unimportant. Overall, the disaggregate findings tend to support the postulated independence between 1978 Grand Prix owners' instrumental involvement with their present car and length of ownership as stated in the hypothesis.

B. Hypothesis INV2: Purchasers' Present Instrumental Involvement With Their 1978 Grand Prix Automobile is Independent of their Derived "Latitudes of Satisfaction" Toward the Car.

1. Analysis of Grand Prix Purchasers' Present Involvement to Derived Latitudes of Satisfaction.

To test for the possible existence of a significant systematic relationship between purchasers' present involvement with their Grand Prix and changes in their attitude of satisfaction, three composite latitude of satisfaction measures: (1) COMLTSAT; (2) DLATSAT; and (3) ACOLSAT, were compared at the aggregate level, to the categorical measure of purchasers' present involvement with their 1978 Grand Prix using Pearson and Spearman correlation. Then the COMLTSAT and DLATSAT latitude measurements were subjected to a one-way analysis
of variance procedure with categorical present involvement to
determine and test for the strength of possible with group
associations.

2. Results - Purchasers' Present Involvement and Derived Latitudes of
Satisfaction.

Table 4-9 presents the summary of the aggregate measures
between the various composite measurements of derived latitudes of
satisfaction and the aggregate categorical measurement of present
instrumental involvement. Also included in the table are the levels
of significance relative to each of the association measures. Due to
the nature of the predicted relationship, the significance values
were computed using a two-tailed t-test.

TABLE 4-9
AGGREGATE RELATIONSHIP MEASURES BETWEEN 1978 PONTIAC
GRAND PRIX PURCHASERS' ACTUAL INSTRUMENTAL INVOLVEMENT
WITH THEIR AUTOMOBILE AND DERIVED LATITUDES OF
SATISFACTION TOWARD THE CAR*
(Sample Size = 250)

<table>
<thead>
<tr>
<th>Aggregate Categorical Measure of Present Involvement</th>
<th>Pearson Produce Moment Correlation</th>
<th>Spearman Rank Order Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMLTSAT</td>
<td>-.093 (-.14)</td>
<td>-.107 (.09)a</td>
</tr>
<tr>
<td>DLATSAT</td>
<td>-.051 (.42)</td>
<td>-.063 (.32)</td>
</tr>
<tr>
<td>ACOLSAT</td>
<td>-.036 (.58)</td>
<td>-.067 (.29)</td>
</tr>
</tbody>
</table>

*Significance Test (Values) represent a two-tailed test.
a—Statistically significant at the .1 level.
The findings demonstrate an absence of a significant linear or monotonic association between present involvement and the composite measures of latitude at the .05 level of significance. On the other hand, the reported Spearman coefficient (-.107) revealed the existence of a relatively weak negative, monotonic relationship between the COMLTSAT latitude and present involvement measure at the .1 level of significance. Although the monotonic relationship is significant, due to the relatively weak magnitude of the association the existing relationship is considered unimportant.

In an effort to clarify the apparent inconsistency of the latitude measures, the data structures of the COMLTSAT and DLATSAT latitude measures as well as the NPT INV variable were subjected to a one way analysis of variance treatment with the latitude measures as the dependent variables and the present involvement variable (NPT INV) as the independent factor. Table 4-10 presents the results of testing the relationships between the composite and categorical composite latitude measures and the different categorical levels of present involvement.

The findings fail to support, at the .1 level, the existence of any significant differences between the categorical levels of involvement and changes (latitudes) in purchasers' satisfaction toward their 1978 Grand Prix car. Consequently, one would have to conclude that the postulated relationship between present involvement and latitudes of satisfaction is supported.
TABLE 4-10
OVERALL RELATIONSHIP COMPARISON BETWEEN COMPOSITE AND CATEGORICAL COMPOSITE MEASURES OF DERIVED LATITUDES OF SATISFACTION AND CATEGORICAL LEVELS OF PRESENT INSTRUMENTAL INVOLVEMENT
(Sample Size = 250)

<table>
<thead>
<tr>
<th></th>
<th>COMLTSAT</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEPENDENT VARIABLE</strong></td>
<td>COMLTSAT</td>
<td><strong>INDEPENDENT VARIABLE</strong></td>
<td>NTP INV</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SOURCE</strong></td>
<td>D.F.</td>
<td>SUM OF SQUARES</td>
<td>MEAN SQUARES</td>
<td>F RATIO</td>
<td>F PROBABILITY</td>
</tr>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>13.36</td>
<td>4.45</td>
<td>1.70</td>
<td>0.17</td>
</tr>
<tr>
<td>Within Groups</td>
<td>246</td>
<td>644.57</td>
<td>2.62</td>
<td>Eta</td>
<td>Eta^2</td>
</tr>
<tr>
<td>Total</td>
<td>249</td>
<td>657.93</td>
<td></td>
<td>.14</td>
<td>.02</td>
</tr>
</tbody>
</table>

|                   | DLATSAT  |                  |                   |                  |                  |
| **DEPENDENT VARIABLE** | DLATSAT | **INDEPENDENT VARIABLE** | NTP INV |                  |                  |
| **SOURCE**        | D.F.     | SUM OF SQUARES  | MEAN SQUARES      | F RATIO         | F PROBABILITY   |
| Between Groups    | 3        | 8.07            | 2.69              | 1.42            | 0.24            |
| Within Groups     | 246      | 465.99          | 1.89              | Eta             | Eta^2           |
| Total             | 249      | 474.06          |                   | .13             | .02             |

1. Analysis of Present Instrumental Involvement to Present Commitment.

To test for the postulated independence relationship between purchasers' present involvement and present commitment toward their Grand Prix car, Pearson and Spearman correlation techniques were used to analyze the associations between the PT INV and NPT INV measures of involvement and the PT COMMIT and NPT COMMIT measures of commitment.

2. Results - Purchasers' Present Instrumental Involvement and Perceived Actual Commitment.

Table 4-11 offers the summary of the aggregate association measures between present involvement and actual commitment determined through the Pearson and Spearman correlation coefficients. Again, the coefficients were tested for significance using a two-tailed test. The correlation findings demonstrate no significant linear or monotonic associations. As a consequence, empirical support is given to the existence of independence between the two variables as predicted in the hypothesis. Therefore, one can conclude that the extent to which Grand Prix purchasers actually, or physically, drive their car is associated with the extent to which they desire owning the Grand Prix.

D. Summary of the Involvement Hypotheses' Findings.

1. Hypothesis INV1:

Aggregate and disaggregate tests of the involvement and usage experience (length of ownership) measures failed to demonstrate
TABLE 4-11
RELATIONSHIP MEASURES BETWEEN 1978 PONTIAC GRAND PRIX PURCHASERS' PRESENT COMMITMENT TOWARD OWNING THEIR AUTOMOBILE AND PRESENT INSTRUMENTAL INVOLVEMENT WITH THE CAR*
(Sample Size = 250)

<table>
<thead>
<tr>
<th>Measures of Present Involvement</th>
<th>PT COMMIT&lt;sup&gt;1&lt;/sup&gt;</th>
<th>NPT COMMIT&lt;sup&gt;2&lt;/sup&gt;</th>
<th>PT COMMIT</th>
<th>NPT COMMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT INV&lt;sup&gt;3&lt;/sup&gt;</td>
<td>.062 (.33)</td>
<td>.065 (.30)</td>
<td>.058 (.37)</td>
<td>.079 (.22)</td>
</tr>
<tr>
<td>NPT INV&lt;sup&gt;4&lt;/sup&gt;</td>
<td>.065 (.31)</td>
<td>.062 (.33)</td>
<td>.068 (.28)</td>
<td>.073 (.25)</td>
</tr>
</tbody>
</table>

*Significance (values) represent results of a two-tailed test.

1 -- PT COMMIT denotes Aggregate Measure of Present Commitment
2 -- NPT COMMIT denotes Categorical Aggregate Measure of Present Commitment
3 -- PT INV denotes Aggregate Measure of Present Instrumental Involvement
4 -- NPT INV denotes Categorical Aggregate Measure of Present Instrumental Involvement
the existence of a significant linear or monotonic relationship at the .05 level. As a result, empirical support was given to the postulated independent association between purchasers' instrumental involvement and their usage experience.

2. **Hypothesis INV2:**

   The data structures relative to purchasers' present instrumental involvement with their 1978 Grand Prix cars and the composite measures of changes in their attitudes of satisfaction toward the car failed to demonstrate the existence of either a significant linear or monotonic relationship. Thus, empirical evidence was found to support the prediction that purchasers' involvement with their 1978 Grand Prix cars was not related (or independent) to changes in their attitudes of satisfaction toward the car.

3. **Hypothesis INV3:**

   Aggregate tests of the association between purchasers' present (actual) commitment to owning their present 1978 Grand Prix and their present instrumental involvement with the car failed to demonstrate the existence of either a linear or monotonic relationship, significant at the .1 level. As a consequence, it was concluded that the hypothesis was supported and that the extent to which Grand Prix purchasers actually drove their car was not associated with the extent to which they desired owning the Grand Prix.
ANALYSES AND RESULTS OF THE SATISFACTION HYPOTHESES

Introduction

This section of the chapter focuses on the analyses and investigations into postulated relationships between Grand Prix purchasers' post purchase felt satisfaction attitudes toward their automobiles and their usage experience, or length of ownership, as well as their attitudes' impact on specified behavioral intentions. More specifically, aggregate and disaggregate data analysis techniques were utilized to determine to what extent, if any, attitude changes in purchasers' post purchase satisfaction toward their 1978 Grand Prixs are associated with degrees of usage experience. Additionally, attention is given to investigating the possible existence of associations between changes in felt satisfaction attitudes and two particular behavioral intentions: (1) likelihood of buying another Grand Prix; and (2) likelihood of complaining about some type of problem concerning the car.

Due to the exploratory nature of this study, the main thrust of the analyses is to identify and substantiate whether different relationships do exist between perceived felt satisfaction attitudes and amounts of usage experience and behavioral intentions. As such, none of the main hypotheses nor their respective subhypotheses attempt to postulate a particular direction.
A. Hypothesis Sxnl: Differences in 1978 Pontiac Grand Prix Purchasers' Post Purchase Felt Satisfaction Attitude Toward their Car Will Exist With Increases in Product Usage Experience.

1. Analysis of Purchasers' Post Purchase Felt Satisfaction Attitudes Over Length of Ownership.

In testing for significant patterns between Grand Prix purchasers' post purchase felt satisfaction toward their cars and time of ownership, consideration was given to the need to compare attitude changes across varying usage experience ranges. Consequently, the total sample of 250 purchasers was stratified into three subgroups. The stratification procedure, as previously discussed in Chapter III, was based on purchasers' usage experience, or length of ownership, with their 1978 Grand Prix cars. To test for the existence of significant attitude change differences between the subgroups, one-way analysis of variance was performed on the composite felt satisfaction measures. The between subgroup attitude differences were tested for significance using the Z-test procedure.

2. Results - Changes in Purchasers' Post Purchase Felt Satisfaction and Length of Ownership.

Table 4-12 presents the summary of the means, standard deviations, and standard errors of the composite measures of felt satisfaction changes for purchasers having different magnitudes of product usage experience. Also included in the table are the results of the mean difference tests. The reported significant value (p), for each subgroup, should be interpreted as representing the lowest
### TABLE 4-12
MEANS, STANDARD DEVIATIONS AND STANDARD ERRORS OF POST PURCHASE CHANGES IN GRAND PRIX PURCHASERS' FELT SATISFACTION ATTITUDE TOWARD THEIR CAR

Analyzed by: Categorical Usage Experience Ranges and Composite Measures of Post Purchase Satisfaction Attitude Changes

<table>
<thead>
<tr>
<th>Categorical Usage Experience Ranges</th>
<th>(N=51)</th>
<th>(N=100)</th>
<th>(N=99)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One to Six Months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seven to Twelve Months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thirteen to Nineteen Months</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Composite Measure of Attitude Change (COMFLSAT) |      |       |       |
| Mean Value                                    | -.02 | 1.47  | -.56  |
| Standard Deviation                            | 1.43 | 7.63  | 4.07  |
| Standard Error                                | .20  | .76   | .42   |

*Significance Level p > .05 p > .02 p > .02

*Each reported significance value (p) represents the lowest level for which the respective mean value is significantly different from at least one other mean value.

Interpretation of the reported mean values prior to testing for any statistical differences indicates the apparent existence of two important characteristics. First and most important, the findings tend to demonstrate that changes in purchasers' felt satisfaction attitudes toward their automobiles do exist and in different magnitudes relative to the degree of usage experience. Second,
interpretation of the composited measures of attitude change tends to indicate the apparent existence of a distinct pattern between usage experience and the average within-group changes in purchasers' felt satisfaction attitudes. That is, Grand Prix purchasers having owned their cars between seven and twelve months tend to exhibit the greatest amount of attitude change toward being satisfied, or dissatisfied, with their 1978 Grand Prixs; whereas, those having owned their Grand Prixs for six months or less appear to exhibit the least amount of change in their satisfaction attitudes. Those purchasers who have owned their 1978 Grand Prixs for thirteen or more months tend to exhibit an average attitude change level which is different from the other two groups of purchasers.

Interpretation of the mean difference tests indicates that significant attitude change differences do exist between Grand Prix purchasers having different magnitudes of product usage experience. More specifically, the findings demonstrate that, on the average, purchasers having owned their cars for only six months or less tend to exhibit no change in their post purchase felt satisfaction attitude (mean = -.02). As such, it appears that purchasers in this usage experience range have a tendency to assimilate their actual satisfaction attitudes toward what their expected satisfaction attitudes were at the time of purchase. From a more pragmatic viewpoint, one might infer from the results that purchasers who have owned their automobiles for not more than six months feel as
satisfied with the overall performance of their 1978 Grand Prixs as they expected to be at the time of purchase.

With respect to purchasers having owned their automobiles between seven and twelve months, the findings demonstrate that on the average these purchasers exhibit somewhat of a positive disconfirmation of their expected satisfaction attitudes toward their cars. Interpretation of the reported 1.47 mean value indicates that this group tends to be more satisfied with their automobiles than what they had expected to be at the time of purchase. Additionally, this reported change in attitude is significantly different than the average attitude change (-.56) associated with those purchasers having owned their cars for thirteen months or more at the .05 level.

On the other hand, purchasers having owned their cars for thirteen or more months tend to exhibit a slight negative disconfirmation in their felt satisfaction attitudes with respect to their perceived expected satisfaction attitudes. Interpretation of the -.56 mean value associated with these purchasers indicates that on the average they felt slightly less satisfied with their 1978 Grand Prixs than at the time of purchase. Furthermore, their negative attitude change proves to be significantly different at the .05 level from the attitude change associated with purchasers having usage experiences of seven to twelve months.

Thus, the mean values of purchasers' attitude changes of felt satisfaction tend to demonstrate the existence of attitude differences between purchasers having different degrees of product
usage experience. As such, one could conclude that the composite measure results support the hypothesized relationship between felt satisfaction attitude changes and purchasers' usage experiences.

