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**Time pressure, attitude towards shopping, shopping behavior,
and shopping efficiency**

Rizkalla, Aida Nakhla, Ph.D.

City University of New York, 1988

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TIME PRESSURE, ATTITUDE TOWARDS SHOPPING,
SHOPPING BEHAVIOR, AND SHOPPING
EFFICIENCY

by

AIDA N. RIZKALLA

A dissertation submitted to the Graduate Faculty in
Business in partial fulfillment of the requirements
for the degree of Doctor of Philosophy.
The City University of New York

1988

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1988**

This manuscript has been read and accepted
for the Graduate Faculty in Business in
satisfaction of the dissertation requirement
for the degree of Doctor of Philosophy.

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Abstract

TIME PRESSURE, ATTITUDE TOWARDS SHOPPING,
SHOPPING BEHAVIOR, AND SHOPPING EFFICIENCY

By

Aida N. Rizkalla

Advisor: Professor William R. Dillon

The treatment of time in consumer behavior and marketing literature has been sporadic and has lacked coordination. In a few empirical studies, time pressure was treated as an objective situational variable. Undoubtedly, studying time pressure from the economic perspective provides some understanding of consumer behavior, but it seems completely to ignore the fact that individuals are different in their temporal orientation.

In this study, time pressure is defined as feeling rushed and pressured, disorganized, over-burdened by many things to do, and running out of time. In other words, it is a personality trait.

Although the literature contains numerous examples of the subjective approach, relatively few works directly address how consumer behavior is affected by individuals' subjective experience of time.

Three major objectives were identified for this inquiry: (a) to develop a measurement that is based on new

conceptualization of time pressure as subjective, two-facet concept, (b) to identify the profiles of two different types of consumers: "Harried" vs. "Relaxed", and (c) to test a broader model that relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency.

Based on the literature review, as well as twenty-one indepth interviews, seven major hypotheses with a total of twenty-seven sub-hypotheses were suggested. The relationships described in these hypotheses differentiate between two types of consumers: "Harried" and "Relaxed". The identification of each person as either harried or relaxed was based on time pressure score.

It was hypothesized that harried consumers are demographically different from relaxed consumers, more involved in their work and home, exhibit different attitudes towards shopping, are different in their shopping orientation, behave differently in the marketplace, process the information differently, and are less efficient in their shopping behavior than relaxed consumers. Also, it was hypothesized that time pressure and attitude towards shopping are causally related to shopping behavior and shopping efficiency.

Three pretests were undertaken using three independent samples. The aim of the first pretest was to select the two experimental products. The aims of the second pretest were

to select the items that would be included in time pressure and attitude towards shopping scales, and to identify the evaluative criteria for the two experimental products. The third pretest was undertaken to assess the reliability and validity for time pressure and attitude towards shopping scales, to perform more tests on the evaluative criteria and the weights given to them, to test familiarity with the two experimental products selected for the study, and to assist in selecting the cut-point that differentiates harried consumer from relaxed consumer.

A non-probability convenience sample of 350 female heads of households, ages 30 to 50, were contacted in person. The sample was selected from the five boroughs of New York City. A total of 320 pre-experimental questionnaires were returned, from which 309 subjects completed part two of the study, representing 88% of the total number of subjects contacted.

In order to test the research hypotheses and the proposed model, a shopping simulation game was employed using two separate samples and two different stimuli. For the first sample ($n_1=80$), an informational board was used as a stimulus, whereas for the second sample ($n_2=229$) a scenario was used. In both samples, 2X2X2 factorial design was used combining the following three variables: (a) two types of consumers, (b) two products, and (c) two decision times.

To test the research hypotheses, Chi-Square and ANOVA tests were used. LISREL VI was used to test the proposed model that relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency.

The findings indicate that there are significant differences between harried and relaxed consumers regarding birth-order, marital status, having children, having pre-school aged children, work involvement, mothering and home involvement, and attitude towards shopping. However, no significant differences were found between them regarding work status, occupation, family income, and social class. Education was found moderately related to feeling pressure.

Regarding shopping orientation, no significant differences were found between harried and relaxed consumers in using price and store location as evaluative criteria. Also, no significant difference was found between harried and relaxed consumers regarding the perception of the self as a good shopper.

Significant differences were found between harried and relaxed consumers regarding number of brands, number of attributes, number of informational cues used, decision time, confidence in their choices, satisfactions with their choices, approaching their ideal choices, and approaching the best choice, when shopping under no time constraints. The same hypotheses were rejected when shopping under time constraints.

The proposed model that causally relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency was supported using data generated from the first sample, but not data generated from the second sample. After the deletion of the indicators that caused interpretation confoundings, and testing different alternative models, the causal model was supported using both data sets.

Recommendation as to the marketing implications of the findings of this research were offered.

DEDICATION

To my mother, Ghalia, my best educator.

To my caring and loving husband, Magdi.

And to my precious daughters, Magi and Sally.

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TABLE OF CONTENTS

	PAGE
CHAPTER I:	
INTRODUCTION.....	1
THEORETICAL BACKGROUND.....	12
I. Time and Consumer Behavior.....	12
II. The Time Dimension of Shopping Behavior.....	21
III. Attitude Towards Shopping and Shopping Behavior.....	25
IV. Shopping Behavior and Shopping Efficiency.....	30
CHAPTER II:	
REVIEW OF RELATED LITERATURE.....	33
I. The Concept of Time.....	33
A. Economic Time.....	35
B. Socio-Cultural Time.....	39
C. Psychological Time.....	44
Time Perception.....	44
Time Orientation.....	50
II. Determination of Time Orientation.....	52
A. Time Orientation and Human Development.....	53
B. Impact of Culture and SubCulture.....	56
C. Time Orientation-The Impact of Gender.....	58
D. Time Orientation and Personality.....	60
III. Shopping Behavior of the Harried Consumer:	
A General Model.....	69
A. Dimensions of Time Pressure.....	71
1. Role Overload.....	72
2. Personal Predispositions.....	78
B. Adaptation Strategies.....	82
C. Outcomes of Shopping under Time Pressure.....	94
CHAPTER III	
HYPOTHESES AND RESEARCH METHODOLOGY.....	99
HYPOTHESES.....	99

	PAGE
RESEARCH METHODOLOGY.....	102
(1) Variable Measurement.....	102
A. Time Pressure.....	103
B. Attitude Towards Shopping.....	105
C. Shopping Behavior.....	106
D. Shopping Efficiency.....	107
E. Price Consciousness.....	111
G. Type of Information Processing.....	111
(2) Experimental Design.....	113
(3) Experimental Procedure.....	114
(a) Information Board.....	114
(b) Scenarios.....	120
The First Situation.....	120
The Second Situation.....	120
The Third Situation.....	120
The Fourth Situation.....	121
(4) The Sample.....	122
(5) Product Selection.....	130
(6) Questionnaire Design.....	130
(a) Pre-experimental Questionnaire.....	130
(b) Post-experimental Questionnaire.....	131
(7) Pilot Study.....	132
(8) Methods of Analysis.....	133

CHAPTER IV

PRETEST RESULTS.....	138
Scale Development.....	138
(1) Time-Pressure Scale.....	138
(a) Reliability Tests.....	139
Coefficient Alpha.....	140
Split-Half Reliability.....	140
(b) Validity Tests.....	142
Item-Total Correlations.....	142
Factor Analysis.....	142
Fitting a Confirmatory Factor Model.....	146

	PAGE
Convergent Validity.....	146
Discriminant Validity.....	147
Nomological Validity.....	147
(2) Attitude Towards Shopping Scale.....	151
(a) Reliability Tests.....	152
Coefficient Alpha.....	152
Split-Half Reliability.....	152
(b) Validity Tests.....	153
Item-Total Correlations.....	153
Factor Analysis.....	153
Fitting a Confirmatory Factor Model.....	153
Convergent Validity.....	153
Discriminant Validity.....	154
Nomological Validity.....	154
Identifying The Evaluative Criteria and the Weights Given to Them.....	157
Identifying the Cut-Point Between Harried and Relaxed Consumers.....	161
Testing Familiarity with the Two Experimental Products.....	163

CHAPTER V

DATA ANALYSIS AND RESEARCH FINDINGS.....	166
Results of the Statistical Analysis.....	166
Hypothesis H1a.....	166
Hypothesis H1b.....	168
Hypothesis H1c.....	168
Hypothesis H1d.....	168
Hypothesis H1e.....	169
Hypothesis H1f.....	175
Hypothesis H1g.....	175
Hypothesis H1h.....	175
Hypothesis H1i.....	179
Hypothesis H2a.....	179
Hypothesis H2b.....	183
Hypothesis H3a.....	183
Hypothesis H3b.....	183
Hypothesis H4a.....	184
Hypothesis H4b.....	184
Hypothesis H5a.....	193
Hypothesis H5b.....	193