B. Three Satisfaction-Oriented Subhypotheses.

Introduction

Since the three subhypotheses represent diaggregate features of the main felt satisfaction hypothesis (Sxn 1), the investigation of the subhypothesis follows the logical sequence of general to specific. As such, the first subhypothesis focuses on determining the existence of latitude of satisfaction differences between purchasers having owned their automobiles for varying lengths of time. The second subhypothesis becomes more specific in nature and concentrates on only "actual satisfaction" attitude differences between purchasers. Similarly, the last subhypothesis focuses strictly on possible "expected satisfaction" attitude differences.

1. Analysis of the Three Satisfaction Subhypotheses.

Since the three subhypotheses are disaggregate features of the main felt satisfaction hypothesis, the data analysis methods selected to test each of the postulated relationships were identical to those methods used in testing the relationship between felt satisfaction and length of ownership. Consequently, a oneway analysis of variance was performed on the composite measures of the
three respective satisfaction-oriented variables (i.e., latitude of satisfaction, actual satisfaction, and expected satisfaction) for each of the three strata of Grand Prix purchasers. To test for significant differences between the defined subgroups of purchasers, the computed mean values of each of the specified satisfaction variables were analyzed by means of the Z-test procedure.

2. Results - Differences in Purchasers' Latitudes of Satisfaction, Actual and Expected Satisfaction Attitudes Over Length of Ownership

(a) Subhypothesis 2.1.1: A Difference Exists in 1978 Grand Prix Purchasers' Derived "Latitude of Satisfaction" Toward the Cars Related with Increased Usage Experience

Table 4-13 presents the summary of means, standard deviations, and standard errors of the composite latitudes of satisfaction for purchasers having different magnitudes of product usage experience. Also included in the table are the results of the means difference test. Again, the reported significance value (p), for each subgroup, should be interpreted as representing the lowest level for which the respective mean latitude value is significantly different from at least on other mean value.

Interpretation of the mean test results indicates the absence of any significant relationship between the reported latitude differences of the three defined groups of purchasers at the .1 level of significance. As such, it fails to support the predicted relationship. Consequently, one might be quick to conclude that the
TABLE 4-13
MEANS, STANDARD DEVIATIONS AND STANDARD ERRORS
OF DERIVED LATITUDES MEASURES

Analyzed By: Categorical Usage Experience Ranges and
Composite Measures of Derived Latitudes of Satisfaction

<table>
<thead>
<tr>
<th>Categorical Usage Experience Range</th>
<th>(N=51)</th>
<th>(N=100)</th>
<th>(N=99)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One to Six Months</td>
<td>Seven to Twelve Months</td>
<td>Thirteen to Nineteen Months</td>
</tr>
<tr>
<td>Composite Measure of Derived Latitudes (COMLTSAT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Value</td>
<td>-.09</td>
<td>-.03</td>
<td>-.20</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.49</td>
<td>1.63</td>
<td>1.70</td>
</tr>
<tr>
<td>Standard Error</td>
<td>.21</td>
<td>.16</td>
<td>.17</td>
</tr>
<tr>
<td>*Significance Level</td>
<td>p &gt; .69</td>
<td>p &gt; .45</td>
<td>p &gt; .45</td>
</tr>
</tbody>
</table>
significant differences in purchasers' felt satisfaction attitudes, as demonstrated in the main hypothesis, were the results of the interaction of the commitment and involvement factors within the expectancy-attitude model and not actual attitude changes over time of ownership, or usage experience.

Furthermore, the lack of support of this first subhypothesis raises serious concerns about the validity of not only the expectancy-attitude model but also the underlying theories which guided the conceptualization and operationalism of the model. Prior to making a final assessment of the implications from the lack of empirical support toward the first subhypothesis, it was deemed important to investigate the individual components of the latitude of satisfaction concept. Intuitively, one would suspect that if the findings reported on the first subhypothesis represent an accurate assessment of the relationship existing between different groups of purchasers and their latitudes of satisfaction, then similar results should appear from testing the predicted relationships of actual and expected satisfaction attitudes across the same degrees of product usage experience ranges.

(b) Subhypothesis SxnS 1.2: There is a Difference in Purchasers' Perceived "Actual Satisfaction" Attitudes Toward Their 1978 Grand Prix Car Related to Increased Usage Experience.

Table 4-14 presents the summary of the means, standard deviations, and standard errors of the categorical measure of actual satisfaction attitudes for Grand Prix purchasers having different
TABLE 4-14
MEANS, STANDARD DEVIATIONS AND STANDARD ERRORS OF GRAND PRIX PURCHASERS' PERCEIVED ACTUAL SATISFACTION ATTITUDE MEASURES

Analyzed By: Categorical Usage Experience Ranges, Aggregate and Categorical Composite Measures of Actual Satisfaction

<table>
<thead>
<tr>
<th>Categorical Usage Experience Ranges</th>
<th>(N=51)</th>
<th>(N=100)</th>
<th>(N=99)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One to Six Months</td>
<td>Seven to Twelve Months</td>
<td>Thirteen to Nineteen Months</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Categorical Composite Measure of Actual Satisfaction (NCOMASAT)</th>
<th>Mean Value</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
<th>*Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Value</td>
<td>5.63</td>
<td>5.06</td>
<td>5.31</td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.02</td>
<td>1.34</td>
<td>1.34</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>.18</td>
<td>.14</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>*Significance Level</td>
<td>p &gt; .01</td>
<td>p &gt; .01</td>
<td>p &gt; .1</td>
<td></td>
</tr>
</tbody>
</table>

*Each reported significance value (p) represents the lowest level for which the respective mean value is significantly different from at least one other mean value.
degrees of product usage experience. Again, these sample statistics were generated through a one-way analysis of variance procedure. Also reported in the table are the results of the means difference test.

Interpretation of the means difference test results clearly indicates the existence of significant differences between the three groups of purchasers in their respective composite mean actual satisfaction attitude values. More specifically, the composite mean findings tend to demonstrate that those purchasers having six months or less product usage experience, on the average, exhibit somewhat stronger actual satisfaction attitudes (mean = 5.63) toward their 1978 Grand Prix cars which are significantly different at the .01 level, from the average actual satisfaction attitudes (mean = 5.06) of purchasers having between seven and twelve months of usage experience. Similarly, the findings demonstrate that, on the average, the actual satisfaction attitudes (mean = 5.31) exhibited by purchasers having the greatest amount of usage experience (thirteen months or more) is significantly different, at the .1 level from the attitudes of purchasers with seven to twelve months of experience. On the basis of these findings, one would have to conclude that purchasers' actual satisfaction attitudes toward their Grand Prixs do change somewhat over time of ownership. The apparent pattern associated with attitude changes can be tentatively described as being curvilinear in nature.
(c) Subhypothesis SxnS 1.3: There is a Difference in Purchasers' Perceived "Expected Satisfaction" Attitudes Toward Their 1978 Grand Prix Cars Related to Increased Usage Experience.

Table 4-15 presents the summary of the means, standard deviations, and standard errors of the categorical measure of purchasers' expected satisfaction attitudes over varying degrees of product usage experience. The sample statistics in the table were generated through a one-way analysis of variance statistical technique and the means tested for significant differences.

Interpretation of the results indicates the existence of significant differences in expected satisfaction attitude with increases in product usage experience. More specifically, the findings demonstrate a similar relationship pattern between expected satisfaction and degrees of product experience as that identified for actual satisfaction attitudes. Purchasers with the least amount of product usage experience (six months or less) tend to express having somewhat greater expected satisfaction attitudes toward their Grand Prix at time of purchase (mean = 5.61) than do purchasers having seven to twelve months experience (mean = 5.10). The relative difference between these two groups' expressed satisfaction attitudes, at time of purchase, was significant at the .01 level. Whereas, the expressed expected satisfaction attitudes of those purchasers having the greatest amount of product usage experience, thirteen months or more, (mean = 5.41) also demonstrated to be significantly different from the attitudes of those purchasers
TABLE 4-15
MEANS, STANDARD DEVIATIONS AND STANDARD ERRORS OF GRAND PRIX PURCHASERS' PERCEIVED EXPECTED SATISFACTION ATTITUDE MEASURES

Analyzed By: Categorical Usage Experience Ranges, Categorical Composite Measures of Expected Satisfaction

<table>
<thead>
<tr>
<th>Categorical Usage Experience Ranges</th>
<th>(N=51)</th>
<th>(N=100)</th>
<th>(N=99)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One to Six Months</td>
<td>Seven to Twelve Months</td>
<td>Thirteen to Nineteen Months</td>
</tr>
<tr>
<td>Categorical Composite Measure of Expected Satisfaction (NCOMESAT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Value</td>
<td>5.61</td>
<td>5.10</td>
<td>5.41</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>.98</td>
<td>1.18</td>
<td>1.19</td>
</tr>
</tbody>
</table>

*Significance Level p > .01  p > .01  p > .07

*Each reported significance value (p) represents the lowest level for which the respective mean value is significantly different from at least one other mean value.

averaging seven to twelve months of ownership experience, at the .1 level of significance. Again, the apparent small attitude differences pattern associated with increases in usage experience can be tentatively identified as curvilinear in nature.
C. **Hypothesis Sxn2:** A Relationship Exists Between 1978 Grand Prix Purchasers' Perceived Felt Satisfaction Toward Their Car and Their Intentions to Either Buy Another Grand Prix Automobile (Likelihood of Repeat Purchase) or Complain About the Car.

1. **Analysis of Purchasers' Felt Satisfaction Attitudes and Behavioral Intentions**

   In determining the existence of systematic relationships between purchasers' felt satisfaction attitudes and their expressed behavioral intentions of complaining about major and minor problems relative to their cars as well as their intentions of buying another Grand Prix, Pearson and Spearman correlation coefficients were computed and tested for significance.

2. **Results - Aggregate Relationships Between Purchasers' Felt Satisfaction Attitudes and Specific Behavioral Intentions**

   Table 4-16 offers a summary of the association measures between the composite measures of purchasers' felt satisfaction attitude changes and their likelihood to complain about major and minor problems with their cars as well as their likelihood to purchase another Grand Prix. Also included in the table is the level of significance for each reported association measure. A two-tailed test for significance was used.

   In order to facilitate the data analysis findings, the results for each type of behavioral intention (i.e. major problem complaint, minor problem complaint, repeat purchase) will be discussed separately.
TABLE 4-16
AGGREGATE RELATIONSHIP MEASURES BETWEEN FELT SATISFACTION AND POST PURCHASE BEHAVIORAL INTENTIONS

Analyzed By: Composite Measures of Felt Satisfaction, Likelihood of Complaining, Likelihood of Buying Another Grand Prix, and Pearson and Spearman Correlation Coefficients
(N = 250)

<table>
<thead>
<tr>
<th>Correlation Coefficient</th>
<th>Composite Measures of Felt Satisfaction (Exact Significance Value)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Product-Moment Correlation</td>
</tr>
<tr>
<td>Likelihood of Complaining About a Major Problem</td>
<td>.09 (-14)</td>
</tr>
<tr>
<td>Likelihood of Complaining About a Minor Problem</td>
<td>-.03 (.64)</td>
</tr>
<tr>
<td>Likelihood of Purchasing Another Grand Prix Next Time</td>
<td>.07 (.29)</td>
</tr>
</tbody>
</table>

*The exact significance values were computed using a two-tailed test of significance.

a—Statistically significant at the .05 level.

b—Statistically significant at the .1 level.

(a) Changes in Felt Satisfaction and Complaints About Major Problems

Interpretation of the correlation coefficients indicates an absence of any significant linear or monotonic associations, at least at the aggregate level, between changes in purchasers' felt satisfaction attitudes toward their Grand Prix cars and their expressed intention to complain about an unexpected major problem with their
car. That is, both the Pearson (.09) and Spearman (-.02) coefficients fail to demonstrate the existence of a significant correlation at the .1 level of statistical significance between felt satisfaction and the intention to complain about a major problem. Consequently, one would conclude that purchasers' willingness to complain about an unexpected major problem with their 1978 Grand Prix is not associated with their feelings of being satisfied with it.

(b) Changes in Felt Satisfaction and Complaints About Minor Problems

The resulting Spearman (-.12) coefficient tends to demonstrate the existence of a very weak but significant negative monotonic relationship between changes in purchasers' felt satisfaction attitudes toward their cars and intentions to complain about an annoying minor problem, one costing less than one hundred dollars. Although the relationship is significant at the .1 level, the magnitude of the relationship is so weak that it would have to be considered unimportant in nature. As such, one may conclude from the results that changes in felt satisfaction attitudes do not really relate to purchasers' intentions to complain about annoying minor automobile problems.

(c) Changes in Felt Satisfaction and Buying Another Grand Prix

Interpretation of the Spearman (.14) coefficient tends to indicate the existence of a relatively weak but significant, at the .05 level, positive monotonic relationship between felt satisfaction attitude changes and repeat purchase intentions toward the Grand
Prix brand of automobiles. As such, one can conclude that changes in purchasers' satisfaction attitudes have at best only a nominal magnitude of relationship to intentions to buy another Grand Prix the next time they are in the market for an automobile. On the basis of these findings, it can be concluded that the postulated relationship between felt satisfaction changes and behavioral intentions is only nominally supported.

In an attempt to gain a better understanding of the apparent nominal relationship existing between changes in purchasers' felt satisfaction attitudes and their behavioral intentions, it was deemed important to determine what relationships if any, exist between purchasers' actual satisfaction attitudes toward their cars and their behavioral intentions of either complaining or repeat purchase. Using a similar data analysis procedure, correlation coefficients for the measures of actual satisfaction attitudes and the three behavioral intentions were computed.

Table 4-17 presents the summary of the aggregate relationship measures between purchasers' perceived actual satisfaction attitudes and the likelihood of their behavioral intention to either complain about some type of major and/or minor problem relative to their Grand Prixs as well as the likelihood of buying another Grand Prix next time. Also included in the table, is the significance level for each relationship measure.
TABLE 4-17
AGGREGATE RELATIONSHIP MEASURES BETWEEN PERCEIVED ACTUAL SATISFACTION LIKELIHOOD OF POST PURCHASE BEHAVIORAL INTENTIONS
Analyzed By: Categorical Composite Measures of Actual Satisfaction, Intentions of Complaining, Intentions of Repeat Purchase, and Product-Moment/Rank Order Correlation Coefficients (N = 250)

<table>
<thead>
<tr>
<th>Correlation Coefficient (Exact Significance Value)*</th>
<th>Categorical Composite Measure of Actual Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>Spearman Correlation</td>
</tr>
<tr>
<td>Likelihood of Complaining About a Major Problem</td>
<td>-.05</td>
</tr>
<tr>
<td>(.42)</td>
<td>(.88)</td>
</tr>
<tr>
<td>Likelihood of Complaining About a Minor Problem</td>
<td>-.11b</td>
</tr>
<tr>
<td>(.07)</td>
<td>(.14)</td>
</tr>
<tr>
<td>Likelihood of Purchasing Another Grand Prix Next Time</td>
<td>.47a</td>
</tr>
<tr>
<td>(.01)</td>
<td>(.01)</td>
</tr>
</tbody>
</table>

*The exact significance values were computed using a two-tailed test of significance.

a—Statistically significant at the .01 level.

b—Statistically significant at the .1 level.