	PAGE
Hypothesis H5c.....	193
Hypothesis H5a.....	194
Hypothesis H5e.....	194
Hypothesis H5f.....	200
Hypothesis H6a.....	200
Hypothesis H7a.....	205
Hypothesis H7b.....	209
Hypothesis H7c.....	209
Hypothesis H7d.....	212
Hypothesis H7e.....	212
Discussion and Interpretation of Findings.....	212
CHAPTER VI:	
TESTING AND INTERPRETING THE CAUSAL MODEL.....	244
Evaluating LISREL Solutions.....	245
(1) Evaluating the Overall Goodness-Of-Fit.....	245
(a) Chi-Square.....	245
(b) Goodness-Of-Fit Index (GRI).....	245
(c) Adjusted-Goodness-Of-Fit Index (AGFI)....	250
(d) Root Mean Square Residual.....	250
(2) Evaluating the Measurement Model.....	253
(a) Square Multiple Correlations.....	256
(b) Composite Reliability.....	256
(c) The Average Variance Extracted:	
Convergent Validity.....	256
(d) Discriminant Validity.....	259
(3) Evaluating the Structural Model.....	259
(a) Squared Multiple Correlations.....	259
(b) Coefficient of Determinations.....	260
Testing Alternative Models.....	260
Interpretational Confounding.....	262
CHAPTER VII:	
SUMMARY, CONCLUSIONS, IMPLICATIONS, AND DIRECTION FOR FUTURE RESEARCH.....	266

	PAGE
(1) Theoretical Background.....	266
(2) Hypotheses.....	270
(3) Pretest.....	272
(4) The Sample.....	275
(5) Method.....	276
(6) Data Analysis.....	277
(7) Research Findings.....	277
Contributions, Implications, Limitations and Conclusions.....	279
Directions For Future Research.....	287
APPENDICES:	
I. First Pretest: Selecting the Items for Time Pressure And Attitude Towards Shopping Scale.....	291
II. Second Pretest: Assessing the Reliability and Validity For the Scales.....	299
III. Agreement Letter.....	308
IV. Pre-experimental Questionnaire.....	310
V. Measure of Specific Attitude Towards Shopping.....	321
VI. The Four Experimental Scenarios.....	323
VII. Instructions For The Use Of Information Board.....	327
VIII. Post-experimental Questionnaire.....	333
BIBLIOGRAPHY.....	335

LIST OF TABLES

TABLE		PAGE
II-1	TIME PRESSURE: HOW IT IS CONCEPTUALIZED AND/ OR OPERATIONALIZED IN THE LITERATURE.....	65
III-1	CLASSIFICATION SCHEME FOR INFORMATION PROCESSING.....	115
III-2	DEMOGRAPHIC PROFILE OF SAMPLE (1).....	123
III-3	DEMOGRAPHIC PROFILE OF SAMPLE (2).....	126
III-4	DATA ANALYSIS PLAN.....	135
IV-1	RELIABILITY TESTS FOR TIME PRESSURE SCALE.....	141
IV-2	RELIABILITY TESTS FOR ATTITUDE TOWARDS SHOPPING SCALE.....	141
IV-3	ITEM-TOTAL CORRELATION FOR TIME PRESSURE SCALE..	143
IV-4	VARI MAX ROTATED FACTOR MATRIX FOR TIME PRESSURE SCALE.....	148
IV-5	ITEM-TOTAL CORRELATION FOR ATTITUDE TOWARDS SHOPPING SCALE.....	155
IV-6	FACTOR LOADINGS FOR ATTITUDE TOWARDS SHOPPING SCALE USING PRINCIPAL FACTOR METHOD.....	156
IV-7	WEIGHTS GIVEN TO EVALUATIVE CRITERIA FOR THE FIRST PRODUCT: PRETEST RESULTS.....	159
IV-8	WEIGHTS GIVEN TO EVALUATIVE CRITERIA FOR THE SECOND PRODUCT: PRETEST RESULTS.....	160
IV-9	CHI-SQUARE TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING FAMILIARITY WITH SHOES.....	165
IV-10	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING FAMILIARITY WITH DINNERWARE.....	165
V-1	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING WORK STATUS.....	167
V-2	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING WORK TYPE.....	170

LIST OF TABLES (CONT.)

TABLE		PAGE
V-3	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING BIRTH ORDER.....	171
V-4	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING FAMILY INCOME.....	172
V-5	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING FAMILY INCOME.....	173
V-6	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING MARITAL STATUS.....	174
V-7	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING SOCIAL CLASS.....	176
V-8	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING HAVING CHILDREN.....	177
V-9	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING HAVING PRE-SCHOOL CHILDREN.....	178
V-10	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING EDUCATION.....	180
V-11	MEASURE OF ASSOCIATION BETWEEN PERSON TYPE AND DEMOGRAPHIC VARIABLES.....	181
V-12	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING WORK INVOLVEMENT....	182
V-13	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING HOME INVOLVEMENT....	185
V-14	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING ATTITUDE TOWARDS WORK.....	186
V-15	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING ATTITUDE TOWARDS SHOPPING.....	187
V-16	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING PERCEPTION OF SHOPPING AS A MANDATORY ACTIVITY.....	188
V-17	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING IMPORTANCE OF STORE LOCATION: GENERAL ORIENTATION.....	189

LIST OF TABLES (CONT.)

TABLE		PAGE
V-18	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING IMPORTANCE OF STORE LOCATION: DIFFERENT SITUATIONS.....	190
V-19	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING IMPORTANCE OF PRICE: GENERAL ORIENTATION.....	191
V-20	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING IMPORTANCE OF PRICE: DIFFERENT SITUATIONS.....	192
V-21	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING NUMBER OF BRANDS: DIFFERENT SITUATIONS.....	195
V-22	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING NUMBER OF ATTRIBUTES.....	196
V-23	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING NUMBER OF STORES: DIFFERENT SITUATIONS.....	197
V-24	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING TOTAL INFORMATION ACQUIRED: DIFFERENT SITUATIONS.....	198
V-25	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING DECISION TIME: DIFFERENT SITUATIONS.....	199
V-26	CHI-SQUARE TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING STORE VISITING: DIFFERENT SITUATIONS.....	201
V-27	CHI-SQUARE TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING STORE PATRONAGE: DIFFERENT SITUATIONS.....	202
V-28	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING STORE PATRONAGE.....	203
V-29	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING STORE PATRONAGE: THE TWO PRODUCTS.....	204

LIST OF TABLES (CONT.)

TABLE		PAGE
V-30	CHI-SQUARE TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING TYPE OF INFORMATION PROCESSING: DIFFERENT SITUATIONS.....	206
V-31	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING TYPE OF INFORMATION PROCESSING.....	207
V-32	COMPARISON BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING TYPE OF INFORMATION PROCESSING.....	208
V-33	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING CONFIDENCE IN CHOICE: DIFFERENT SITUATIONS.....	210
V-34	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING SATISFACTION WITH CHOICE: DIFFERENT SITUATIONS.....	211
V-35	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING APPROACHING BEST CHOICE: DIFFERENT SITUATIONS.....	213
V-36	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING APPROACHING IDEAL CHOICE: DIFFERENT SITUATIONS.....	214
V-37	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING THE PERCEPTION OF THE SELF AS A GOOD SHOPPER.....	215
V-38	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING CONFUSION WHILE PERFORMING THE TASK: DIFFERENT SITUATIONS.....	227
V-39	ANOVA TEST OF NO DIFFERENCE BETWEEN HARRIED AND RELAXED CONSUMERS REGARDING FEELING PRESSURED WHILE PERFORMING THE TASK.....	228
V-40	MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR OF HARRIED AND RELAXED CONSUMERS UNDER DIFFERENT TIME CONSTRAINTS (THE FIRST SAMPLE).....	235
V-41	MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR OF HARRIED AND RELAXED CONSUMERS UNDER DIFFERENT TIME CONSTRAINTS (THE SECOND SAMPLE).....	236

LIST OF TABLES (CONT.)