Interpretation of the results tends to coincide with those of the earlier results. The findings demonstrate an absence of a significant linear or monotonic relationship between purchasers' perceived actual satisfaction attitudes toward their car and their behavioral intentions toward complaining about an unexpected major problem. With respect to purchasers' likelihood of complaining about some type of annoying minor problem, the correlation results fail to support, at the .05 level of significance, the existence of
any significant linear or monotonic relationship between purchasers' perceived actual satisfaction attitudes toward their car and their willingness to complain about minor problems.

On the other hand, interpretation of the reported Pearson (.47) and Spearman (.46) coefficients indicates that a moderately positive linear relationship does exist, at the .01 level, between actual satisfaction attitudes and purchasers' likelihood of buying another Grand Prix as their next automobile.

D. Two Behavioral Intention Subhypotheses

Introduction

Due in part to the marginal aggregate-level data analysis results and the recognition of the necessity for clearer insights into the existing associations between felt satisfaction attitudes and behavioral intentions, it was considered important to investigate separately the differences, if any, in the behavioral intentions reported by purchasers exhibiting positive, negative, and no changes in their satisfaction attitudes toward their automobiles. As such, two interrelated subhypotheses were formulated postulating that differences do exist in the behavioral intentions toward either complaining about the car or the willingness to buy another Grand Prix, for purchasers exhibiting either a positive or negative or no change in their satisfaction attitude. To aid in the tests for significant differences in behavioral intentions, purchasers were
segmented into three test groups on the basis of confirmation (no change) and disconfirmation (positive and negative changes) of their felt satisfaction attitudes.

1. Analysis of the Two Behavioral Intention Subhypotheses

In assessing the degree to which various behavioral intention differences exist between purchasers exhibiting: (1) positive changes; (2) no change; and (3) negative changes in their felt satisfaction attitude toward the 1978 Grand Prix, purchasers were subjected to a one-way analysis of variance procedure to test for significant differences between the groups with regard to behavioral intentions. The computed mean values relative to each of the specified behavioral intentions were respectively analyzed by the Z-test procedure.

2. Results - Differences in Purchasers' Behavioral-Intention Patterns Relative to Changes in Felt Satisfaction Attitudes

(a) Subhypothesis SxnS 2.1: A Difference Exists for Post-Purchases Intentions to Complain About Some Problem With The Grand Prix Between Purchasers Who Exhibit A Positive Felt Satisfaction Attitude Toward Their Car and Those Purchasers Who Exhibit a Negative Felt Satisfaction Attitude Toward Their Car

(1) Major Problems and Behavioral Differences

Table 4-18 presents the summary of the complaining intention ratings, means, and standard deviations determined for the three groups of 1978 Grand Prix purchasers derived through the composite measurement method. Also included in the table are the results of the means difference test as well as the sample size of each purchaser group.
TABLE 4-18
BEHAVIORAL INTENTION DIFFERENCES TOWARD COMPLAINING ABOUT A MAJOR PROBLEM BETWEEN PURCHASERS EXHIBITING A POSITIVE AND NEGATIVE CHANGE IN THEIR FELT SATISFACTION ATTITUDE (CATEGORICAL COMPOSITE MEASURE)

Analyzed By: Intention Ratings, Means, Standard Deviations, and Significant Values

<table>
<thead>
<tr>
<th>Categorical Composite Measure</th>
<th>Definitely Would Complain</th>
<th>Probably Would Complain</th>
<th>Unlikely Would Complain</th>
<th>Definitely Would Not Complain</th>
<th>Mean(^a) Value</th>
<th>Standard Deviation</th>
<th>Significant(^b) Value</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Change in Felt Satisfaction</td>
<td>40 (54.1)</td>
<td>13 (17.6)</td>
<td>17 (23.0)</td>
<td>4 (5.4)</td>
<td>4.69</td>
<td>1.56</td>
<td>p ≥ .26</td>
<td>74</td>
</tr>
<tr>
<td>No Change in Felt Satisfaction</td>
<td>42 (41.6)</td>
<td>24 (23.8)</td>
<td>32 (31.7)</td>
<td>3 (3.0)</td>
<td>4.43</td>
<td>1.44</td>
<td>p ≥ .26</td>
<td>101</td>
</tr>
<tr>
<td>Negative Change in Felt Satisfaction</td>
<td>32</td>
<td>25</td>
<td>18</td>
<td>--</td>
<td>4.61</td>
<td>1.26</td>
<td>p ≥ .39</td>
<td>75</td>
</tr>
</tbody>
</table>

\(a\) -- Measurement Scale: Definitely would complain = 6; Probably would complain = 4; Unlikely would complain = 3; Definitely would not complain = 1.

\(b\) -- Each reported significance value (p) represents the lowest level for which the respective, mean value is significantly different from at least one other mean value.
The results of the means test demonstrate no significant relationship between the reported mean complaining intention differences of the three defined groups of purchasers, at the .1 level. As such, differences between purchasers' intentions to complain about an unexpected major problem with their Grand Prixs fail to support in part the predicted relationship of subhypothesis. Using a more disaggregate data analysis procedure of comparing the actual intention responds between the three satisfaction based groups, clearer insights can be gained to the results. Interpretation of the complaint intention ratings indicates that in all three test groups, purchasers are more likely to complain about an unexpected major problem with their cars regardless of whether they felt satisfaction attitudes have increased or decreased in strength. That is, approximately 72% of those purchasers exhibiting some type of increase in their satisfaction attitude toward their Grand Prix also report there is better than a 50-50 chance, with heavy emphasis on "definitely would" (54.1%), that they would complain about an unexpected major problem concerning their Grand Prix to either the dealership or some other recognized organization. Whereas, 76% of those purchasers exhibiting some form of a decrease in their felt satisfaction report similar intentions toward the likelihood (better than a 50-50 chance) of complaining about a major problem. Likewise, those purchasers exhibiting no change in the felt satisfaction attitudes (65%) demonstrate basically the same type of complaining intention pattern as
do the other two groups. With respect to at least major unexpected problems, one can conclude that the degree to which individuals feel satisfied with their cars has no significant influence on the likelihood of their complaining about the problem to some type of recognized organization, or party.

(2) Minor Problems and Behavioral Differences

Table 4-19 presents the summary of complaining intention ratings, means, and standard deviations relative to purchasers' likelihood of complaining about an annoying minor problem with their Grand Prixs. Also reported in the table are the mean differences as well as the sample size for each of the purchaser groups.

Interpretation of the means test results indicates the existence of significant differences between the behavioral intentions of those purchasers who either exhibit confirmation or positive disconfirmation of their felt satisfaction attitudes toward their cars and purchasers exhibiting some magnitude of negative disconfirmation.

More specifically, the findings demonstrate that purchasers exhibiting no change in their satisfaction attitudes tend to be somewhat undecided (mean = 3.66), or indifferent, toward whether or not they would complain about a minor problem. These purchasers' complaining intention pattern appears to be significantly different, at the .01 level, from those purchasers exhibiting some negative magnitude of disconfirmation (or decrease) with their felt satisfaction attitudes. The negative disconfirmed purchasers tend to exhibit a
TABLE 4-19
BEHAVIORAL INTENTION DIFFERENCES TOWARD COMPLAINING ABOUT A MINOR PROBLEM BETWEEN PURCHASERS EXHIBITING A POSITIVE AND NEGATIVE CHANGE IN THEIR FELT SATISFACTION ATTITUDE (CATEGORICAL COMPOSITE MEASURE)

Analyzed By: Intention Ratings, Means, Standard Deviations, and Significant Values

<table>
<thead>
<tr>
<th>Categorical Composite Measure</th>
<th>Definitely Would Complain</th>
<th>Probably Would Complain</th>
<th>Unlikely Would Complain</th>
<th>Definitely Would Not Complain</th>
<th>Mean Value</th>
<th>Standard Deviation</th>
<th>Significant Value</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Change in Felt Satisfaction</td>
<td>16 (21.6)</td>
<td>30 (40.5)</td>
<td>21 (28.4)</td>
<td>7 (9.5)</td>
<td>3.86</td>
<td>1.42</td>
<td>p &gt; .05</td>
<td>74</td>
</tr>
<tr>
<td>No Change in Felt Satisfaction</td>
<td>29 (28.7)</td>
<td>22 (21.8)</td>
<td>29 (28.7)</td>
<td>21 (20.8)</td>
<td>3.66</td>
<td>1.80</td>
<td>p &gt; .01</td>
<td>101</td>
</tr>
<tr>
<td>Negative Change in Felt Satisfaction</td>
<td>29 (38.7)</td>
<td>19 (25.3)</td>
<td>24 (32.0)</td>
<td>3 (4.0)</td>
<td>4.33</td>
<td>1.46</td>
<td>p &gt; .01</td>
<td>75</td>
</tr>
</tbody>
</table>

a — Measurement Scale: Same as for Table 4-18.

b — Each reported significance value (p) represents the lowest level for which the respective mean value is significantly different from at least one other mean value.
more positive-oriented intention to complain about minor problems as is indicated by the mean complaint intention value of 4.33. Further support can be seen by the fact that approximately 65% of the negative disconfirmed purchasers indicate that there is better than a 50-50 chance that they would complain, with heavy emphasis (38.7%) on "definitely would complain" intentions; whereas, only about 50% of those purchasers confirming their attitudes expressed there is better than a 50-50 chance that they would be likely to complain about a minor problem.

With respect to those purchasers exhibiting some degree of positive disconfirmation with their satisfaction attitudes, the findings demonstrate that their mean complaint intention value (3.86) was significantly lower, at the .05 level, than the mean value of the negative disconfirmation group of purchasers. In interpreting these findings, one might conclude that those purchasers who tend to become more satisfied with their Grand Prixs are somewhat less likely to complain about an annoying minor problem with their cars than purchasers who become somewhat less satisfied with their Grand Prixs.

Furthermore, the findings demonstrate that no significant differences exist between the complaining intentions exhibited by the purchasers who confirm their satisfaction attitudes and those who express some type positive disconfirmation. Finally, with respect to behavioral intentions toward complaining about a minor
problem, evidence tends to support in part the relationship prediction of the subhypothesis.

The failure of the overall findings to unequivocally demonstrate support of the relationship prediction on the subhypothesis, tends to indirectly support two considerations: (1) the premise that satisfaction is not the sole predictor of individuals' behavioral intentions and/or outcomes; and (2) that more research is needed to identify what other endogenous and exogenous factors have a significant impact, or influence, on purchasers' cognitive process of forming expressions of specific types of complaint behavior intentions under different environmental conditions.

(b) Subhypothesis 2.2: A Difference Exists for Post Purchase Intentions to Buy Another Grand Prix Car between Purchases Who Exhibit a Positive Felt Satisfaction Attitude Toward Their Present Grand Prix and Purchasers Who Exhibit a Negative Felt Satisfaction/Dissatisfaction Attitude Toward Their Car

Table 4-20 presents the summary of intention ratings, means, and standard deviations relative to the behavioral intentions to buy another Grand Prix as the next automobile for each group. Also included in the Table are the sample sizes as well as the means difference test results.

The means test results demonstrate that a significant difference does exist between the expressed buying intentions of those purchasers exhibiting a positive disconfirmation in their felt satisfaction attitudes and purchasers experiencing a negative disconfirmation. With respect to those purchasers who experienced
TABLE 4-20
BEHAVIORAL INTENTION DIFFERENCES TOWARD BUYING ANOTHER GRAND PRIX BETWEEN PURCHASERS EXHIBITING A POSITIVE AND NEGATIVE CHANGE IN THEIR FELT SATISFACTION ATTITUDE (CATEGORICAL COMPOSITE MEASURE)

Analyzed By: Intention Ratings, Means, Standard Deviations, and Significant Values

<table>
<thead>
<tr>
<th>Categorical Composite Measure</th>
<th>Definitely Will Buy</th>
<th>Probably Will Buy</th>
<th>Unlikely Will Buy</th>
<th>Definitely Will Not Buy</th>
<th>Mean(^a) Value</th>
<th>Standard Deviation</th>
<th>Significant(^b) Value</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Change in Felt Satisfaction</td>
<td>10 (13.5)</td>
<td>46 (62.2)</td>
<td>17 (23.0)</td>
<td>1</td>
<td>4.00</td>
<td>.95</td>
<td>p (\geq .01)</td>
<td>74</td>
</tr>
<tr>
<td>No Change in Felt Satisfaction</td>
<td>14 (13.9)</td>
<td>51 (50.5)</td>
<td>27 (26.7)</td>
<td>9</td>
<td>3.74</td>
<td>1.25</td>
<td>p (\geq .11)</td>
<td>101</td>
</tr>
<tr>
<td>Negative Change in Felt Satisfaction</td>
<td>5 (6.7)</td>
<td>39 (52.0)</td>
<td>25 (33.3)</td>
<td>6</td>
<td>3.56</td>
<td>1.07</td>
<td>p (\geq .01)</td>
<td>75</td>
</tr>
</tbody>
</table>

\(a\) -- Measurement Scale: Definitely will buy = 6; Probably will buy = 4; Unlikely will buy = 3; Definitely will not buy = 1.

\(b\) -- Each reported significance value (p) represents the lowest level for which the respective mean value is significantly different from at least one other mean value.
a positive change in their felt satisfaction attitude toward their Grand Prixs, the reported findings tend to demonstrate that on the average these purchasers overwhelminglly exhibit the behavioral intention (mean = 4.00) of having a willingness, described as being better than a 50-50 chance, to buy another Grand Prix as their next car. Additionally, their perceived behavioral intentions were significantly different at the .01 level from the somewhat undecided, or indifferent, type of repeat purchase intentions exhibited by purchasers having some degree of negative disconfirmation in their felt satisfaction attitudes, as delineated from their average intention measure of only 3.56.

Furthermore, interpretation of the actual intention ratings relative to these two groups of purchasers indicate that both groups lack of a substantial commitment toward either a strong, or definite willingness to purchase again or a strong willingness not to repeat purchase. Nevertheless, the findings for the two groups exhibiting either positive or negative disconfirmation with their felt satisfaction attitudes tend to support the postulated relationship. Due in part to the marginal mean intention values of each of the test groups, one might conclude that changes in purchasers' felt satisfaction attitudes toward their Grand Prix serve, as best, as a partial indicator of the likelihood that individuals will buy another Grand Prix as their next car.
E. Summary of the Satisfaction Hypotheses' Findings

(1) Hypothesis Sxn 1: Tests of the mean values of purchasers' attitude changes of felt satisfaction demonstrated at the .05 level, the existence of attitude differences between purchasers having different degrees of product usage experience. More specifically, purchasers having owned their Grand Prixs for six months or less exhibited no changes in their felt satisfaction attitudes (mean = -.02), toward their 1978 Grand Prix cars. However, those purchasers demonstrating ownership of seven to twelve months exhibited a significantly greater positive change in their attitudes (mean = 1.47). While those purchasers having owned their cars for more than a year exhibited significantly smaller, negative attitudes changes (mean = -.56), toward their 1978 Grand Prix cars. As such, it was concluded that data results supported the hypothesis for felt satisfaction attitude changes and purchasers' usage experience.

(2) Subhypothesis SxnS 1.1: Tests of purchasers' latitudes of satisfaction across different degrees of usage experience failed to support, at the .1 level, the predicted relationship of the subhypothesis.

(3) Subhypothesis SxnS 1.2: Test results demonstrated the existence of significant differences in perceived actual satisfaction attitudes between purchasers having different degrees of usage experience. The findings showed that purchasers having owned their Grand Prix for six months or less and for more than twelve months,
exhibited somewhat higher attitudes of satisfaction than those purchasers having owned their cars between seven and twelve months.

(4) **Subhypothesis Sxns 1.3:** The mean difference tests demonstrated support for the postulated relationship. More specifically, the findings tended to demonstrate a similar relationship pattern between expected satisfaction and degrees of product experience as that identified for actual satisfaction attitudes in Subhypothesis Sxns 1.2. Although the magnitudes of the attitude changes were regarded as small, the pattern associated with increases in usage experience was tentatively identified as curvilinear in nature.

(5) **Hypothesis Sxn 2:** The data analysis findings indicated an absence of any significant linear or monotonic association, at the .1 level between changes in purchasers' felt satisfaction attitudes toward their 1978 Grand Prix cars and their expressed behavioral intention of complaining about an unexpected major problem with their car. Similarly, the results suggested that changes in felt satisfaction attitude did not really influence purchasers' intentions to complain about annoying minor problems relative to their 1978 Grand Prix automobiles. Finally, the findings tended to indicate the existence of a relatively weak but significant, at the .05 level, positive monotonic relationship between felt satisfaction attitude changes and repeat purchase intentions toward the Grand Prix
brand of automobiles. As a result, it was concluded that the postulated relationship predicted in the hypothesis was, at best, only nominally supported.

(6) **Subhypothesis SxvS 2.1:** With respect to at least major unexpected problems, the findings demonstrated an absence of any significant relationship patterns between the degree to which individuals felt satisfied with their car and their likelihood to complain about the problem to some type of recognized organization. With respect to minor complaints, interpretation of the means test results indicated the existence of significant differences between the behavioral intentions of those purchasers who either exhibit confirmation on positive disconfirmation of their felt satisfaction attitudes toward their cars and purchasers exhibiting some negative disconfirmation. More specifically, the findings demonstrated that purchasers who became less satisfied with their 1978 Grand Prixs (negative disconfirmation) were somewhat more likely to complain about some type of minor problem that those purchasers who increased their felt satisfaction attitudes toward their car.

(7) **Subhypothesis SxvS 2.2:** The mean test results demonstrated support of a significant difference in the expressed buying intentions between those purchasers exhibiting a positive disconfirmation in their felt satisfaction attitudes and purchasers experiencing a negative disconfirmation. Due in part to the marginal mean intention values of each of the test groups, it was concluded that changes in
purchasers' felt satisfaction attitude toward their 1978 Grand Prix served, at best, as a partial indication of the likelihood that individuals would buy another Grand Prix as their next car.

SUMMARY OF CHAPTER FOUR

This chapter presented the statistical analyses of the data associated with the testable hypotheses and subhypotheses which were formulated in this research study. The rationale behind the choice of the statistical analysis used to investigate the postulated relationships were described and the results were presented.

The data analyses and significance tests of the various postulated relationship predictions gave empirical support to the expectancy-attitude satisfaction modeling approach as being an alternative for studying the concept of consumer satisfaction. Empirical support was given to the notion that instrumental involvement with the Grand Prix and commitment toward owning the automobile are two distinct dimensions of purchasers' interactions with their cars. Furthermore, it was shown that individuals' satisfaction attitudes have the propensity to change over time as more product usage experience is gained. As such, support was demonstrated for viewing consumers' felt satisfaction attitudes toward their automobiles as an outcome of an ongoing cognitive-evaluative process.

More specific discussions on the findings and their implications will be delineated in the next chapter.
CHAPTER V

RESEARCH CONCLUSIONS AND FUTURE RESEARCH CONSIDERATIONS

INTRODUCTION

This chapter presents a discussion of the research conclusions which can be drawn from investigating consumer satisfaction from an attitudinal orientation within a cognitive evaluation process framework. The chapter is divided into five sections. The first section presents a brief overview of the research objectives as well as the specific research questions addressed in the study. Also included in this section is an overview of the methodologies used in the various investigations. The second section discusses the implications of the findings for each of the hypotheses and sub-hypotheses. The next section presents a discussion of the study's limitations and their effects on the generalizability of the findings. Additionally, separate summary comments are made regarding the various research questions of concern in the study. The fourth section discusses the contributions of the research as well as possible applications which may result from it. The final section of the chapter presents future research considerations for studying consumer satisfaction.

200
A. The Focus of the Empirical Research Study

It has been well documented in the consumer satisfaction/dissatisfaction literature that information on the concept of consumer satisfaction can be of great value to all parties in the marketplace. Although significant efforts in conceptualizing and empirically researching consumer satisfaction have emerged in the past few years, little progress has been made in crystalizing the conceptual structure and understanding of consumer satisfaction. As a consequence, many researchers have recognized the lack of an adequate conceptualization of consumer satisfaction, but only a few have made an attempt to bring crystalization and understanding to the concept. The lack of an adequate conceptualization has raised questions regarding the appropriateness of measurement methods as well as research designs which have been used in studying consumer satisfaction.

In light of the present state of available research designs this research can be viewed as an attempt to contribute valuable insights toward: (1) the formation and change of constructs of satisfaction; (2) the impact of specific endogenous and exogenous variables on an individual's evaluative process; (3) the measurement methodologies that should be used; and (4) the subsequent market
behavior or consumer behavior outcomes which may be a direct or indirect result of some perceptual latitude of consumer satisfaction. More specifically, this exploratory study endeavored to address the following research questions:

1. Can clear and meaningful insights for better understanding satisfaction and consumer behavior be gained by viewing consumer satisfaction toward a product (service) as an attitude formulated within a dynamic post purchase process framework?

2. Does the expectancy-attitude model represent a viable alternative for studying satisfaction within a post purchase scenario?

3. To what extent do individuals actually strive to maintain a cognitive-consistency behavioral balance with respect to expected and actual satisfaction levels?

4. What impact does additional product usage experience have on derived latitudes of satisfaction toward the purchased object?

5. What impact do the commitment to and involvement with factors have on the formulation (determination) of latitudes of satisfaction?

6. What impact does consumers' post purchase commitment to as well as instrumental involvement with the purchased object have on their decision process for deriving their
felt satisfaction attitude toward final worth of the purchased object?

7. Do more experienced individuals exhibit different satisfaction attitudes toward a given purchased object as compared to less experienced persons?

8. Do more committed persons exhibit different satisfaction attitudes toward a given purchased object as compared to less committed individuals?

9. Are there any distinguishable linkages between post purchase product expectations, attitudes of satisfaction, and consumers' behavioral intentions?

B. Methodologies Underlying the Research Design and Procedure

The expectancy-attitude modeling approach used in this study represented an exploratory endeavor to investigate consumer satisfaction as an attitude and not just a measurement difference between an aggregate, perceived product expectation and an aggregate, rating response of the product performance. As such, the modeling approach represented a cross-fertilization of a number of theoretical constructs from research reported in the attitude formulation and change literature as well as the consumer satisfaction literature.

For purposes of control and data manageability, the research design involved studying selected purchasers of a 1978 Pontiac Grand Prix automobile in Baton Rouge, Louisiana. Furthermore, the research procedure used to collect the necessary data was a direct mail survey,
characterized as being descriptive and exploratory in nature. The instrument used to collect the data necessary for the study was a detailed self-administered questionnaire which included both direct and indirect, disguised-structured measurement methods with capabilities of assessing the subjects' past attitudes and behavioral intentions toward their 1978 Grand Prix at time of actual purchase as well as after some specified amount of usage experience.

Finally, the data was analyzed and tested for the existence of postulated associations through selected aggregate and disaggregate data analysis methods. The specific methods were determined on the basis of the information requirements and the associated scaling assumptions of the various data structures.

**IMPLICATIONS OF THE FINDINGS**

This section provides a discussion of the various implications that can be derived from the test results of each of the stated hypotheses and subhypotheses. Consequently, discussion is presented in an outline manner by hypotheses.

A. Implications of the Findings for the Commitment Hypotheses

1. **Hypothesis Cl: Commitment to Own a 1978 Grand Prix Car Decreases Over Time of Ownership**

   On the basis of the contradictory results of the statistical tests, one would have to conclude that the stated hypothesis is not supported. Consequently, purchasers' commitment toward their
automobiles does not decrease in a linear or monotonic fashion over time. Some of the results raise suspicions that the true relationship might be nonlinear in nature. Further research is required to investigate the nonlinear relationship possibility.

2. Hypothesis C2: The Higher the Commitment to Own a 1978 Grand Prix the Smaller the Latitude of Satisfaction

The findings tend to empirically support the postulated inverse association between purchasers' commitment toward their Grand Prix automobile and latitudes of satisfaction. Several implications can be drawn from the reported findings. First, the significant inverse association between purchasers' desire toward owning their 1978 Grand Prix and changes in their attitudinal-oriented expression of being satisfied or dissatisfied with the automobile lends support that commitment is an active variable within the expectancy-attitude satisfaction model. More important, however, the findings give support from a theoretical orientation to the concept of commitment as a variable when investigating post purchase consumer satisfaction within an evaluative process framework.

Second, the findings provide empirical evidence that the commitment factor has some predictive capabilities with respect to measures of derived latitudes of satisfaction. The findings have demonstrated that significant differences did exist between a number of pairs of mean latitude values. As a result, most of the mean latitude values fell into rather well-delineated clusters or groupings,
each of which was indicative of a distinct relative commitment level (score). The findings suggest that commitment levels have the potential of being a viable method of categorizing attitudinal changes in purchasers' perceived satisfaction toward their automobile within a process framework. Consequently, future research on consumer satisfaction should continue to investigate the concept of commitment and its predictive capabilities.

A final implication of the findings focuses on the anticipated unimodal relationship pattern predicted in the hypothesis. The findings tend to demonstrate that purchasers who are highly-commited to their automobile tend to exhibit small positively or negatively-oriented differences between their actual and expected satisfaction attitudes toward the car. In contrast, lowly-committed purchasers tend to exhibit significantly larger positive or negative attitudinal differences. As such, the findings tend to further support the predictive powers of the commitment factor with respect to attitudinal changes in satisfaction toward, at least, 1978 Grand Prix cars.

3. **Hypothesis C3: Present Commitment to Own a 1978 Grand Prix is Directly Associated with Actual Satisfaction Toward the Car**

   The findings tend to support the postulated direct association between purchasers' present commitment toward their Grand Prix and their attitude of perceived actual satisfaction with the performance of the car. As a result, the concept of commitment is given further
recognition as being an endogenous factor with substantial predictive capabilities. Consequently, consumer satisfaction researchers should give strong consideration to the concept of commitment as a factor to be included in their research on consumer satisfaction (dissatisfaction).

B. Implications of the Findings for the Involvement Hypotheses

1. Hypothesis INV1: Instrumental Involvement with a 1978 Grand Prix is not Associated with Length of Ownership

On the basis of the statistical test results, one would have to conclude that the stated hypothesis was supported. Consequently, purchasers' instrumental involvement with their 1978 Grand Prix tends not to change significantly over time. Purchasers who expect to be highly involved in the actual use of their Grand Prix tend to fulfill their expectations as do those expecting low involvement. As such, one might conclude that determination of the extent to which an individual will be instrumentally involved with their automobile occurs either before or at the time of purchase. Additionally, the findings give partial support that the instrumental involvement factor has potential capabilities of serving as a multiplier factor within the expectancy-attitude satisfaction model.

2. Hypothesis INV2: Instrumental Involvement with a 1978 Grand Prix is Independent of Purchasers' Latitudes of Satisfaction

Overall, the data results tend to support the postulated independency relationship of the hypothesis. On the basis of the
findings one can conclude that the concept of involvement has, at best, only very nominal capabilities of predicting satisfaction attitude outcomes within a dynamic process framework. As such, the involvement factor can be viewed as being independent in nature within the expectancy-attitude model and serving as a specific multiplier on the magnitude of change in an individual's satisfaction attitude.

3. **Hypothesis INV3**: Present Instrumental Involvement with the Grand Prix is Independently Related to Purchasers' Present Commitment Toward the Car

Several significant implications can be drawn from the empirical findings. First, it can be concluded that the concepts of instrumental involvement and perceived commitment measure different dimensions of an individuals' interaction with their automobile; with involvement representing more of a corporeal state of being dimension and commitment a psychological or state of mind dimension. Secondly, the empirical evidence demonstrating that involvement and commitment are independent of one another fortifies the operation of the expectancy-attitude model developed for the study. As a consequence, consideration should be given to the involvement and commitment variables when studying the attitudinal aspects of consumer satisfaction or dissatisfaction. Finally, further research endeavors into the general area of satisfaction/dissatisfaction may prosper more due, in part, to the insights gained on involvement and
commitment being distinctively different dimensions within individuals' cognitive process of attitude formation and changes.

C. Implications of the Findings for the Satisfaction Hypotheses and Subhypotheses

1. Hypothesis Sxn 1: Post Purchase Felt Satisfaction Attitude Differences do Exist with Increases in Product Usage Experience

   The findings tend to support the postulated existence of attitude differences between purchasers having different magnitudes of usage experience, or length of ownership, with their 1978 Grand Prix cars. Several significant implications can be drawn from the reported findings. First, the empirical evidence of the existence of felt satisfaction attitude differences between purchasers having different degrees of product usage experience lends support to the premise that consumer satisfaction can be interpreted as an attitude having the ability to change over time, in either a positive and/or negative fashion. Additionally, the findings provide empirical support to earlier theorists' speculations that the time element associated with consumer's product usage experience is a salient factor of consideration when studying the concept of consumer satisfaction. Consequently, knowledge that consumers' satisfaction attitudes toward a given purchased object can change over time will afford researchers and practitioners, alike, new insights in the measurement and understanding of the concept of consumer satisfaction.