TABLE		PAGE
V-42	MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR OF HARRIED AND RELAXED CONSUMERS WHEN SHOPPING FOR TWO DIFFERENT PRODUCTS (THE FIRST SAMPLE).....	239
V-43	MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR OF HARRIED AND RELAXED CONSUMERS WHEN SHOPPING FOR TWO DIFFERENT PRODUCTS (THE SECOND SAMPLE).....	240
V-44	MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR OF THE SAME PERSON UNDER TWO DIFFERENT TIME CONSTRAINTS (USING TWO SEPARATE SAMPLES).....	241
V-45	MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR OF THE SAME PERSON WHEN SHOPPING FOR TWO DIFFERENT PRODUCTS (USING TIME SEPARATE SAMPLES).....	242
VI-1	CORRELATION MATRIX (1).....	246
VI-2	CORRELATION MATRIX (2).....	248
VI-3	THE NORMALIZED RESIDUALS DATA SET (1);MODEL (1)..	251
VI-4	THE NORMALIZED RESIDUALS DATA SET (2);MODEL (2)..	252
VI-5	RELIABILITY AND VALIDITY ASSESSMENT FOR THE OBSERVED VARIABLES, THE CONSTRUCTS, AND THE MODEL: A COMPARISON BETWEEN THE TWO DATA SETS..	257
VI-6	EVALUATING THE STRUCTURAL MODEL: A COMPARISON BETWEEN THE TWO DATA SETS.....	258
VI-7	GOODNESS-OF-FIT: COMPARISON AMONG FOUR RIVAL MODELS.....	263
VI-8	GOODNESS-OF-FIT: COMPARISON AMONG FOUR RIVAL MODELS/AFTER DELETING Y_6 AND Y_9	265

LIST OF FIGURES

FIGURE	PAGE
II-1 SHOPPING BEHAVIOR OF THE HARRIED CONSUMER: A GENERAL MODEL.....	73
VI-1 THE PROPOSED MODEL.....	247
VI-2 THE PROPOSED MODEL IN LISREL FORMAT.....	249
VI-3 Q-PLOT OF THE NORMALIZED RESIDUALS: DATA SET (1); MODEL (1).....	254
VI-4 Q-PLOT OF THE NORMALIZED RESIDUALS: DATA SET (2); MODEL (1).....	255
VI-5 ALTERNATIVE MODELS.....	261

CHAPTER I

INTRODUCTION

The ability to understand how consumers make decisions in the marketplace is essential to consumer research. Several attempts have been made to conceptualize this process. These include models developed by Engel, Kollat, and Blackwell (1973), Howard and Sheth (1969), and Nicosia (1966). The emphasis in these works has been a detailed description of the choice process viewed deterministically, but incorporating the dynamic of consumer behavior through feedback mechanisms. A counter viewpoint is that choice is essentially stochastic. Models based on this view have developed by Bass (1974), Massy et al., (1970), and Zufryden (1977). These attempts do not deal with the choice process, but instead focus on the choice outcome.

In both approaches there are three implicit assumptions: (a) that time is given, (b) that time is perceived the same by all consumers, and (c) that choice is optimal. These three assumptions have been questioned by many researchers.

Linder (1970) suggests that "the limited availability of time, coupled with the increasing value of time spent working, generates the need for a reallocation process. Individuals must continually transfer time among activities to achieve parity between the yield of work and consumption.

Moreover, economic development and technological advances have produced a growing list of alternative ways to use time. The combination of these forces has resulted in the realization that time, as a nonrenewable resource, is an essential element in calculating all labor-leisure decisions" (pp. 2-9).

The fact that Americans place more value on time rather than money is well documented. Western cultures, particularly American society, are said to be permeated by a high degree of time consciousness. Krech et al. (1961) pointed out that of various ways in which time is conceived, an awareness of time as a tangible commodity with an urgent and compelling quality dominates the American mind. However, in many cultures this concept of time is not salient (Hall, 1959; Kluckhohn and Strodtbeck, 1961), and evidence exists that there are differences in time awareness on the individual level as well (Wessman, 1973; Calabresi and Cohen, 1968).

The intimate link between the sense of time and individual and cultural behavior has been noted by philosophers (Fraser, 1975; Fraisse, 1966), by contemporary social theorists (Lewin, 1951; Frank, 1939; Wirth, 1964), and observed in empirical studies (Wallace and Rubin, 1960; Orme, 1969; Doob, 1971; Cottle, 1976; Gorman and Wessman, 1977).

In psychology, the objective and subjective features of

time have long been topics of speculation and inquiry. Consequently, the philosophical and scientific formulations concerning the nature of time constitute a large and complex literature (Fisher, 1967; Fraser, 1966; Whitrow, 1963).

In marketing, on the other hand, researchers have largely ignored time as a facet of consumer behavior, focusing instead on the acquisition of goods and services (Handrix, 1983). Jacoby, Szybillo, and Berning (1976) pointed out that because time pervades every aspect of consumer behavior, we seem to remain unaware of its significance and fail to recognize the need to study its relationships to consumer behavior.

Recently, the marketing discipline has begun to recognize the fundamental importance of time, primarily as a resource which, like money, consumers spend (Becker, 1965; Bentler, 1964; Schary, 1971). In fact, the interdependence between the allocation of time and the demand for various goods and services (Etgar, 1978) has stimulated considerable conceptual and empirical work (Hornick, 1985; Wilson and Holman, 1980, 1985).

Up to this date, research on time and consumer behavior has focused on the time allocation process (Wilson and Holman, 1980). The "economic" perspective of time, however, is only one of several worthy of attention by consumer behavior researchers (Settle, 1980). Although the literature contains numerous examples of the "subjective" appra-

ches (Jacoby, Szybillo, and Berning, 1976) relatively few works directly address how consumer behavior is affected by individuals' subjective experiences of time.

Wessman (1973) pointed out that the use of the physical time concept in the description of human events is often artificial and misleading. It fails to account for the facts that human time estimates rarely match clock and calendar time, and that societies and individuals demonstrate vast differences in their constructions and uses of time.

Doob (1971) views time as highly judgmental and individualized. He states that individuals employ various internal and external cues in conjunction with cognitive constructs concerning, the order, the duration, and the rhythmic nature of time. As many of the authors (Doob, 1971; Cottle, 1976; Wessman, 1973) have shown, time is a set of acquired mental schemata and concepts that individuals and cultures have developed for various purposes. Therefore, time is not an external "object". Although we may commonly use time as a noun in everyday language, we probably would find it more advantageous to consider time as internal process of judgment rather than a primary object of judgment itself (Whitrow, 1961).

There is an increasing awareness of the subjective experience of time as an important and a potentially key variable for understanding human behavior in general and

consumer behavior in particular. Hollman et al., (1985) acknowledged that by pointing out that just as the concept of perceived risk has expanded the ability of researchers to explain consumer behavior towards risky products or services, so the study of the perception of time may help us to better understand, explain, and predict consumer behavior.

While it seems that consumer behavior researchers have neglected an important facet of human behavior, in fact, that neglect is more apparent than real. As Hawes pointed out (19'9) many of the global models of buyer behavior incorporate some references to consumers' experience or perception of time. Furthermore one aspect of time experience, time pressure, is embedded in several of the explanations of buyer behavior employed by many researchers.

On the theoretical side, some researchers recognize the increasing importance of time as it relates to consumer behavior. Howard and Sheth (1969) included time pressure as a major exogenous variable in their theory of buyer behavior. The difference between extended and habitual decision making in the Engel, Kollat, and Blackwell (1973) model suggests a basic relationship with time pressure. Moreover, the view that Americans are increasingly placing more value on time than goods (Kotler, 1972) is becoming widely held.

On the other hand, relatively few empirical contributions appear in the marketing literature that treat time pressure as a major variable of interest. Marketers

(Garretson and Mauser, 1963; Howard and Sheth, 1969), psychologists (Heslin and Streufert, 1968; Jacoby, 1974), and economists (Gronau, 1973; Linder, 1970) have discussed the role of time pressure on decision making. Yet few empirical studies have actually investigated the effects of time pressure on consumer behavior. Moreover, these studies have focused on time pressure as a situational variable viewed as objective/physical/universal rather than subjective/psychological/individualistic. Stroud (1955) indicated that "we have had for a century or more ample evidence that physical and psychological time are by no means identical in nature" (p. 75). The author asserted this distinction between subjective time and objective time indicating that psychological time is the time in which we are aware of events, some of which occur before others, and some of which occur together.

No doubt there is enough evidence that the concept of time pressure exists and influences consumer behavior. However, it has remained unmeasured, even "hidden" in previous studies. Therefore, there is a potential benefit to be gained by scrutinizing it and explicitly investigating its impact on different aspects of consumer behavior.

There is an increasing awareness that many consumption activities require the use of scarce resources such as energy, information, money, space, and time. Shopping is one consumer activity that requires the use of most of these

scarce resources. Of the various resources involved in shopping, time has been researched the least (Hornik, 1985), although in most writings one would find the arguments that shopping is a time consuming activity (Berry, 1979; Granbois, 1977).

Shopping, traditionally, is the domain of women. Martineau (1957) speculated that "shopping is a woman's equivalent of a man's hunting trip. It's a spree of binge when she can let herself go and be herself. It's a vicarious enjoyment of higher status. It's the woman's way to wield power which is denied her in the typical husband-wife relationship, where she is forced into the subordinate role. In shopping, she can order people, be waited on, be courted. She is literally "Queen" for a day, flattered and imperious" (p. 182). No doubt the validity of this hypothesis is questioned in today's market with shifting female attitudes and life styles.

Today, the assumption about the typical consumer has been changed. Business has operated under the assumption that up to 80% of all consumer purchasing was done by females. It was assumed that the majority of them were housewives who achieved social pleasure from daily contacts at a multiple number of retail institutions (Walters, 1974). As a result of this assumption, many researchers have viewed consumers as seeking to prolong time expenditures, such as during enjoyable shopping. Now, nearly one-half of the

females age 16 and over are in the labor force. Projections indicate that the phenomenon of women entering the labor force will accelerate, with the greatest increasing occurring among married women (McCall, 1977).