   Second, the reported findings tend to demonstrate empirical support for investigating the concept of consumer satisfaction within
an ongoing cognitive-evaluative process framework. More specifically, the data analysis findings tend to support the expectancy-attitude modeling approach as being a viable alternative method for investigating satisfaction as an attitude in a dynamic setting as well as offering insights and directions for future research into the area of consumer satisfaction, dissatisfaction, and complaining behavior. Consequently, future research on consumer satisfaction should continue to investigate the relationships between attitude changes and varying degrees of product usage experience, or the impact of a dynamic time factor. Furthermore, the findings tend to be supportive of this researcher's earlier expressed conviction that no longer can consumer satisfaction (dissatisfaction) researchers completely ignore the importance of or the relative impact of the time dimension within the factor of usage experience, or length of ownership.

A final implication that can be drawn from the data analysis findings focuses on the constructs underlying the Theory of Assimilation. Interpretation of the findings tends to tentatively support the notion that Grand Prix purchasers, on the average, have a tendency to assimilate their expressions of post purchase felt satisfaction attitudes toward what their expected satisfaction attitudes were at the time of purchase. That is, the findings indicate that purchasers having owned their cars for six months or less tend to, on the average, confirm their felt satisfaction attitudes as being the same as at the time purchase. While those purchasers having usage
experience of between seven and twelve months demonstrate an average positive disconfirmation in their felt satisfaction attitudes which is significantly higher, only at the .1 level, than if they would have had confirmation, meaning no attitude change. On the other hand, the findings demonstrate the existence of an average negative disconfirmation of felt satisfaction among those purchasers having the greatest amount of product usage experience, thirteen months or more. Again, it can be inferred that this group of purchasers have a tendency to assimilate their expressions of negative felt satisfaction toward their expected satisfaction attitudes, since their average disconfirmation value is regarded as being significantly different from confirmation (no attitude change) at the .05 level. Although the findings tentatively support the likelihood that purchasers, over time, have the capabilities of both confirming and disconfirming their satisfaction attitudes towards a given purchased object, more longitudinal research needs to be undertaken as well as more disaggregate analysis on attitude changes in order to more accurately assess the explanatory powers of Assimilation Theory in explaining satisfaction attitude changes.

2. **Subhypotheses, Sxns 1.1, 1.2, 1.3: Latitude, Actual, and Expected Satisfaction Attitude Differences Exist Over Time of Ownership**

Several important implications can be drawn from the reported findings of the three satisfaction subhypotheses. First, empirical evidence demonstrates that purchasers expected satisfaction attitudes
toward their automobiles at time of purchase have a tendency to change as individuals gain more product experience through length of ownership. This evidence tends to be supportive of one of the underlying propositions of the expectancy-attitude model used in the study; that is, an individual's perceived expected satisfaction towards product performance has a propensity to change over time. As such, one might conclude that an individual's satisfaction attitude toward the product at time of purchase serves, in part, as either an explicit or implicit standard for which to compare later cognitive judgements about the product's performance levels. Additionally, an individual may either consciously or subconsciously modify the standard upward or downward as he becomes more familiar with the product.

Second, the support given to the actual satisfaction attitude change subhypothesis tends to further strengthen the notion that the time element is a salient factor that should be given consideration when investigating the concept of consumer satisfaction through an attitude orientation. Furthermore, the findings for both the actual and expected satisfaction subhypotheses tend to fortify the cognitive-evaluative process framework as being a viable alternative approach for studying the formation and change patterns of consumers' expressed satisfaction toward products, or services, subsequent to the actual purchase.

A final implication focuses on a methodological consideration relative to the contradictory and unsupportive results in the first
subhypothesis. This researcher is of the conviction that the failure of the data to support the predicted relationship in the latitude of satisfaction subhypothesis was not due to any improper application of measurements, survey methodologies, or conceptualizations in building the theory which underlines the expectancy-attitude model. Instead, the failure of the data to demonstrate significant differences can be attributed in part to the psychological phenomenon of purchasers either consciously or subconsciously modifying their expected satisfaction attitudes over time. As such, one might regard these attitudes as being the substratum standards in the ongoing cognitive process of evaluating the automobile's true overall performance level.

3. Hypothesis Sxn 2: Associations Exist Between Purchasers' Felt Satisfaction Attitudes Toward Their 1978 Grand Prixs and Specific Behavioral Intentions of Complaining or Buying

At the aggregate level of analysis, the findings tend to, at best, only marginally support the postulated existence of an association between 1978 Grand Prix purchasers' felt satisfaction attitudes toward their automobiles and post purchase behavioral intentions relative to either complaint and/or repurchase actions. Several implications can be drawn from the reported findings. First, the weak tentative support of the existence of an association between felt satisfaction attitudes and the respective behavioral intentions toward complaining about unexpected major and annoying minor problems as well as willingness to buy another Grand Prix, leads one to believe that purchasers' overall felt attitudes of being satisfied, or dissatisfied,
with their Grand Prix may not always serve as a salient, instrumental factor in the assessment of the likelihood of particular post purchase behavioral actions or outcomes.

A second possible implication of the findings focuses on the notion that satisfaction attitudes provide pertinent feedback information that can be useful not only to consumer behavior theorists but also all parties in the marketplace. The aggregate level findings tend to raise questions as well as doubts about the capabilities of satisfaction attitudes to provide meaningful feedback information relative to possible behavior intentions toward, at least, 1978 Pontiac Grand Prix automobiles. For example, the findings tend to communicate the notion that purchasers' felt satisfaction attitudes have no significant impact on whether or not purchasers' would be likely to register some form of a complaint either with the dealership or some other recognized organization (i.e. Better Business Bureau) with respect to an unexpected major problem with their Grand Prix.

On the other hand, a more positive implication can be drawn from the findings relative to complexity of studying the concept of consumer satisfaction through an attitude orientation. That is, the findings support of theorists' and marketing practitioners' recognition that felt satisfaction is not the sole predictor of attitude or behavioral outcomes. Consequently, more in depth investigations, at the disaggregate level, are needed in order to gain better insights into the possible existing associations between satisfaction attitudes and post purchase behavioral outcomes. Additionally, the marginal
support of the results may well serve as a stimulus for conducting further disaggregate investigations into identifying differences between satisfied and dissatisfied consumers and behavioral intentions as well as clearer insights into satisfaction's capabilities of providing meaningful feedback information.

4. Subhypotheses, SxnS 2.1, 2.2.: Post Purchase Behavioral Intention Differences to Complain or Buy Again do Exist Between Purchasers Exhibiting Positive and Negative Felt Satisfaction Attitudes Toward Their 1978 Grand Prix Cars

There are two apparent implications that can be derived from the empirical findings of the two behavioral intention subhypotheses. First and foremost, there is a definite need for more descriptive and explanatory research to be conducted relative to better identification and explanation of the apparent associations that do exist between purchasers' felt satisfaction attitude and changes and perceived purchasing as well as complaining intentions. Future research into this area should not only assess the existence and magnitudes of the relationships, as was done in this research endeavor, but also investigate and identify other situational and marketplace environmental factors which may have an impact not only on purchasers' behavioral intentions but also possible causal-effect associations with changes that apparently occur in purchasers' post purchase satisfaction attitudes. Through this direction of investigation better insights can be gained in understanding the concept satisfaction as an attitude and its importance as a vital feedback factor not only in the consumer behavior models and theories but also to marketing practitioners.
The second implication focuses on a methodological consideration relative to the expectancy-attitude modeling approach to studying the concept of consumer satisfaction. The empirical evidence demonstrates further that studying the concept of consumer satisfaction through an attitude orientation rather than just a measurement orientation can offer consumer behaviorists as well as satisfaction (dissatisfaction) researchers new insights in investigating satisfaction. Although this research was limited to one specific brand within one specific product class, evidence has been shown that the expectancy-attitude approach can be a vital methodological alternative for gaining more insights and better conceptualizations of consumer satisfaction. Consequently, the reported findings should be regarded as tentative in nature but substantial enough to generate new avenues, or thoughts, for future research in the consumer satisfaction/dissatisfaction area.

LIMITATIONS OF THE RESEARCH AND DISCUSSION OF THE RESULTS

A. Inherent Limitations of the Study

In carrying out this endeavor there are two limiting methodological considerations relative to the research design. These limitations relate to the generalizability of the results as well as the expectancy-attitude model and the underlying theories behind the model.
The first limitation focuses on the fact that the entire study centered around one particular brand name, durable-type product, 1978 Pontiac Grand Prix, within one particular product class, automobiles. In contrast, most other research that has been conducted in the consumer satisfaction area has always compared either several different products within one general product class or different products across different product classes. Critics of the present research must keep in mind several pertinent factors relative to the research objectives. The first consideration focuses on the fact that this research is the only known endeavor to empirically investigate the concept of consumer satisfaction as an attitude within a cognitive evaluation process framework. As such, the endeavor should be viewed as exploratory in nature. Consequently, it was critical to try to prevent as many potential extraneous biases from entering the study as possible. Second, it was further realized that this endeavor was an initial attempt to use an untested expectancy-attitude model to provide researchers with another viable alternative for gaining insights to better understand the concept of consumer satisfaction. As a consequence, the design of this research was necessarily limited. The research attempted by studying selective purchasers of only one particular brand name product to isolate several factors: expected and actual satisfaction attitudes; commitment toward the product; instrumental involvement with the product; and the time dimension of usage experience with the product. It also sought to investigate the
existence of specific postulated associations between those factors.

A second major limitation is that the research design emphasized investigating satisfaction attitudes within an ongoing cognitive evaluation process, yet the data collection method yielded cross-sectional data. More specifically, a more suitable research design for investigating satisfaction within a process framework is a longitudinal design. There is no doubt that a longitudinal design would have provided a more accurate recording of the subjects' expected satisfaction attitudes toward their Grand Prix cars at the time of purchase as well as the tracing of attitude changes over time. Due to specific time and cost considerations, the researcher attempted to circumvent the time factor by carefully building the longitudinal time element into the questionnaire used in the study. On the basis of a sequential time order dimension, subjects first responded to a set of specific questions which asked them to recall their feelings and attitudes toward their Grand Prix cars at the time of purchase. Next, the subjects were asked to state how long they had owned their Grand Prix, followed by another set of questions which asked purchasers to evaluate their Grand Prix at the present time.

In view of the overall constraints of the study, the researcher believes the research design used yielded acceptable data about 1978 Grand Prix purchasers' expected and actual satisfaction attitudes toward their cars. While these two limitations
do impede somewhat the overall generalizability of the findings, the researcher is of the conviction that the results are valuable to satisfaction researchers.

B. **Summary Comments on the Research Questions**

This section provides some summary thoughts on the questions the study attempted to address through the various hypotheses and subhypotheses.

1. **Can clear and meaningful insights for better understanding satisfaction and consumer behavior be gained through an attitude orientation?**

Although all the reported findings would have to be described as tentative due to the exploratory nature of the overall research design, some of the empirical evidence presented tends to lead one to believe that meaningful insights can be gained through the assessment of consumer satisfaction as an attitude. For example, it was demonstrated that purchasers' actual satisfaction feelings toward their automobile as well as their perceived expected satisfaction attitudes do have a propensity to change in either a positive or negative fashion as purchasers gain more product usage experience over time. The recognition that purchasers' satisfaction attitudes toward a given purchased object can change over time supports the need for longitudinal research. Additionally, studying consumer satisfaction as an attitude allows researchers to gain insights into the complex multi-dimensional characteristics of satisfaction. Finally, interpretation of the empirical results relative to the purchasers'
satisfaction attitudes and selected behavioral intentions as well as specific exogenous and endogenous variables (i.e., instrumental involvement and commitment respectively) indicates that insights can definitely be gained through the attitude orientation.

2. Does the expectancy-attitude model provide researchers with a viable alternative for studying the concept of consumer satisfaction?

Again, on the basis of the overall results, one would tend to conclude that the expectancy-attitude model as well as the theoretical constructs behind the model can most certainly serve as an alternative to studying the concept of consumer satisfaction. This is not to say the model is in its conclusive form, since only four independent variables were addressed: latitude of satisfaction; instrumental involvement; commitment; and the dynamics of the time dimension associated with product usage experience. More research is definitely needed to determine what other exogenous and endogenous variables should be included in the model. On the other hand, the methodologies underlying the model afford satisfaction researchers opportunities to investigate the cognitive formulation and change processes individuals use in evaluating the overall worth of any given purchased object.

3. To what extent do individuals actually strive to maintain a cognitive-consistency behavioral balance between their expected and actual satisfaction levels?

Although the study failed to directly address this research question, interpretation of the empirical findings relative to the
first satisfaction subhypotheses on differences between purchasers' latitudes of satisfaction and length of ownership allows one to indirectly address the question. The mean value findings for each respective group of purchasers demonstrate that on the average purchasers tend to very nominally modify, in a negative direction, their actual satisfaction attitudes toward their Grand Prix cars from what their perceived expected satisfaction attitudes were at time of purchase. Consequently, interpretation of the mean value results leads one to conclude that, for the most part, purchasers have a tendency to confirm their expected satisfaction attitudes. Therefore, indirect support may be inferred that purchasers do strive to a certain extent to maintain some type of cognitive-consistency balance relative to their satisfaction attitudes toward their automobiles. More research at a disaggregate level definitely is needed in order to directly assess this consideration.

4. What impact does additional product usage experience have on latitudes of satisfaction toward the purchased object?

Again referring to the mean value findings, one can tentatively conclude that length of ownership, or usage experience, has no significant relationship with changes which may occur between purchasers expected and actual satisfaction attitudes toward their 1978 Grand Prix cars. Further analysis of the separate relationships between length of ownership and actual satisfaction as well as expected satisfaction attitudes tends to yield similar results, which
could be viewed as a partial explanation for the lack of any significant relationship between length of ownership and derived latitudes of satisfaction.

5. What impact do commitment to and instrumental involvement with the given purchased object have on determination of latitudes of satisfaction?

With respect to the commitment factor, the results demonstrate the existence of an inverse, or negative, relationship between purchasers expressed commitment toward owning their 1978 Grand Prix and derived magnitudes of change between their expected and actual satisfaction attitude toward the car, or latitude of satisfaction. More specifically, it was determined that those purchasers who had a high desirability toward owning their Grand Prix cars exhibit significantly smaller changes between their expected and actual satisfaction attitudes than did those purchasers expressing significantly lower degrees of desirability toward owning a Grand Prix.

On the other hand, the findings for the instrumental involvement factor demonstrated the existence of two equivocal and contradicting relationships between present involvement and the aggregate and composite data structures for latitudes of satisfaction. More specifically, the association measures between instrumental involvement and aggregate, single-item measurements of latitude of satisfaction demonstrated the existence of a relatively weak but significant inverse relationship pattern. But, the association measures between
the composite, multiple-item measurements of the latitudes and involvement demonstrated an absence of a significant relationship. Consequently, no direct conclusions could be made relative to the impact of involvement on determination of latitude patterns. Speculation was made regarding the possible inappropriateness of the aggregate, single-item scaling measurements of both expected and actual satisfactions attitudes.