Many researchers stated that at all income levels and life-cycle states, working wives appear to face greater time pressure than do nonworking wives. For example, Strober and Weinberg (1980) used a representative sample of married women in 1977 to indicate that, as compared to nonworking wives, working wives were much less likely to report having excess spare time. The authors treated time pressure as given and as experienced at the same level by all working wives, ignoring any individual differences. They stated that given the greater time pressure faced by employed wives, as compared to nonemployed wives, employed wives will more frequently and/or intensively utilize strategies to reduce time pressure.

Most of the studies that have investigated differences in consumption and shopping behavior between working and nonworking wives have found very few differences, and the literature review indicates a great deal of opposing results. These conflicting findings may be attributable to a failure to consider time pressure as a major variable of interest which is experienced differently by individuals.

So far the potential relationship between time pressure and shopping behavior has been discussed. In addition,

there is another variable that seems to influence shopping behavior: attitude towards shopping. Bellenger et al. (1977) suggested two types of shoppers: (a) the convenience shopper, and (b) the recreational shopper. The authors indicated that the consumers who value convenience have a strong negative interest in shopping as a leisure activity. On the other hand, the consumers who sought quality and variety expressed a strong and positive interest in shopping as a leisure. The authors found that differences in the level of interest in shopping were far greater between the two groups than any other demographic or life-style variables.

Buckling (1966) points out that consumers are likely to spend more time in shopping activities if they place a high value on the benefits to be gained from such an activity, relative to the benefits expected for other (nonshopping) activities.

A careful search of the literature on shopping behavior reveals surprisingly little knowledge of how people shop. A linear model that relates demographic variables to shopping behavior proved to be of limited usefulness for predicting choice (Aaker and Jones, 1971). Many researchers (e.g., Mackey, 1972) suggest a model that incorporates demographic, attitudinal, and shopping variables is more useful to predict how and where consumers shop.

Holman and Wilson (1982) claimed that consumers respond

to retail environments in relation to their time needs and how these environments help to satisfy those needs. The authors state that the consumer who suffers from time shortage experiences time disequilibrium and attempts to restore balance through shopping behavior.

If time pressure and attitude towards shopping affect shopping behavior, how is shopping efficiency affected by this behavior? There is a common belief that people shop around to gather information in order to make a better choice. In this study shopping behavior will be defined in terms of pre-purchase information acquisition.

The role of information in consumer decision making has been studied from a variety of perspectives. Economists have focused on factors which limit the amount of search for information by consumers, i.e., the costs of search (Nelson, 1970; Stigler, 1961). Behavioral scientists and marketing researchers have examined the sources of information used by consumers, the influence of information on consumers' brand attitudes, choices, and the dynamics of consumer information processing (Anderson and Engle, 1977; Bettman and Jacoby, 1976). However, little theory or empirical research has focused on the role of information acquisition (shopping around) on shopping efficiency (i.e., choice efficiency). In an exploratory study, Sproles et al., (1978) found that information enhances the likelihood that consumers will make efficient choices of products. The authors define a con-

sumer's efficiency in terms of the extent to which his/her choice approaches the ideal.

Thus, an underlying rationale of this research, which aims to pursue earlier indications that time pressure may be related to consumer behavior, is to determine whether consumers who experience time pressure differently, and have different attitude towards shopping, exhibit different shopping behavior, and in turn shopping efficiency. More specifically, this research aims to:

1. Develop a measurement of time pressure that is based on a new conceptualization of time pressure as a multifaceted, subjective phenomenon that varies across individuals.
2. Identify the profiles of two different consumers: the "Harried consumer" and "Relaxed consumer". This will be done by correlating time pressure measurement with different demographic, attitudinal, and behavioral variables.
3. Test a broader model that relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency.

THEORETICAL BACKGROUND

I. Time and Consumer Behavior:

Hawes (1979, p. 442) pointed out that "time is a variable which not only pervades all aspects of behavior, but also is perceived differently by different people and at different periods in their life, yet it has been virtually ignored as a salient factor in consumer behavior." Jacoby, Szybillo and Berning (1976, p. 320) pointed out "that despite the fact that time pervades every aspect of human behavior, consumer researchers have given it scant attention".

Theoretically, time in general and time pressure in particular are included in each of the well known conceptual models of buyer/consumer behavior. Some of these models treated time pressure explicitly, others implicitly.

The general topic of the relationships of time to consumer behavior has been reviewed by Jacoby, Szybillo, and Berning (1976). This review focused heavily on time in economics, time budgets in sociology and home economics, decision time in psychological experiments, and some marketing related studies. The authors' synthesis stressed time as a baseline variable over which consumption activities and decision making proceeds. While expenditures of time, time intervals, time spans, points-in-time and how time is valued are stressed, the effects of time orientation

and varying perceptions of time on purchase and use behavior are not discussed. However, the authors do note that "the entire subject of how perceptions of recency arise and their effects on consumer behavior remains to be explored" (p. 335).

In the second version of the EKB model, Engel, Kollat, and Blackwell (1973) considered time in only a cursory way (Hawes, 1979). First, the decision process itself is acted over a time-line. The three variations of decision-making consume varying amounts of time, wherein the habitual decision-process consumes the least amount of time (convenience goods), and the extended decision-process consumes the greatest amount of time (major purchases).

Second, time seems to be implicitly included as a culture variable, though it is never explicitly mentioned. Time pressure, due in part to working conditions, is a familial factor. Time, as a constraint, is briefly considered in a discussion of time budgets. The fact that there may be differences between time-using and time-saving goods in leisure is suggested. The authors also pointed out that "as scarcity of product disappears, the scarcity of time ascends the value scale" (p. 105).

Third, the shorter time horizon of the lower class as compared with the middle and upper classes is noted, as is the tendency of the lower classes towards impulsiveness and immediate gratification. Fourth, the implication of varying

time spans of exposure, attention, and retention is suggested under the topic of information processing. The authors mentioned in their brief discussion some potential differences based upon different perceptions of, and reaction to time and time pressure.

Finally, the discussion of personality does not mention time perception at all. This in spite of studies which suggest that time perception is related to personality factors (Calabresi and Cohen, 1968; Wessman, 1973; Getsinger, 1976).

In their third edition, Engel, Kollet, and Blackwell (1978) recognized time as a salient variable in several more explicit ways than in the earlier versions. The cost of time as a factor in search processes is explicitly mentioned, as in anticipated circumstances. Consumer time budgets and leisure time are both discussed in more detail and clarity than in the second edition. The authors noted that consumers in the future should be willing to pay "more" money to enjoy their limited leisure time, and that the desire on the part of consumers to save time is increasingly becoming an important marketing factor. In the same edition, the authors explicitly defined the variable "anticipated circumstances" to include "time pressure", though "time pressure" itself is not defined (Hawes, 1979).

In their first version of the well-known model, Howard and Sheth (1969) considered time directly in the form of an

exogenous variable labeled "time pressure". This was defined as "the inverse of the amount of time the buyer has available to perform the behavior required for the acts of purchasing and consumption" (p. 77). That is, the time required to perform these acts in relation to the time allocated to them by the individual. The authors point out that not too much is known about this variable.

Howard and Sheth (1969) postulate that time pressure "will cause search to be more vigorous, but that it seems to limit the things to which attention is paid; span of attention is reduced" (p. 78). It is also suggested that "buyers under time pressure are less apt to adopt a new brand. They are probably less likely to learn about it and less likely to change their behavior even if they do learn about it" (p. 325). Sharir (1974) points out that an alternative pattern of behavior for the household that wants to economize on buying time is to buy at random "according to the ease of acquiring them" (p. 54). Howard and Sheth (1969) offer the opinion that some advertising messages, by describing the preparation of a product, may create inhibition to the purchase by bringing up a perceived time pressure situation. The buyer may feel that the preparation is time consuming (p. 381). Therefore, time pressure is considered explicitly in Howard and Sheth model (1969). In addition, the authors considered time implicitly as a baseline underlying the phenomenon of brand loyalty (over

time), diffusion of innovations (over time), and extent of search for information (over time; cost of time versus benefits). Finally the authors indicate that such personality characteristics as cautiousness and venturesomeness may contain a time perception dimension. Innovators, who are typically high on venturesomeness, seem to need less time (or perceive time to flow faster) to resolve the stimulus ambiguity caused by an innovation (p. 323).

In their updated version of 1969 model, Howard and Sheth (1974) explicitly postulated that the exogenous variable "time pressure" is inversely related to search and positively related to intention to purchase (p. 29, 30). In their empirical test of the Howard-Sheth model, Farley and Ring (1974) did include time pressure as an exogenous variable. They assumed that time pressure is an unchanging sociopsychological variable not affected by the consumer's awareness of, or purchasing of, a product of the particular type. Empirically, time pressure was measured as the inverse of the "wife's hours per week of employment".

In his trials to test Howard-Sheth model, Holbrook (1974) did not attempt to operationalize time pressure. Lehmann, et al. (1974) discussed an even further modified/simplified version of the Howard-Sheth model in which time is explicitly included as an "exogenous socio-economic variable". It is included in the form of time pressure. The authors defined time pressure as "the amount

of time spent shopping". This is, of course, different from the Farley and Ring definition.

Nicosia (1966) states that, "Because it bears on all others, time is a key variable in consumer decision processes...Despite its crucial role in any behavior process, this component has received little attention in the literature" (p. 86). The author suggests that time may figure in the decision process in at least three ways. First, if an action is seen as a sequence of more elementary activities, time becomes a "subscript" which differentiates these activities. Second, if an action is seen as the final outcome of a cognitive process, "time may be used to differentiate the predispositions and attitudes whose changes and conflicts are resolved into specific, action-oriented motive" (p. 87). Finally, time may be used to describe not only physical and mental activities, but also the interplay between these two broad classes of behavior determinants.

While time in these three situations is a chronological dimension, Nicosia (1966) notes that the perceived length of a given period of time may vary between two groups of consumers. The author states "no empirical and little theoretical literature is concerned with time perceived subjectively" (p. 87). He goes on, "We still do not know, however, any procedure for building subjective measures of time. Research is badly needed in this area" (p. 87).

Nicosia and Mayer (1976) suggest that time should be included in any operational definition of consumption activities. The authors state "each activity implies time, but more important, different goods imply different amounts of time allocated to buying, using, and disposing" (p. 68). The thrust here, however, is on differential use of time as a baseline of acquisition and consumption and only inferentially on how varying perceptions of time affect the consumer's decision process.

Hansen (1972) hypothesized that the consumer will experience time pressure as cognitive conflict continues during the choice process. According to the author, the more cognitive conflict the consumer perceives, the more time he will need to eliminate the conflict. Time, as used here, however, seems to be objective or chronological time. The author also raises the issue of whether or not consumers, when they evaluate alternatives whose study extends over time, apply a discounting factor such that the most immediately available alternatives become relatively more attractive (p. 220).

Sheth (1974) includes a variable labeled "time pressure" as an exogenous determinant of family buying decisions. He points out that "the more a family is pressed for time, for whatever reason, the less will be the incidence of joint decision making" (p. 30). The author goes on to state that "time is a scarce resource and hence the importance of

any activity that uses up more time than it can return to the family is reduced" (p. 30). However, time pressure is never operationally defined, nor are any of the factors affecting time pressure defined or discussed.

In their cross-cultural buyer behavior model (which focuses mainly on the adoption process), Sheth and Sethi (1977) include a variable labeled "value of time". The authors hypothesized that "the more value a culture places on time as a scarce resource, the more rapid a diffusion the innovation will experience" (p. 382). This variable--value of time--and its precedent conditions are not defined. The authors do not indicate the relationship between "time pressure" and "value of time".

Schary (1971) pointed out that "an expenditure of time is involved each time a product is used, and the consumer's perception of that time may influence both his product choice and the way he uses it. The author presents a conceptual model of time utilization which focuses on the use of time as part of the consumer's choice process. The key suggestions which arise from this model are (Schary, 1971, p. 55): (1) The nature of the role of time will depend on the nature of the chosen activities. (2) There may be cyclical patterns of time valuation. (3) There are undefined subjective attitudes which create consumer's time valuation and whether time expenditures may be substituted for money expenditures. (4) These subjective attitudes may

influence the perceived duration of activities.

McGuire (1977) believes that there is a growing "pessimistic consciousness that time is running out, particularly in the domain of material life. He also suggests that economic cycles such as booms and recessions also affect consumers' basic orientation toward time, "but the implications of these effects have only been superficially examined" (p. 322).

Settle and Alreck (1977, 1978) have developed a scale, called the F-A-S-T Time Orientation Test, to measure consumers' time orientation. The four dimensions are: Focus (location of consciousness on the time spectrum, past to present to future); Activity (perceived time pressure and supply, relative to activity level); Structure (tendency to see time in distinct blocks rather than a continuous flow); and Tenacity (willingness to delay gratification over substantial periods of time). The authors found the Structure and Tenacity scales provided somewhat more substantive evidence of a systematic relationship with consumer attitudes than the other two scales. They conclude that highly structured persons believed in planning large purchases, budgeting, having a shopping list, avoiding impulse buying, and being brand and store loyal. Highly tenacious persons were less likely to use credit cards, and more likely to save and buy large items rather than several smaller ones.

The Settle/Alreck approach differs noticeably from the other views reviewed before on several grounds. First, it appears to be concerned primarily with the long run, as opposed to the immediate situation (e.g., Howard-Sheth model). In other words, time orientation is treated as psychological time that includes the incorporation of predisposition related to time in the psychological makeup of the individual as durable personality traits (Settle et al., 1981a). Second, it is multi-faceted in its attempt to tap different dimensions of time perception. Hawes (1979) points out that this path deserves further exploration.

II. The Time Dimension of Shopping Behavior:

Settle (1979) identifies three principal topic areas that relate time orientation to consumer behavior:

(1) Effects on information dissemination, acquisition and processing. (2) Implications for buyer or purchase actions and processes. (3) Influence on actual consumption patterns. The author points out that "time almost certainly has much to do with the actual strategies and tactics of shopping for and buying products and services. Consumers can be seen to vary greatly in the amount of time they are willing or able to devote to the marketplace. Probably the selection of such things as optimizing versus satisfying strategies are significantly influenced by consumer time factors. The decision process might be elongated or truncated, depending

on the circumstances of time, and can be seen to play a part in determining the degree of brand loyalty exhibited by buyers. Perceived risk and risk reduction strategies are subject to time requirements and availabilities. Even post-purchase evaluations may be affected by consumer time" (p. 446).

Schary (1971) reached the same conclusion when he pointed out that "time interacts with consumer behavior in several ways. Consumers invest large quantities of time gathering product information, often called shopping behavior" (p. 50).

Shopping as an activity requires the use of scarce resources such as energy, money and time. Hornik (1985) points out that among all the various resources involved in shopping, time has been researched the least, although in most writings one would find the arguments that shopping is a time-consuming activity (Berry, 1979; Granbois, 1977).

Moreover, most of the studies that relate time to shopping behavior deal primarily with "economic" time. More specifically using the household production approach which emphasizes the fact that market goods and services are not themselves carrying utility but are rather inputs in a process that generate commodities (or characteristics), which, in turn, yield utility. A second feature is that market goods and services are not the only inputs in this process, the other input being the consumer's time.

According to this economic approach (Becker, 1965) the consumer's utility is subject to the time and budget constraints, where utility is a function of commodities, which are produced using market goods and time. Hornik (1985) points out that such a framework can be used for considering how consumers may determine their shopping activities.

According to the economic approach consumers will assign values both to the benefits of shopping and the cost of time, effort, and money involved. The extent of the shopping activity (frequency and duration) is thus determined by the marginal rate; shopping continues until the value of an additional unit of shopping is equalized by its cost.

Even the use of economic time to explain shopping behavior implies some cognizance of "psychological time". Hornik (1985) points out that "individual differences occur because consumers differ in their value of time, which is thought to be subjectively valued according to the opportunity cost rule---the greater the number of activities competing for a unit of time, the greater its value. Time is further valued by its relationship with income, to the extent that time and money can be thought of as, at least partly, substitutable resources. For this reason the value of time becomes greater as one's income increases and the value of the next (marginal) dollar decreases" (p. 200).

McCall (1977) operationalized time pressure in terms of "hours of employment" pointed out that "since the working

wife has 40 less hours per week to perform the shopping function, she is very dependent upon marketing efforts to provide the appropriate products and services to the marketplace. The convenience aspect of shopping is becoming so critical for working wives, in particular, and all working women, in general, that the function of price is less significant" (p. 55). In his study McCall (1977) found that working wives are less likely than nonworking wives to (1) visit many stores, (2) make price comparisons of brand, and (3) read newspaper advertising.

Venkatesh (1986) explains that "through its operationalization in recent research, convenience is overwhelmingly implied to be equivalent to time saving or time buying. The theoretical framework for this definition lies primarily in the economic concept of the household as production unit" (p. 403).

It might be concluded from the above discussion that shopping behavior and shopping orientation are functions of time (i.e., time pressure), and that the harried person would be expected to emphasize convenience as a choice criterion. In contrast, the relaxed person tends to be price conscious, view shopping as a recreational activity, and look for variety.

There is some evidence which supports these expectations. Crowell and Bowers (1977) point out that time is an important factor in achieving the lowest cost market basket.

Opportunity costs of spending time in shopping would be different for each individual and would change as the person moved through the life cycle. The authors studied food shopping and concluded that decisions about food shopping procedures need to be made with awareness with low opportunity costs. They mentioned that for retired consumers with low opportunity costs, time spent shopping can be economically and psychologically rewarding. For the food shopper who is gainfully employed, opportunity costs might dictate shopping at one familiar supermarket which is geographically convenient. While the authors used economic time to explain shopping behavior, they implicitly implied psychological time by emphasizing the individual differences with regard to opportunity costs.

III. Attitude Towards Shopping and Shopping Behavior:

Hawes and Arndt (1980) point out that a wide variety of attitudes and preferences may affect how consumers spend their time. Particularly important are attitude towards activities, e.g., whether one enjoys the activity or regards it as appropriate or necessary for role enactment (McCall and Simons, 1978).