6. What impact do commitment to and involvement with a given purchased object have on the purchasers' decision process for deriving their felt satisfaction attitudes?

In addressing this research consideration, the commitment and involvement factor were tested for independence. The findings demonstrated that the extent to which Grand Prix purchasers actually drove their car was not significantly associated with the extent to which they desired to own a Grand Prix. As such, it was concluded that the concepts of instrumental involvement and perceived commitment measured different dimensions of individuals' interaction with their automobiles. With involvement representing more of a corporeal state of being dimension and commitment a psychological, or state of mind, dimension. Consequently, it was concluded that commitment tended to have a more direct impact within an individual's cognitive process of attitude formation and change than did the involvement factor.
7. Do more experienced purchasers (longer lengths of ownership) exhibit different satisfaction attitudes than less experienced purchasers (shorter lengths of ownership)?

Due in part to the exploratory nature of the research design, only tentative considerations can be discussed relative to this particular research question. The findings demonstrated the existence of significant attitude differences between groups of purchasers having different magnitudes of product usage experience but the pattern of differences between the test groups was regarded as non-linear. That is, the average satisfaction attitudes of purchasers having seven to twelve months of usage experience was significantly different from the attitudes exhibited by purchasers having six or less months of experience as well as those having thirteen months or so. But, the attitudes of those purchasers having six months or less experience were not significantly different than the attitudes exhibited by those purchasers with thirteen or more months of experience. Further research is definitely needed in order to gain a better understanding of the differences in the data.

8. Do more committed purchasers exhibit different satisfaction attitudes toward their Grand Prix cars than do less committed individuals?

The findings of this research clearly demonstrated the existence of a moderately strong, positive association between magnitudes of commitment and satisfaction attitudes. As a consequence, it was concluded that the commitment factor has some predictive capabilities in the determination of satisfaction attitudes. As such,
researchers should definitely include the concept of commitment in their study of consumer satisfaction.

9. Are there any distinguishable linkages between post purchase product expectations, attitudes of satisfaction, and consumers' behavioral intentions?

In addressing this question, purchasers' felt satisfaction changes as well as their actual satisfaction attitudes toward their 1978 Grand Prix automobiles were analyzed against purchasers' expressed likelihood of complaining about some type of unexpected major and annoying minor problems about their cars, as well as their intentions to buy another Grand Prix as their next car. From the results, it was concluded that, at best, satisfaction served as a weak to moderate predictor of purchasers intention to buy another Grand Prix. The degree to which the purchasers felt satisfied about the overall worth of their cars had apparently no significant association with their decision of whether or not they would formally complain to either the dealership or some other recognized organization about major or minor problems. That is, the results indicated that both satisfied and dissatisfied owners of 1978 Grand Prix automobiles exhibited fairly positive intentions that they would complain about either unexpected major or annoying minor problems.

On the basis of the limited support of the findings, it was concluded that purchasers' felt satisfaction attitudes are not strong predictors of either complaint or repeat purchase intentions. The lack of unequivocal support suggests a need for additional
research into the feedback potentials of consumer satisfaction attitudes. Additionally, the findings support the notion that satisfaction is not the sole predictor of individuals' behavioral intentions.

RESEARCH CONTRIBUTIONS AND POSSIBLE APPLICATIONS

A. Contributions to the Consumer Satisfaction Research Area

In spite of the fact that this research was exploratory and the empirical findings suggested only tentative conclusions, the study does provide new insights into several conceptual, theoretical, and methodological considerations. In assessing the overall value of the research, it is apparent that the study renders several meaningful contributions relative to researching and understanding the concept of consumer satisfaction.

1. Conceptual Development of an Attitude Orientation

With the recognition that consumer satisfaction needs to be better conceptualized, this study addresses that important task by conceptualizing satisfaction as an attitude rather than the traditional measurement outcome. As delineated in earlier chapters, the conceptualization of satisfaction as an attitude stems from a cross-fertilization of theoretical constructs reported in the attitude formulation and change literature as well as the consumer satisfaction literature. This study demonstrates empirical evidence that is supportive of the attitude orientation. Consequently, this
orientation should provide researchers with new insights into how individuals formulate their perceived satisfaction toward a given purchased object as well as guidelines for investigating how and why consumers change their cognitive, affective and behavioral dimensions of satisfaction toward that same object.

2. An Ongoing Cognitive Evaluation Process

This study recognizes that post purchase consumer satisfaction is derived through an ongoing cognitive process of individuals consciously or subconsciously evaluating the rightness or wrongness of their actual purchase decision relative to the given object. As such, post purchase evaluation of a purchased object includes consideration of the dynamics of the time/usage experience dimensions. This study provides empirical evidence which is supportive of the dynamics of time. More specifically, the findings demonstrate that purchasers' satisfaction attitudes toward their 1978 Grand Prix automobiles differ with varying degrees of usage experience, or length of ownership. As a result, knowledge that the time/usage experience dimensions do have significant impacts on individuals' post purchase product evaluation process can afford researchers new insights into the appropriateness of not only the traditional measurements of satisfaction but also the importance of including some type of time/usage experience frame of reference as a specific variable. Therefore, researchers can regard the expectancy-attitude modeling framework as a vital alternative for investigating the concept of consumer satisfaction.
3. **An Alternative Method of Measuring Satisfaction**

Through the conceptualization of satisfaction as an attitude and the theoretical underpinnings of the expectancy-attitude model, this study provides researchers with an alternative method for measuring individuals' assessment of their perceived satisfaction toward a given purchased object. The measurement has been delineated as a composite multiple-item, measure of belief-expectancy values and the relative importance of each belief (for expected satisfaction attitudes) and belief-performance responses and the relative importance of each belief (for actual satisfaction attitudes). More specifically, the composite measurement can be viewed as a hybrid method of interrelating basic constructs from the accepted attitude change models developed and tested by Fishbein as well as Rosenberg with those associated with the classical expectation-fulfillment of expectation model. Additionally, the composite, multiple-item measure tested to be more reliable than the traditional single-item, measure of consumer satisfaction.

4. **The Impact of the Concepts of Commitment and Involvement**

Recognition that an individual's interaction with a purchased object might have some influence on how he perceives being satisfied with that object prompted the inclusion of the concepts of commitment and involvement. Due to the lack of agreement in the marketing literature as well as the attitude formulation and change literature to what was really meant by the commitment/involvement concept, new
specific definitions were conceptually derived for both commitment and involvement.

Empirical evidence demonstrated that the two variables were independent. That is, the concepts of instrumental involvement and perceived commitment measured significantly different dimensions of individuals' interaction with their automobiles (purchased objects). With involvement representing more of a corporeal state of being dimension and commitment a psychological, or state of mind, dimension. Furthermore, commitment was regarded as having a more direct impact within individuals' cognitive process of attitude formulation and change than did the involvement factor. As a consequence, satisfaction researchers are afforded insights regarding the importance of including the commitment and involvement factors in research designs.

B. Applications of the Research Findings

An indicator that is used in evaluating the value of any type of marketing research investigation is the degree to which meaningful theoretical and managerial applications can be derived from the results. Considering the research objectives of this project and the data analysis methods employed, the results can be regarded as having direct, theoretical and methodological-measurement applications. This is not to say that managerial applications do not exist, but rather the exploratory nature and the research objectives focused more on methodological considerations than the managerial considerations. Consequently, additional analysis between purchasers'
satisfaction attitudes and selective marketing mix variables needs
to be undertaken in order to provide insights which are more
directly managerial.

1. Theoretical and Methodological Applications

From a methodology standpoint, consumer satisfaction
researchers can use the expectancy-attitude modeling orientation
as an alternative approach to investigating satisfaction, or dis­
satisfaction, relative to any environmental situation. That is,
viewing satisfaction as an ongoing cognitive evaluation process of
the rightness or wrongness of a purchase decision is not limited to
understanding individuals' satisfaction/dissatisfaction toward
strictly large durable type products like automobiles. The model's
constructs are general enough to provide researchers with a method
for investigating and measuring any type of satisfaction situation.
For example, the model may be used to measure and study the forma­
tions and changes of employees' attitudes relative to the area of
job satisfaction/dissatisfaction.

Another direct application is in more accurate assessments
of the concept of satisfaction. As discussed earlier, the hybrid,
composite measurement of perceived satisfaction attitudes was
demonstrated to be more reliable than the traditional measures.
As such, the composite measurement methods tends to suggest the
possibility of investigating disaggregate dimensions, or subcompo­
nents, relevant to the overall assessment of individuals' perceived
satisfaction attitudes. For example, researchers can use the composite measurement method to better determine the extent to which individuals are satisfied, or dissatisfied, with selective product, service, or situation criteria. Studying satisfaction from a more disaggregate level may prove to be a much more productive approach to understanding satisfaction.

Finally, theorists can apply the methodological insights from the present research in their efforts to build general consumer behavior models as well as more specific post purchase behavior models. Post purchase behavior models can further enhance understanding of the various relationships which may exist between people's cognitive evaluation processes for products, services, and specific environmental conditions leading to behavioral intentions and/or outcomes.

2. **Potential Managerial Applications**

Research in marketing is usually pursued because it is anticipated that the knowledge gained will be applied by management. The findings of the present study fail to provide any direct insights for managerial type applications. But once more is learned and understood about: (1) satisfaction as an attitude; (2) the evaluative processes consumers use to formulate and change their attitudes; and (3) the feedback-communicative dimension inherent in satisfaction attitudes, meaningful direct applications may emerge. These applications should be beneficial not only to marketing decision makers
but also to society as well. More specifically, if research efforts could demonstrate the existence of significant relationships between consumers satisfaction attitudes and marketing management's intermediate goals, then managerial applicants would become almost unlimited. Thus, market managers might well realize greater refinement in the development, implementation, and control of the various marketing mix strategies and policies necessary for successful integration of the marketing concept in today's complex societal environment.

Additionally, clearer assessments of individuals' satisfaction attitudes toward broader societal issues may serve as vital indicators for which federal, state, or local policy makers can use in evaluating present public policies and programs as well as the processes of development, implementation and control of future societal oriented policies and programs.

FUTURE RESEARCH CONSIDERATIONS

This initial endeavor of investigating the concept of consumer satisfaction as an attitude within a cognitive process framework has built a basic foundation from which many different research investigations may emerge and prove beneficial in understanding consumer behavior in general. In addition, new insights into consumers' post purchase attitudinal and behavioral habits and patterns should follow. Future research should continue investigating the applicability of
the expectancy-attitude satisfaction modeling method under conditions of multiple product categories and/or multiple products within a selected product category. Additionally, research should strive to address the following types of questions:

A. Conceptual Research Questions

1. What does the presence or absence of satisfaction mean to consumers?
2. What are the subconscious or symbolic attributes to which satisfaction is related?
3. Where do satisfaction attitudes lie in the value structure of the individual consumer in the American society, or even in today's world society?
4. In what ways does the consumer perceive and discern satisfaction? What are the experiential manifestations of satisfaction?

B. Modeling and Methodological Research Questions

1. Besides commitment and involvement, what other endogenous and exogenous factors are related to satisfaction attitudes, and in what magnitudes?
2. What is the minimum number of variables necessary (the principle of parsimony) for inclusion in a model of consumer satisfaction or for its accurate assessment?
3. What influence does a joint decision-making process of purchasing a given product or service have on an individual's expression of his (her) post purchase satisfaction attitude toward that product/service?

C. Managerial Satisfaction Research Questions

1. As an independent variable, what is the relationship between satisfaction attitudes and sales, brand loyalty, or profits?

2. How sensitive are consumer satisfaction attitudes to changes in the competitive environment?

3. What are the specific product and service variables that have the greatest influence on formulation and changes of consumer satisfaction attitudes for a given product/service?

4. Can measures of consumer satisfaction attitudes provide useful diagnostic measures which explain sales or marketing problems?

5. Are there general principles with respect to consumer satisfaction which can be used in the initial design of products or marketing strategies or is its usefulness restricted to ex post facto, diagnostic purposes?

6. What effects do individuals' past purchasing patterns have on their actual satisfaction attitudes toward a current product or service?

7. How often should consumers satisfaction attitudes be monitored or measured? How quickly does it change?
D. Fact-Finding Research Questions

1. Which consumption experiences generate high levels of consumer satisfaction?

2. Are there common sources or experiences across product or service categories which appear to be related to the satisfaction attitude expressed?

3. What are the general magnitudes of satisfaction produced by organizations in the market sector of the economy compared to those generated through the public sector?

4. What types of life style dimensions can be used in identifying satisfied and dissatisfied consumers relative to a given purchased object?

By now, one should see that the scope of future research on consumer satisfaction can vary in generality and content. Additionally, future research endeavors should give strong consideration to use of the longitudinal designs in generating the needed data structures for addressing some of the above suggested research questions. With solid research designs and measurement methodologies, the concept of consumer satisfaction as an attitude can definitely provide new and useful insights into understanding individual's behavior patterns within today's market environment.

SUMMARY OF CHAPTER FIVE

This concluding chapter presented an overview of the investigation of the concept of consumer satisfaction as an attitude derived
within a cognitive evaluation process framework. First, a brief review of the basic research objectives and specific research questions was presented followed by a delineation of the methodologies used to carry out the research. Next, discussion was given to the implications of the findings; followed by a discussion which focused on the major limitations inherent in the research as well as recognizable effects on the generalizability of the study's reported findings. Then each research question was discussed independently and the pertinent reported findings summarized. The next section of the chapter outlined and discussed the major contributions of the study to the consumer satisfaction research area. Insights regarding direct theoretical and methodological applications of the findings as well as possible indirect managerial and societal-oriented applications were given. The chapter concluded with an overview discussion on future research considerations which should be investigated for further understanding of the concept of consumer satisfaction and its impact on the area of consumer behavior.


APPENDIX

DOCUMENT

A. Cover Letter Used With No Follow-Up Telephone Contact
B. Cover Letter Used With Follow-Up Telephone Contact
C. Second Cover Letter Attached to the Questionnaire Following the Telephone Contact
D. Interviewer Instructions Used in the Initial Drop-Off, Pick-Up Data Collection Design
E. Questionnaire Used in the Study
Hello,

I am writing you to introduce myself and ask for your cooperation in an automobile study that I am conducting in Baton Rouge and surrounding communities this month.

My name is David J. Ortinau and I am currently a graduate student in Marketing at Louisiana State University trying to complete my doctorate degree by the end of the summer.

The last requirement in my degree program is to conduct a meaningful research study which, in part, will further develop my overall teaching capabilities at the university level. In an attempt to fulfill this last requirement, my Thesis Committee, chaired by Dr. Joseph F. Hair, Jr. of the Marketing Department, has approved my research topic of investigating automobile purchasing habits and opinions of car owners in the Baton Rouge Metropolitan area.

I think you will find the survey interesting.

Your name was chosen when I drew a representative sample of current automobile owners in your community. Because the success of my survey depends upon the cooperation of all people whose names are drawn, I would especially appreciate your willingness to help.