Hendrix (1979) hypothesized that individuals who regarded an activity as relatively enjoyable would spend more time in the activity than individuals who regarded the activity as relatively unenjoyable.

Robinson (1977) concludes that even some daily routines are psychologically rewarding and individuals arrange them in such a way that participation in these activities can be scheduled more frequently.

Winter (1975), in an experimental setting, manipulated the attractiveness of alternative activities and examined the impact on the time which consumers spent in acquiring price information. Individuals faced with an attractive alternative use of their time spent less time acquiring price information than their counterparts faced with an unattractive alternative. Juster (1978) suggests that activities may be characterized by process and/or outcome benefits. Hendrix (1979) claims that reinforcement which an individual receives from engaging in an activity may be synchronous or asynchronous--simultaneous with or removed temporarily from the expenditure of time, respectively. The author adds that given the subjectivity of individual preferences as well as the options available for effecting certain outcomes, one must often trade off synchronous for asynchronous reinforcement, and vice versa. Hendrix (1979) concluded that one might be forced to engage in an unenjoyable activity (in the individual's subjective estimation) in order to affect some desired outcome. Conversely, one might incur undesirable consequences in order to engage in an enjoyable activity.

Feldman and Hornik (1981) point out that the individual

choice of an activity is a function of its relative perceived value as determined by socioeconomic and personality traits. The author identified two basic elements in the subjective meaning of time, (a) the satisfaction intrinsic to participation in the activity, and (b) the satisfaction arising from association with others while participating. Hendrix (1979) added that for a given activity, the meaning will vary across individuals. Furthermore, subjective differences in meaning will result in individual variations in the perceived duration of an activity. The author stated that "it should be noted that it is not the content or location of the activity that defines work, homework, or leisure. Rather, it is the consumer who imputes a meaning to the activity. This evaluation may be based on whether the consumer perceives the activity as obligatory or discretionary, pleasant or unpleasant, active or passive, or free or constrained" (p. 412). This suggests that time devoted to the act of shopping is, at least partly, determined by attitude towards shopping.

Different attempts have been made to classify activities. One of these attempts is to classify activities as either obligatory or discretionary. Chapin (1974) noted the difficulties associated with classification and stated that "an exact assignment of an activity to either category would require interpretation of the activity in the context of a number of contingencies: meaning ascribed to that activity

by the culture and social system in which the subject falls, the actual defined household role being performed by the subject at the time of the activity, the subject's own taste and preference, situational factors surrounding the occurrence of each such activity, and the time frame" (pp. 70-71).

Robinson (1977) suggests three attributes--enjoyable, discretionary, and spontaneous--which distinguish leisure or free-time activities from obligatory activities. The author noted that "while there is some correspondence between the discretionary nature of an activity and its spontaneous or enjoyable character....it is far from complete" (pp. 137-138).

Hendrix et al. (1978) points out that classifying activities into a dichotomy (obligatory/discretionary) is entirely too restrictive and ignores the set of activities which contain elements of both obligation and discretion. As DeGrazia (1962) has noted, things with a sense of obligation may also be felt as enjoyable. Bell (1975) lends support by noting certain activities (e.g., sleeping and eating) which cannot be neatly assigned to either category of the work-leisure dichotomy. Chapin (1974) has observed that "the assignment of an activity to one or other category can vary with the person and the circumstances." Hendrix et al. (1978) extended the propositions devoted earlier and arranged activities along with a continuum according to the

degree of latitude one has in determining, in the short run, the amount of time so employed. At one end of the continuum are inelastic activities in which the individual has no latitude in determining time input. Employment, for many, may fall within this category. At the other end of the continuum are discretionary activities in which one may exercise virtually complete latitude in employing one's time (e.g., recreation). In between these extremes are intermediate activities, with which some latitude is associated.

It is assumed that shopping activities are seen either an inelastic or intermediate time expenditure. Empirical evidence indicates that the perception of shopping as something other than discretionary time may be a function of certain family structure and other variables (Reid, 1963; Anderson, 1971, 1972; Douglas, 1976; Arndt and Gronomo, 1977; McCall, 1977).

Hendrix (1979) pointed out that the theoretical basis for studying family structural variables is that some of these variables would tend to place pressure upon individuals to decrease shopping in order to reestablish optimal levels of discretionary time. This has been supported by many (Stampful, 1978); Wilson, 1981; Bellenger and Korgaonkar, 1980).

The preceding discussion indicates not only a relationship between attitude towards shopping and the time devoted to it, but also a relationship between time pressure and

attitude towards shopping.

IV. Shopping Behavior and Shopping Efficiency:

It is commonly assumed that by doing a thorough search of information on a product prior to purchase and by doing careful comparison shopping a consumer will make a better purchase decision and then be more satisfied with the product purchased. Despite the heavy reliance on this commonly held premise very few empirical studies have been reported in the literature exploring shopping behavior and shopping efficiency.

However, the efficiency of consumer decision-making has recently emerged as a subject for consumer research. Sproles et al. (1978, 1980) defined consumer efficiency as the degree to which a consumer obtains the greatest possible utility or satisfaction from a consumption decision, given a fixed set of resources allocated to the decision (i.e., time, money, information, effort and space). The authors (1978) indicate that consumers' efficiency in rating product quality and personal purchase preferences was likely to increase with increasing use of information. That is, the more information which is available and used, the more efficient or better the outcome of the decision is likely to be. In another study, the authors (1980) examined the difference between the perfectly efficient consumers and less efficient consumers in terms of the amount of informa-

tion considered and the types of informational cues that are selected and used by perfectly efficient consumers during the course of decision-making. Their findings indicate that increased efficiency parallels increased information. The authors operationalize the efficient consumer in terms of making the best choice.

Some researchers viewed consumer efficiency subjectively and measured it in terms of her satisfaction and confidence with her decision. Janis and Mann (1977) analyze the psychological dynamics of decision making and postulate various orientations to choice situations. These orientations are then related to the ultimate level of satisfaction with the resulting decision. The orientations are based on pre-decisional information search. The authors termed the highest information seeking orientation as "vigilant information processing" and is theoretically more likely to result in improving decisions as well as insulating the decision-maker from post decisional regret. The other orientations are based on lower levels of pre-decisional information seeking and are theoretically more likely to result in decisional miscalculations, less satisfactory choices. The authors state that careful search seems to alert the decision to all the potential negative consequences of the decision and prepare him eventually for their materialization. In other words, he is less likely to base his decision on unrealistic expectations that cannot be

fixed and may result in dissatisfaction (feeling less efficient).

Gardoza (1965) reaches a similar prediction of the effect of information search. He hypothesizes that decisional effort moderates the relationship between expectancy disconfirmation and subsequent product evaluation. Accordingly, when consumers have invested high levels of decisional effort in the form of prepurchase information search cognitive dissonance will occur when expectations are subsequently negatively disconfirmed and consumers will then reduce dissonance by raising their evaluation of the product. Even when expectations are confirmed, evaluation will be raised in order to consonant with a high amount of decisional effort expended.

Hughes (1977) in a field study, measured informational search by the number of stores visited prior to purchase. He reported that prepurchase information search was the strongest of several independent variables to measure consumer satisfaction.

Based on the above discussion, there is enough evidence that relates shopping behavior to shopping efficiency--more specifically, pre-purchase information search, choice quality, and consumer's satisfaction derived from that choice.

CHAPTER II

REVIEW OF RELATED LITERATURE

In chapter one, time pressure was presented as an implicit or explicit variable that included in each of the well known conceptual models of buyer/consumer behavior. As Hawes (1979) points out, "it seems to be accepted that time in some way exerts a 'pressure' upon various stages of decision process" (p. 446). In addition to the time dimension in shopping, the relationship between attitude towards shopping and shopping behavior and the relationship between shopping behavior and shopping efficiency have been explored. Since one aim of this study is to develop a measurement of time pressure and relate it to different demographical, attitudinal, and behavioral aspects in order to develop a profile of harried versus relaxed consumer, this chapter is devoted to the review of related literature on time. Furthermore, a general model of the shopping behavior of the harried consumer is to be presented and discussed.

I. The Concept of Time:

Time as a subject of inquiry has attracted thinkers over the ages, across cultures and disciplines, from the early philosophers--Aristotle, Socrates and Plato--through the modern thinkers--Locke, Leibnitz, Kant and Einstein,

including a long list of contemporary social scientists in anthropology, sociology and psychology (Fraser, 1966; Gorman and Wessman, 1977). Recently, the treatment of time as a major variable in understanding consumer behavior has been accelerating (Wesely, 1981; Hawes, 1979; Voss, 1979; Graham, 1981).

Among the philosophers, there were those who viewed time as an external reality, and others who saw time as a phenomenological, internal reality. This rough division of notions regarding time in its objective versus subjective features is reflected in the work of contemporary social scientists engaged in time research.

Fraser (1967) points out that the vast array of opinions regarding the nature and meaning of time as recorded in the literature demonstrate that there has always existed in both humanistic and scientific thought an intense preoccupation with the temporal aspects of reality. Meade (1967) points out that this abundance of views may be attributed to certain general causes: the idea of time is a constituent of all human knowledge, experience, and mode of expression; time is an entity that seems to be connected with the functions of the mind, it is a fundamental feature of the physical universe.

Settle, Alreck, and Belch (1981a) point out that there are three kinds of time that influence buyer/consumer behavior: economic time, socio-cultural time, and psycho-

logical time.

A. Economic Time:

The study of economic time takes the perspective that time is a commodity. Work in this area seeks to measure the trade-offs and elasticities among time, possessions such as money or goods, and space in the form of territorial area. The phrase, "Time is money", identifies this perspective and cites the possible trade-offs between time and possessions. The focus of study in this area relating to the purchase and consumption of goods often treats such things as the amount of search time a shopper might devote to one or more types of products or services. Identification of purchase priorities, frequency of purchase over time, and the time-line running through the purchase process are also topics within the context of economic time (Settle, 1979).

Stigler (1971) appears to have been among the first to consider the economic value of time in the economics of information. Given that price dispersion in the marketplace is partially due to insufficient information search on the part of the consumer, Stigler reasoned that if nonprice factors were not relevant to the amount of search, a complete search would be conducted and the lowest price would be found by everyone.

Mincer (1963) also admonished economists for omitting nonprice variables from their analyses and discussed how

such omissions could bias predictions. He was principally concerned with the tendency to ignore the opportunity costs of time and noted that many consumption activities involve specific costs to consumers over and above the money paid to the seller of goods, such as the contribution of complementary resources--including time.

Stigler's model of information search was also elaborated. Given two consumers, their relative search times will be a function of their income and the amount consumed by each. The model becomes more involved, however, when an alternative to time-intensive search is introduced, namely, the purchase of information. As Mincer notes "The consumer will buy information services, rather than conduct the search himself so long as the price per unit of additional information is less than the marginal revenue resulting from it" (p. 80).

Becker (1965) was one of the first economists to suggest that time is an economic variable of equal importance with market goods and services and money. As such, these factors are combined via the household production function to produce basic useful commodities from which utility is derived and supposedly maximized, subject to various constraints.

Linder (1970) adopted Becker's model in his book "The Harried Leisure Class". He defined time scarcity as the discrepancy between the demand for time and the supply of

it. He explains that "time, unlike other economic resources, cannot be accumulated. We cannot build up a stock of capital. As it passes, however, time puts into people's hand something that they can use. In economic terms, there exists a certain 'supply of time'. But there is also a certain 'demand of time'. Time can be used by individuals in work, with a view to acquiring various goods. Time can also be used in consumption, i.e., the process in which goods are combined with time, in attempts to achieve the ultimate utility in the economic process--material and spiritual well-being. Linder adds that the scarcity of a commodity is determined by the supply in relation to the demand. Such a scarcity is normally in the price. The demand of time by individuals is usually sufficiently high in relation to the supply to make time a 'scarce commodity' in the economic sense. But if time is an economic utility in short supply, then it must be distributed over its different sectors of use--different activities--in accordance with the general principles of economics. It means that people actually try to allocate their time in order to achieve a maximum yield. The yield on time spent working increases as the results of economic growth entails a general increase in the scarcity of time" (Linder, 1970, p. 2,3).

Hawes (1979) points out that the net effect of Becker's approach and that of Linder is to recognize that the value

of time changes for an individual (or family) at various stages in his (its) life cycle, and these changes induce substitution toward relatively cheaper input factors of production. When income, and consequently the value of time, is relatively high, the individual works more, takes less leisure time, and generally behaves in ways which conserve time and use money (and time saving shopping goods) relatively intensively.

Morgan (1968) recognizes that the cost of time varies among individuals. He argues that the self-employed consumer has a greater opportunity to decide how many nonwork hours can be transformed into work hours, while salaried workers may have more difficulty making such transformations.

Gronau (1973a), citing the adage that "time is money", addressed the question, "How much money is time?". Some of his findings were (1) the value of a woman's time increases with education; (2) the existence of children tends to increase the value placed on their mother's time, but this effect diminishes with the child's age, and (3) the effect of children on the way a mother values time interacts with her education.

Nichols, Smolensky, and Tideman (1971) considered the time-money trade-off as it relates to waiting in lines for goods and services. They state that "queuing raises the cost of acquiring the good with which it is associated and

that burden from queuing is a deadweight loss....When two individuals who value their time unequally wait in the same queue, they face different prices. Thus, those individuals with low-opportunity costs of time will wait in queues while those with high-opportunity costs of time will be more likely to pay higher prices to conserve time" (p. 312).

Hotman (1972) found that the value of the consumer's time, as well as the cost of the physician's time and medical commodities, is important in the medical services the consumer selects.

Acton (1973a) found that demand for medical services is already more sensitive to variation in time prices than true for travel and waiting time.

To summarize, economists view time as existing in limited and finite quantities--hence, it has value as a basic intangible resource having certain properties--it cannot be expended or stored, and that the freedom to use time as one chooses can be acquired through trading another resource, such as money and effort.

B. Socio-Cultural Time:

The study of socio-cultural time often focuses on the consumer's perceptions and behavior patterns that have been acquired as a result of the socialization process (Settle, 1979). This work will often attempt to reveal systematic differences in the treatment of time among various cultures,

sub-cultures or social strata. Various demographic categories are often revealed to behave differently in and toward time. Another aspect of socio-cultural time relates to the effects of the passage of time on purchase and consumption patterns. Settle (1979) points out that identification of life style transitions and typical consumption patterns for the various stages of the family life cycle fall loosely into this category because time is an independent variable that exerts influence directly or indirectly in either the long- or short-run.

Sociologists and home economists have generally studied time as socio-cultural variable. They adopted descriptive approaches to time expenditures, focusing on how time is expended for various activities. The method of measuring time expenditures is the time budget.

Kelly (1973) points out that most differences in resource availability, with three resources types specifying the activity constraints. One dimension is temporal (frequency and duration) aspects of activities--the time at which they take place, and the elapsed time from start to finish; the second dimension is purely economic, relating to the monetary cost of the activities; and the third dimension is spatial and refers to the location of these in terms of

distance, region and place. Using this latter dimension, activities can be divided, for example, into those carried out at home, and those pursued away from home. Feldman and Hornik (1981) proposed that in cases where time and money are scarce, there is an increasing pressure on spatial resources close to home, like beaches and forest preserves.

Individual use and choice of time are influenced by socioeconomic and demographic variables in a number of ways. Economic benefits and money costs have long enjoyed premiere status in evaluating the use of time in industrial society (Gutenschwager, 1973). However, Settle, Alreck, and Glasheen (1978) claim that selected demographic variables were better predictors of leisure activities than socioeconomic factors, and that education was by far the best single socioeconomic determinant of leisure choice. Both Robinson (1977) and Leibowitz (1972) found education, rather than income, to be a more important predictor of time allocation.

Sex and employment status have also been found to be valuable predictors of the use of time (Robinson, 1977). There appear to be sex differences in the perception of leisure activities (Ducan, 1978), with women being more homogeneous and intensive in their leisure time interests (Hawes, Tatarzyk, and Blackwell, 1975).

Differentiations by age, type of community, education, etc...appear to be important determinants of free time

(Ennis, 1968). Social variables of class, status, education and family have consistently been found to be related to leisure behavior (Kelly, 1972). Some of these variables were highly correlated to selected leisure activities, such as community activities. Variations in nonwork time were also explained by religious denomination (Whippler, 1970).

Family characteristics found to have a significant effect on the time spent at housework were family size, age, amount of time spent at job, presence and age of children, and presence of a dog or cat (Hall and Schroeder, 1970). Stage in the family life cycle (FLC) was found to be the most significant factor in the meanings of, motivation for, and satisfactions from leisure (Kelly, 1978; Landon and Locander, 1978). In many studies, FLC was better than age as a predictor of vacation travel and away-from-home lodging. It was correlated with ownership of many recreational products, such as boats, bicycles, and toys (Landon and Locander, 1978). After marriage, the leisure pattern changes drastically, and practical and economically useful activities prevail (Gronau, 1977). Feldman and Hornik (1981) point out that "family life cycle, as a composite of several important variables, matches needs with groups of people. As such, it offers a construct that can serve as a rich independent variable for the analysis of time allocation. It is also a means of segmenting markets into target groups whose recreational needs and subsequent behaviors are

relatively homogeneous" (p. 411).

A number of sociological studies have examined the effects of occupational status on the selection of leisure activities, but have arrived at conflicting conclusions. Studies by Cunningham et al. (1970) and Spreizer et al. (1974) suggest that occupational position influences time allocation, e.g. managers are more work-oriented, whereas professionals prefer vacations. Other studies (Bacon, 1975; Kelly, 1973) found that occupation had no effect on leisure preferences.

Income is both a socioeconomic variable and an indicator of the resources available to the consumer in the choice of activities. Generally, one would expect wage rate and work at home to be negatively correlated. Low-income groups will participate in low-cost but more time- and space-intensive activities. They will also spend more time at home than higher-income groups (Nanus and Abelman, 1973). Therefore, there is a significant relationship between income and the propensity for social interaction and participatory activities (Feldman and Hornik, 1981).