My study is not being financially supported in any way by either an organization within the automobile industry or the marketing department at LSU. Your cooperation, attitudes, and opinions are very important to the success of my survey and will be kept strictly confidential. The information obtained from the study will be used for academic research and will in no way reflect the identities of the people participating in the survey.

I realize that to most of us in the community our leisure time is scarce and important and that we do not like to spend it filling out a questionnaire for some unknown person's survey. To show, in part, my appreciation for you taking the time to participate in the study, I'm going to hold a drawing for $150 among those of you who donate some of your leisure time to help me complete the survey.

The drawing procedure has been designed in such a way that everyone who completes and returns their questionnaire will have an equal opportunity to receive the appreciation gift of $150.
Enclosed with this letter is the questionnaire being used in my study and a stamp-addressed envelope to return the completed questionnaire.

I realize that many of us in the community receive a lot of things through the mail for which we classify as "junk mail" and not important to respond to, please do not consider this survey as "junk mail". Your opinions, attitudes, and viewpoints toward each question are very important to me and the success of my study.

I have designed the questionnaire to include all the directions and instructions necessary to complete the survey without the assistance of an interviewer.

Please take your time in responding to each question; your honest responses are very important to the success of my study.

After completing all the questions in the survey, please remember to fill-out the coupon at the bottom of the last page of the questionnaire so that I can include you in the drawing for the appreciation gift of $150.

To help me complete my study by the end of the summer, I need your cooperation in returning the completed questionnaire by no later than Monday, April 30th.

Again, I deeply appreciate your cooperation in taking part in this study.

Sincerely,

David J. Ortinau
Doctorate Student
LSU Marketing Dept.
Hello,

I am writing you to introduce myself and ask for your cooperation in an automobile study that I am conducting in Baton Rouge and surrounding communities this month.

My name is David J. Ortinau and I am currently a graduate student in Marketing at Louisiana State University trying to complete my doctorate degree by the end of the summer.

The last requirement in my degree program is to conduct a meaningful research study which, in part, will further develop my overall teaching capabilities at the university level. In an attempt to fulfill this last requirement, my Thesis Committee, chaired by Dr. Joseph F. Hair, Jr. of the Marketing Department, has approved my research topic of investigating automobile purchasing habits and opinions of car owners in the Baton Rouge Metropolitan area.

I think you will find the survey interesting.

Your name was chosen when I drew a representative sample of current automobile owners in your community. Because the success of my survey depends upon the cooperation of all people whose names are drawn, I would especially appreciate your willingness to help.

My study is not being financially supported in any way by either an organization within the automobile industry or the marketing department at LSU. Your cooperation, attitudes, and opinions are very important to the success of my survey and will be kept strictly confidential. The information obtained from the study will be used for academic research and will in no way reflect the identities of the people participating in the survey.

I realize that to most of us in the community our leisure time is scarce and important and that we do not like to spend it filling out a questionnaire for some unknown person's survey. To show, in part, my appreciation for you taking the time to participate in the study, I'm going to hold a drawing for $150 among those of you who donate some of your leisure time to help me complete the survey.

The drawing procedure has been designed in such a way that everyone who completes and returns their questionnaire will have an equal opportunity to receive the appreciation gift of $150.
The study will be conducted during the week of April 23rd.

One of my student interviewers will be telephoning your home soon to invite you to participate in the study. I mention this to you before the interviewer calls, because I know that people are suspicious of anyone who starts a telephone call with the phrase "I'm conducting a survey." Many times the so-called "Interview" ends up with an attempt to sell you something that you probably don't need or want.

Let me give you my personal guarantee that the student interviewer will not be trying to sell you something. If you have any doubts about this letter or the interviewer representing me and the survey, please give me a call (OFFICE: (504) 388-8684 or HOME: (504) 766-0438) or call Dr. Joseph F. Hair, Jr. at (504) 388-8684.

The questionnaire has been designed so that you can complete it in the comfort of your own home without the need of an interviewer being present. The student interviewer will simply drop-off the questionnaire at your home at a pre-arranged time and pick it up the following day.

Again, I deeply appreciate your cooperation in taking part in this study.

Sincerely,

David J. Ortinau

Doctorate Student
LSU Marketing Dept.
Dear Respondent:

Again, thank you for your time and cooperation in helping to make this a successful study for me.

I have designed the questionnaire to include all the directions and instructions necessary to complete the survey without the assistance of an interviewer.

Please take your time in responding to each question; YOUR honest responses are very important to the success of my study.

The questionnaire should take you approximately 40 minutes to one (1) hour to complete. Please remember that there are questions on both sides of each page of the questionnaire.

After completing all the questions in the survey, please remember to fill-out the coupon at the bottom of the last page of the questionnaire so that I can include you in the drawing for the appreciation gift of $150.

After filling out the coupon, place the completed questionnaire into the attached envelope and have it ready for the student interviewer who will come back on Sunday (April 29th) to pick up the envelope.

In case you will not be home at the agreed upon time on Sunday, please do one of the following:

A. **IF** you live in a house that has an "open mailbox" (that is, a mailbox in which you do not use a key to open), please place the envelope with the completed questionnaire in the mailbox so that the student interviewer can pick it up.

B. **IF** you live in an apartment, please tape the envelope with the completed questionnaire to your door before leaving so that the student interviewer will be able to pick it up.

I think you will find the survey interesting. Again, I deeply appreciate your cooperation in taking part in this study.

Sincerely,

David J. Ortinau

Doctorate Student
LSU Marketing Dept.
INTERVIEWER INSTRUCTIONS

A. Wednesday and Thursday (April 25th & 26th) call and contact each respondent on your "sector" list.

1. Politely introduce yourself as the "student interviewer" helping David Ortinau on his automobile study.

2. Politely ask the respondent when he (she) will be home (Friday or Saturday) so that you can drop-off the questionnaire.

   Note: Inform the respondent that he (she) does not have to be home per se to receive the questionnaire -- someone else can be there to receive it for them.

3. Explain to the respondent that you will come back on Sunday (April 29th) to pick up the completed questionnaire.

   Further explain that it is not necessary that they be present at the time of the pick-up.

   a. If they live in a home with an open-type mail box -- they can leave the completed questionnaire in its envelope in their mail box.
   b. If they live in an apartment -- they can simply tape the envelope with the completed questionnaire on their door.

4. Make sure the address on your "sector" list is the address at which the respondent currently residing.

   If not obtain the current address and record the change on your "sector" list. And locate it on the map.

5. Politely thank the respondent for his (her) cooperation in the study.

B. At the time of Drop-off

1. Politely introduce yourself as the "student interviewer". Please wear your name tag. Do not wear blue jeans or cut-offs.

2. Make sure the respondent is living at that address.

3. If speaking with respondent tell them you will come back Sunday at (establish your own time range) to pick up the completed questionnaire.
4. Again, politely thank them for his (her) cooperation in the study.

C. At the time of Pick-up

1. Be politely in asking for the completed questionnaire.

2. Make sure it's in the envelope and if respondent is present ask them if they filled out the coupon for the drawing.

3. Politely thank them for their cooperation in the study.

4. Record on your "sector" list whether the respondent was

   WHITE = W
   BLACK = B
   FOREIGN = F
   OTHER = O

-2-
Thank you for cooperating with me in this study which is being conducted to fulfill the last requirement in my graduate program in marketing at Louisiana State University. The study is an investigation of automobile purchasing habits and opinions toward specific automobiles purchased within the last two years.

Although your attitudes, preferences, and opinions are important to this study, they will be kept strictly confidential. Your responses will only be used when grouped with those of many other automobile purchasers participating in the study.

Please read the instructions and directions for each question completely and carefully. If you have any questions or problems, please do not hesitate to contact me. My office telephone number is (504) 389-8684 and my home number is (504) 766-0438.

DIRECTIONS: PLEASE READ EACH QUESTION CAREFULLY. ANSWER THE QUESTION BY CHECKING THE APPROPRIATE BOX(ES) THAT REPRESENT YOUR RESPONSE OR RESPONSES.

1. AUTOMOBILE PURCHASING HABITS

1. In the past 5 years, how many automobiles have you purchased for yourself or someone else in your immediate household? (PLEASE CHECK THE ONE APPROPRIATE RESPONSE)

- One automobile ...
- Two automobiles ...
- Three automobiles ...
- More than four automobiles ...

2. For each automobile that you have purchased in the past 5 years, please indicate the MAKE of the car; the specific MODEL NAME; the MODEL YEAR; and TYPE OF PURCHASE (that is was the car purchased NEW or USED) in the spaces provided below.

For example: I have purchased two cars in the past 5 years.

<table>
<thead>
<tr>
<th>Automobile #1</th>
<th>Make</th>
<th>Model Name</th>
<th>Model Year</th>
<th>Type of Purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ford Mustang</td>
<td>1968</td>
<td>Used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automobile #2</td>
<td>Pontiac Grand Prix</td>
<td>1976</td>
<td>New</td>
<td></td>
</tr>
</tbody>
</table>

# of Automobiles | Make | Model Name | Model Year | Type of Purchase
---------------|------|------------|------------|------------------
Automobile #1    |      |            |            |                  |
Automobile #2    |      |            |            |                  |
Automobile #3    |      |            |            |                  |
Automobile #4    |      |            |            |                  |
Automobile #5    |      |            |            |                  |

3. How many automobiles are presently being driven in your immediate household? (PLEASE CHECK THE ONE APPROPRIATE RESPONSE)

- One car ...
- Two cars ...
- Three cars ...
- More than three cars ...

4. What type of car(s) are presently driven in your household? (PLEASE INDICATE THE MODEL TYPE(S) BY CHECKING THE APPROPRIATE BOX(ES))

- Ford LTD
- Chevrolet Nova
- Pontiac Grand Prix
- Oldsmobile Cutlass
- Buick Electric
- Ford LTD
- Chevrolet Monte Carlo
- Mustang
- Toyota Celica
- Mercedes-Benz
- Cadillac
- Pontiac Sunbird
- MG
- Ford Pinto
- Volvo
- Some other type (Please Specify)
II. OPINIONS AND ATTITUDES TOWARD A SPECIFIC AUTOMOBILE

This section of the study deals with questions concerning specific automobiles purchased within the past two years.

5. According to the warranty records of the General Motors Corporation, it was noted that you had purchased a 1978 Pontiac Grand Prix within the past two years. Do you still own your 1978 Pontiac Grand Prix?

YES, I still own the Grand Prix .......
NO, I no longer own the Grand Prix .......

6. Now thinking back to the time period before you purchased your 1978 Pontiac Grand Prix, when you were shopping for a car to buy, did you consider only Pontiac Grand Prix cars or did you also consider other types (models) of cars?

□ I considered only Pontiac Grand Prix cars ... SKIP TO Q.7
□ I also considered other types of cars ... GO ON TO Q.6a

6a. ANSWER THIS QUESTION ONLY IF YOU HELD "ALSO CONSIDERED OTHER TYPES OF CARS".

What other types of cars did you consider buying before purchasing your 1978 Grand Prix? (PLEASE WRITE THE MAKE AND MODEL NAME(S) IN THE SPACE PROVIDED BELOW -- THEN GO ON TO Q.7)

MAKE MODEL NAME
MAKE MODEL NAME
MAKE MODEL NAME

7. Approximately, how much time did you spend seriously looking at automobiles before purchasing your 1978 Grand Prix? (PLEASE CHECK THE ONE APPROPRIATE RESPONSE)

Less than one month .............
Between one and three months ....
Between one and three months ...
More than six months .............

8. When you purchased your 1978 Grand Prix, were you the person who made the final decision to purchase a Grand Prix or did someone else in your household make the decision or was that decision jointly made by you and other members of the household?

□ I made the final decision to purchase a Grand Prix .................
□ Someone else in the household made the final decision ..........
□ The final decision was jointly made by myself and other members of the household ........................................

9. Did you buy the 1978 Grand Prix for yourself or someone else in your household or the whole household?

The Grand Prix was purchased for myself .........................
□ The Grand Prix was purchased for someone else ..............
□ The Grand Prix was purchased for the whole household .......

10a. Did the purchase of your 1978 Grand Prix include a trade-in of some other car(s)?

YES, the purchase included a trade-in .............
NO, the purchase did not include a trade-in .........

10b. ONLY ANSWER THIS QUESTION(10b) IF YOU RESPONDED "YES" IN Q.10a

What type of car(s) did you trade-in at the time you purchased the 1978 Grand Prix? (PLEASE INDICATE THE MAKE, MODEL NAME, AND MODEL YEAR OF EACH CAR(S) IN THE SPACE PROVIDED BELOW)

MAKE MODEL NAME MODEL YEAR
MAKE MODEL NAME MODEL YEAR
MAKE MODEL NAME MODEL YEAR
11. Are you primarily responsible for maintaining and servicing the car(s) in your household or does someone else have those responsibilities?

- I have those responsibilities ...
- Someone else has those responsibilities ...

12. Thinking back to the time that you actually purchased the 1978 Grand Prix, to what extent did you, personally, desire to own a Grand Prix car versus some other automobile? Please check the one appropriate box that best describes your feelings (AT THE TIME OF PURCHASE) toward wanting to own a Grand Prix rather than some other automobile.

- I very much wanted to own a Grand Prix
- I had no desire to own a Grand Prix

13. Again, thinking back to the time you purchased the Grand Prix, to what extent did you feel you would be involved in actually driving (using) the car rather than someone else driving it, in an average week? Please indicate the relative amount of time you expected to be driving (using) the Grand Prix in a typical week by checking the one appropriate box below.

- I expected to drive it all the time
- I expected not to drive it at all

14. The following statements represent the expressed feelings (at the time of purchase) of other 1978 Grand Prix owners and were considered reasons for selecting and purchasing a Grand Prix automobile. These statements may or may not represent the reasons you had for purchasing your Grand Prix. Next to each statement, please check the one appropriate box that best describes the extent to which you agree or disagree that the statement represented a reason (at the time of purchase) for you purchasing a Grand Prix.

(PLEASE CHECK ONLY ONE BOX FOR EACH STATEMENT)

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>Definite Agree</th>
<th>General Agree</th>
<th>Slightly Agree</th>
<th>Slightly Disagree</th>
<th>General Disagree</th>
<th>Definite Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I viewed a Grand Prix as being a trouble free automobile.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. I thought of the Grand Prix as having an acceptable MPG rating.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. I felt the Grand Prix would give me a smoother ride than the other cars I looked at.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. I viewed the Grand Prix as having a high resale value.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Driving a Grand Prix would represent my fashionable life style.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. The Grand Prix had excellent craftsmanship built into it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. The dealer gave me a better deal than other dealers were going to give me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. I thought of Grand Prix cars as being high quality products.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. I expected to receive quick maintenance (or repair) service with a Grand Prix.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. I viewed a Grand Prix as being the type of car that would fulfill my transportation needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. I viewed a Grand Prix as being a good investment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Grand Prix cars are backed by an excellent warranty guarantee.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. I really liked the overall styling features of a Grand Prix.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(PLEASE GO ON TO THE NEXT PAGE)
15. Just as you have indicated your feelings toward the relevance of each opinion statement in purchasing your 1978 Grand Prix, how important at the time of purchase was it to you that your Grand Prix measured up to your feelings?

Next to each statement, please check the one appropriate box that best describes the degree of importance you felt towards the statement. 

(PLEASE CHECK ONLY ONE BOX FOR EACH STATEMENT)

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>Extremely Important To Me</th>
<th>Definitely Important To Me</th>
<th>Generally Important To Me</th>
<th>Somewhat Important To Me</th>
<th>Only Slightly Important To Me</th>
<th>Not At All Important To Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Grand Prix viewed as being a trouble free automobile.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Grand Prix as having an acceptable MPG rating.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. A Grand Prix would give a smoother ride than other cars I looked at.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Grand Prix viewed as having a high resale value.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Driving a Grand Prix would represent my fashionable lifestyle.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. The Grand Prix had excellent craftsmanship built into it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. The dealer gave me a better deal than other dealers were going to give me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Grand Prix cars viewed as being high quality products.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Expected to receive quick maintenance (or repair) service with a Grand Prix.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Grand Prix viewed as being the type of car that would fulfill my transportation needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Grand Prix viewed as being a good investment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Grand Prix cars are backed by an excellent warranty guarantee.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Liked the overall styling features of a Grand Prix.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. Grand Prix viewed as being a very dependable car.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. Owning a Grand Prix would represent my successful career to other people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
16. Again, thinking BACK TO WHEN YOU ACTUALLY PURCHASED your 1978 Pontiac Grand Prix, please check the one appropriate box that best describes your overall attitude towards the extent to which you felt you would be satisfied or dissatisfied with having purchased that Grand Prix rather than some other automobile.

- Completely satisfied (no dissatisfaction) ...........................................
- Definitely satisfied ..........................................................................
- Generally satisfied ........................................................................
- Slightly satisfied (some dissatisfaction) ...........................................
- Slightly dissatisfied (some satisfaction) ...........................................
- Generally dissatisfied ......................................................................
- Definitely dissatisfied ....................................................................
- Completely dissatisfied (no satisfaction) ........................................

17. Approximately, how many months have (had) you owned your 1978 Pontiac Grand Prix?

(PLEASE WRITE THE NUMBER OF MONTHS ON THE LINE PROVIDED BELOW)

_________ Months

18. Approximately, how many total miles per month is your Grand Prix driven?

(PLEASE CHECK THE ONE APPROPRIATE RESPONSE)

- Less than 500 miles per month ...........................................
- 500 to 1,000 miles per month .............................................
- 1,001 to 1,500 miles per month ...........................................
- More than 1,500 miles per month .........................................

19. Now thinking about how often the 1978 Grand Prix is (was) actually driven (or used) in an average week, approximately what amount of use would you, personally, attribute to your driving the car rather than someone else's driving it?

Please indicate the approximate amount of time you spend driving (or using) the 1978 Grand Prix in a typical week by checking the one appropriate box below.

- I Drive It All of the Time
- Someone Else's Driving
- I Do Not Drive It At All

20. Thinking about your present desire for owning the 1978 Grand Prix versus some other make or model of automobile, please indicate your present feelings toward owning the 1978 Grand Prix rather than some other automobile.

(PLEASE CHECK THE ONE APPROPRIATE BOX THAT BEST DESCRIBES YOUR PRESENT DESIRE OF OWNING THE 1978 GRAND PRIX)

- I Very Much Like Owning My 1978 Grand Prix
- I Have No Desire Owning My 1978 Grand Prix
21. This question consists of several automobile performance statements which may or may not represent your present feelings toward your 1978 Grand Prix car. I would like to know how you feel about the performance statements.

Next to each statement, please check the one appropriate box that best describes the extent to which you agree or disagree the statement.

(PLEASE BE SURE TO CHECK ONLY ONE BOX FOR EACH STATEMENT)

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>Definitely Agree</th>
<th>Generally Agree</th>
<th>Slightly Agree</th>
<th>Generally Disagree</th>
<th>Slightly Disagree</th>
<th>Definitely Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Owning my Grand Prix represents my successful career to other people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. My Grand Prix is a very dependable car.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. The overall styling features of my Grand Prix are great.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. My Grand Prix is (was) backed by an excellent warranty guarantee.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. My Grand Prix is a good investment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. My Grand Prix fulfills my transportation needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. I receive quick maintenance(or repair) service with my Grand Prix.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. My Grand Prix is a high quality product.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. I received the best deal possible with my Grand Prix.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. My Grand Prix has excellent craftsmanship built into it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Driving my Grand Prix represents my fashionable lifestyle.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. My Grand Prix has a high resale value.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. My Grand Prix gives me the smoothest ride ever.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. My Grand Prix gets an acceptable MPG.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. My Grand Prix is a trouble free car.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. Just as you have indicated your present feelings toward the performance of your 1978 Grand Prix for each of the performance statements, how important is it to you (NOW) that your car has performed as you have indicated.

Next to each statement, please check the one appropriate box that best describes the degree of importance you now feel towards the performance level response which you indicated for that statement.

(PLEASE BE SURE TO CHECK ONLY ONE BOX FOR EACH STATEMENT)

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>Extremely Important To Me</th>
<th>Definitely Important To Me</th>
<th>Generally Important To Me</th>
<th>Somewhat Important To Me</th>
<th>Only Slightly Important To Me</th>
<th>Not At All Important To Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Owning my Grand Prix represents my successful career to other people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. My Grand Prix is a very dependable car.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Please go on to the next page)
<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>Extremely Important To Me</th>
<th>Definitely Important To Me</th>
<th>Generally Important To Me</th>
<th>Somewhat Important To Me</th>
<th>Only Slightly Important To Me</th>
<th>Not At All Important To Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. The overall styling features of my Grand Prix are great.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>d. My Grand Prix is backed by an excellent warranty guarantee.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>e. My Grand Prix is a good investment</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>f. My Grand Prix fulfills my transportation needs.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>g. I receive quick maintenance (or repair) service with my Grand Prix.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>h. My Grand Prix is a high quality product.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>i. I received the best deal possible with my Grand Prix.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>j. My Grand Prix has excellent craftsmanship built into it.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>k. Driving my Grand Prix represents my fashionable life style.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>l. My Grand Prix has a high resale value.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>m. My Grand Prix gives me the smoothest ride ever.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>n. My Grand Prix gets an acceptable MPG.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
<tr>
<td>o. My Grand Prix is a trouble free car.</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
<td>□ □ □ □ □</td>
</tr>
</tbody>
</table>

23. Based on your experiences with the 1978 Grand Prix since owning (or driving) it, to what extent are you presently satisfied or dissatisfied with the overall performance of the car? (PLEASE CHECK THE ONE APPROPRIATE RESPONSE)

   - Completely satisfied (no dissatisfaction) [ ]
   - Definitely satisfied [ ]
   - Slightly satisfied (some dissatisfaction) [ ]
   - Slightly dissatisfied (some satisfaction) [ ]
   - Generally dissatisfied [ ]
   - Definitely dissatisfied [ ]
   - Completely dissatisfied (no satisfaction) [ ]

42

24. ANSWER THIS QUESTION ONLY IF YOUR RESPONSE IN Q. 23 WAS EITHER "SLIGHTLY SATISFIED" OR SOME DEGREE (slightly, generally, definitely, completely) OF "DISSATISFACTION".

   What are some of your reasons for being (or feeling) dissatisfied with your 1978 Grand Prix? (PLEASE BE AS SPECIFIC AS POSSIBLE)

43
44
45
46
47

25. Since owning your 1978 Grand Prix car, how many times, if any, have you or someone else in your household taken the car in for servicing (minor repair work) and/or major repair work?

   # of times for servicing/minor repair work (costing less than $100) [ ]
   # of times for major repair work (costing more than $100) [ ]

49
50
26. Let's assume you had an unexpected major problem (costing more than $100) with your 1978 Grand Prix, how likely would you be to complain to the dealership and/or some other organization (such as the Better Business Bureau) about the problem?

(PLEASE CHECK THE ONE BOX THAT BEST DESCRIBES YOUR FEELINGS)

- I definitely would complain about the problem
- I probably (better than a 50-50 chance) would complain about the problem
- It's unlikely (less than a 50-50 chance) that I would complain about the problem
- I definitely would not complain about the problem

27. ANSWER THIS QUESTION ONLY IF YOU RESPONDED "DEFINITELY OR PROBABLY WOULD" IN Q.26.

Please briefly explain the method(s) you would most likely use to complain about the problem(s).

28. Now let's assume you have an annoying minor problem (costing less than $100) with your 1978 Grand Prix, how likely would you be to complain to the dealership and/or some other organization (like the Better Business Bureau) about the problem?

(PLEASE CHECK THE ONE BOX THAT BEST DESCRIBES YOUR FEELINGS)

- I definitely would complain about the minor problem
- I probably (better than a 50-50 chance) would complain about the minor problem
- It's unlikely (less than a 50-50 chance) that I would complain about the minor problem
- I definitely would not complain about the minor problem

29. Based on your experiences with the 1978 Grand Prix, to what extent would you buy another Pontiac Grand Prix next time you are in the market for an automobile?

- I definitely will buy another Grand Prix next time
- I probably (better than a 50-50 chance) will buy another Grand Prix next time
- It's unlikely (less than a 50-50 chance) that I will buy another Grand Prix next time
- I definitely will not buy another Grand Prix next time

30. ANSWER THIS QUESTION ONLY IF YOU RESPONDED EITHER "UNLIKELY" OR "DEFINITELY WOULD NOT" IN Q.29.

Which of the following statements best describe the possible reason(s) for you not likely to purchase another Grand Prix next time you are in the market for an automobile?

(YOU MAY CHECK AS MANY OR AS FEW AS ARE NECESSARY)

- The sticker price of a Grand Prix is becoming so high that I will not be able to afford one in the future
- Increasingly higher gasoline prices will make a Grand Prix too expensive to drive
- The possibility that future style changes of a Grand Prix will not satisfy my transportation needs
- The servicing and/or repair work required to maintain a Grand Prix are going to be too expensive in the future
- Some other reason -- Please Specify
31. If a friend of yours was looking for an automobile to buy, would you recommend a Pontiac Grand Prix to him (her)?

   YES, I would recommend a Grand Prix to a friend ............
   NO, I would not recommend a Grand Prix to a friend ........

III. GENERAL OPINION SECTION

32. In this question, there is a list of general opinion statements for which there are no right or wrong answers. As such, the statements may or may not describe you or your feelings.

   Next to each statement, please check the one box that best expresses the extent to which you agree or disagree with the statement. Remember, there are no right or wrong answers—just want your opinions.

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>Definitely Agree</th>
<th>Generally Agree</th>
<th>Slightly Agree</th>
<th>Slightly Disagree</th>
<th>Generally Disagree</th>
<th>Definitely Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like to be informed about a product before I make a purchase.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often seek out the advice of my friends regarding products I purchase.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think I have more self-confidence than most people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like parties where there are lots of people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am more independent than most people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My friends or neighbors often come to me for advice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I thoroughly enjoy conversations about sports.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually shop for a lot of &quot;specials&quot;.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to be considered a leader.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually have one or more outfits that are the very latest style.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would like to take a trip around the world.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy going to an art gallery.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to pay cash for everything I buy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am an active member of more than one service organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unexpected situations often catch me without enough money in my pocket.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to try new and different things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would rather go to a sporting event than a dance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually watch the advertisements for announcements of sales.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An important part of my life and activities is dressing smartly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy wearing fine jewelry more than fashion jewelry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy going to concerts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To buy anything, other than a house or a car, on credit is unwise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to work on community projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Please go on to the next page)
### IV. CLASSIFICATION DATA SECTION

Now just a few more questions so that I can combine your answers with those of other people taking part in this study.

33. Please indicate your sex.  
   Female ...□  Male ...□

34. Please indicate your present employment status.  
   Employed - full time ...□  Employed - part time ...□  Not employed ...□

35. Please indicate your present marital status.  
   Married, with children .........................□  
   Married, without children ........................ □  
   Single - widowed, divorced, or separated ........... □  → PLEASE SKIP TO Q.38

36. IF MARRIED, please indicate your spouse's present employment status.  
   Employed - full time ...□  Employed - part time ...□  Not employed ...□
37. **If married with children**, please indicate the number of children under 18 years of age in your household.

(PLEASE CIRCLE THE ONE APPROPRIATE NUMBER IN THE SPACE PROVIDED BELOW)

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9 or more (Please Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>46</td>
</tr>
</tbody>
</table>

38. What is your occupation... that is, what kind of work do you spend the major portion of your time?

39. In which one of the following categories does your age fall?

- Under 21
- 21 to 25
- 26 to 30
- 31 to 35
- 36 to 40
- 41 to 45
- 46 to 50
- Over 65

40. Which one of the following categories corresponds with your last completed year in school?

- Some grammar school
- Completed grammar school
- Some high school
- Completed high school
- Some college or technical school
- Completed college
- Graduate studies or Advanced degree

41. Into which of the following categories does your total (approximate) family income, before taxes, fall?

- Under $8,000
- $8,000 to $14,999
- $15,000 to $24,999
- $25,000 or more

THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS STUDY.
YOUR TIME AND OPINIONS ARE GREATLY AND DEEPLY APPRECIATED.

(PLEASE TAKE THE TIME TO FILL OUT THE COUPON BELOW FOR THE $150 DRAWING)
VITA

David J. Ortinau was born on December 14, 1948, in Harvey, Illinois. He graduated from Crete-Monee High School in Crete, Illinois, in 1966. He received a B.S. Degree in Management from Southern Illinois University (Carbondale) in 1970 and received an MBA Degree from Illinois State University in 1971.

In 1971 he took a position as a marketing research consultant in Rabin Research Company located in Chicago, Illinois. In September, 1973, he joined the marketing faculty at Illinois State University as Administrative Assistant/Instructor of Marketing. In June, 1975, he cofounded Neaves Neaves and Ortinau, a Media and Market Consulting Firm, located in Normal, Illinois and served as Director of Marketing Services.

In the Fall of 1976, he began work on the Ph.D. degree in Marketing at Louisiana State University. While a graduate assistant in marketing, he taught a number of upper level marketing courses, served as a marketing consultant to several businesses in the Baton Rouge area as well as authored and coauthored several academic publications.

In September 1979, he joined the marketing faculty at the University of South Florida in Tampa, Florida as an Assistant Professor. Additionally, he became a candidate for the Doctor of Philosophy degree in marketing at Louisiana State University, Baton Rouge, Louisiana.
EXAMINATION AND THESIS REPORT

Candidate: David Joseph Ortinau

Major Field: Marketing

Title of Thesis: An Exploratory Investigation of Post Purchase Consumer Satisfaction Within a Cognitive Process Framework

Approved:

[Signatures]

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

November 30, 1979