To conclude this section, one can say that the descriptive approaches to time allocation, which focus on how time is expended for various activities, indicate that the problem of time allocation has been studied as a leisure problem. As Linder indicates in his book "The Harried Leisure Class" that "intellectuals of the rich countries

fail to analyze the increasing scarcity of time, but instead devote a great deal of attention to the so-called leisure problem" (p. 11).

C. Psychological Time:

The study of psychological time takes the perspective that individuals vary in their time perception and time orientation. As observed by Wallace and Rubin (1960), time perception studies deal with extra-individual conditions where characteristics of stimuli are defined by the experimenter and involve relatively brief periods of time, while time orientation studies deal with intra-individual phenomena, span longer periods of time, involve past, present, and future time, and depend on projective and other subjective methods of measurement. Unfortunately, time perception and time orientation have been used by some researchers to refer to the same meaning (Settle, 1979; Settle, Alreck, and Michael, 1981a; Graham, 1981).

Time Perception:

Fraisse (1963) describes the perception of time duration as an awareness of change and a series of reactions which measures time intervals, but that this awareness is modified by attitude. He states that "the perception of duration is a function of our attitude, of which the most important seems to be the attention paid to perceived time. The

greater this attention, the longer the interval seems to be" (p. 47).

Graham (1981) emphasizes the role of time perception in consumer research. He states that "perception of time is an elementary construct in the building of a perceptual set. It is fundamental, and many other perceptions will be biased in one direction or the other depending on the person's perception of time" (p. 335). The author adds "as a person's perception of time is fundamental to the construction of a perceptual set, it would seem natural that people with different perceptions of time would perceive different cue patterns and thus have a different organization of reality. According to Graham, the different organizations of reality result in different patterns of consumption. This further supports the idea that researchers consider perception of time as an important variable when attempting to interpret consumer behavior" (p. 341).

Schary (1971) points out that "objective time may be substantially less important in determining time allocation than the consumer's perception of time duration. Perception might be influenced by how the consumer experiences time intervals, i.e., the physical conditions under which time is experienced, whether it involves disturbances and frequent interruption, and whether more than one activity can be undertaken simultaneously. A second influence could be the consumer's underlying attitude toward the activity.

Finally, perception may also be affected by a more general viewpoint which influences the consumer's whole attitude toward time allocation" (pp. 52-53).

Therefore, the perceived measurement of time intervals depends less on objective measurement than on perceived indicators of time duration and the attitude toward the activity. This was also suggested by Foote (1966) who conducted studies on time duration in which consumers not only measured the time intervals of specific activities, but also described their attitudes toward these activities. While Foote did not correlate attitudinal differences with deviations in perceived versus objective time, this is a potential outcome of this type of research. Foote also noted that consumers referred to activities in time-episodic dimensions with distinct beginnings and endings, lending support to the impression that consumers associate unique time outlays with specific activities.

In an early review, Woodrow (1951) pointed out that previous attempts to measure time as a physical entity have resulted in conflicting results. The search for a physiological "seat" or physiological correlates of time perception also yielded no consensus nor definite findings (Wallace and Rubin, 1960). Although part of the difficulty was due to the fact that several factors affect the perception of time and that different methods had been used in measuring time perception, the major problem, according to

Woodrow, lies in the unmeasurable quality of time itself. The author states that "time is not a thing, that like an apple, may be perceived. Stimuli and patterns of time occupy physical time, and we react to each stimulus by perceptions, judgements, comparison, and estimates, etc. The most significant factors in the estimation of time are external" (p. 1235).

Among the factors noted by Woodrow (1951) to affect the perception of time are: the characteristics of the stimulus itself (duration, intensity, serial position, rhythm, single or paired occurrence); the attitude of the perceiver (attentionality, manner of classifying and organizing stimuli); contextual factors (length of preceding temporal stimulus); and the nature of the experience by which time estimation periods are occupied (i.e., interesting activity seems shorter than one experienced with boredom).

Regarding the search for physiological seat, body metabolism, rhythmical physiological processes, and body temperature were likewise proposed as physiological correlates of time perception. Evidence in support of these physiological hypotheses have not been presented, however (Wallace and Rubin, 1960).

Studies linking time perception with diagnostic states have also been reported, but with inconsistent results. Doob (1971) and Gorman & Wessman (1977b) indicate that these studies have been fraught with methodological problems, both

in their lack of controls over the time intervals being judged, and in the assessment of personality dimensions. In general, however, general temporal disorganization has been linked with depression (Orme, 1965), anxiety (Wallace and Rubin, 1960), schizophrenia (Buckwald and Blatt, 1974), and psychopathy (Orme, 1965).

Other aspects of personality organization found to be linked with an overestimation of the passage of time (as opposed to underestimation) have been high extraversion (Buchwald and Blatt, 1974), the achievement motive (Greene and Knapp, 1959), a sense of danger (Langer, Wapner and Werner, 1961), juvenile delinquency (Hindenland, 1973), and adult perception of parents as dominant figures (Fisher and Fisher, 1953).

Despite the fact that time perception has not been studied experimentally in consumer behavior, there are now a number of fairly well-established theories in other disciplines to guide empirical work about the perception of time in consumer behavior (Allan, 1979; Hornik, 1984). A central proposition in these theories is that temporal and nontemporal variables might account for the differences in time perception.

Moreover, some theories have noted that there might be a relationship between perceived time and the frequency of engaging in the activity (Allan, 1979). In other words, the number of times the subject was involved in the activity

might influence his/her temporal judgment.

Hornik (1984) was one of few who studied the relationship between time perception and consumer behavior. The author tested four hypotheses regarding waiting line: (a) perceived waiting time is expected to vary with actual waiting time (temporal stimuli), (b) perceived waiting time is expected to vary with the length of the line (spatial stimuli), (c) consumers who regard shopping as a relatively enjoyable activity will underestimate the time in line more than individuals who regard the activity as relatively unenjoyable, (d) the frequency of shopping, in addition to personal characteristics, might influence individual perceptions of waiting time. Hornik (1984) found that respondent's level of enjoyment plays a stronger role than all background variables taken together in predicting subjective time estimates. These findings are consistent with others (e.g., Cottle, 1976) which show that subjects have a tendency to overestimate passive durations and underestimate active durations of time. Therefore, it is important to consider a time perception approach to time use studies. According to Hornik (1984), the common practice in consumer behavior of measuring time on the basis of standard measurable characteristics--rather than on a subjective feeling about it--is somewhat challenging. His results also cast some doubt on the use of recall methods, such as the widely used time diaries, as a valid measure of actual time

use.

Time Orientation:

Studies in this area may be categorized further into time orientation, time perspective, or attitudes towards time (Doob, 1971). As pointed out earlier, these studies differ from those on time perception or judgment in that they deal with more phenomenological, personal time sense.

The subjective quality of time orientation has resulted in conceptual and methodological differences in the area. Thus, one finds studies which assess the salience of time sense (Zern, 1970; Knapp and Garbutt, 1958), studies involving preferential emphasis on the past, present, or future (Le Shan, 1962); Kluckhohn and Strodtbeck, 1961), studies that deal with attitudes toward time (Greene and Knapp, 1959), and those concerned with the future time perspective (Meade, 1971, 1972).

Perhaps the most dramatic expression of the way time is conceived, and the most illustrative in terms of pointing out cultural and individual differences in time orientation lies in the expressions of time imagery. Time may be seen as linear and progressing, or cyclical and static.

Graham (1981) used these various time-imagery to construct three different models: Linear-Separable, Circular-Traditional, and Procedural-Traditional. The linear-separable model is similar to the Anglo image, where

time is seen as linear--that is, there is a past, present, and future--and is separable into various discrete compartments. The author states that people who share this linear-separable image tend to be future-oriented, do only one thing at a time, and equate time with money. In the circular-traditional model, time is seen as a circular system in which the same events are repeated according to some cyclical pattern. Those who share a traditional time perspective are often characterized as being oriented to the past. For the procedural-traditional model, the amount of time and money spent on an activity is irrelevant, as activities are procedure-driven rather than time driven. That is, the important variable in any activity is that it be done correctly when the time is right.

Graham (1981) compared these three models with the rational-actor consumer purchase model, as given by Engel, Kollat, and Blackwell (1968) which consists of the following steps: problem recognition by the consumer, a search for alternatives to alleviate the problem recognized, an evaluation of alternatives, product purchase, and post-purchase evaluation, in that order. The author argues that this model is consistent only with the linear-separable viewpoint. This may explain the great deal of variation that have been found among consumers in their decision-making processes.

The important point here is that no one image about

time is universally shared. This would mean that time orientation is a part of an individual's culture and like other parts of culture, it has an important influence on the individual's world view and subsequent behavior (Graham, 1981).

On the individual level, Knapp and Garbutt (1958) were able to classify subjects according to their choice of time metaphors. The authors observed three groupings by which time was imagined. To one group (also found to be high in Achievement), time was "a galloping horseman", "a dashing waterfall", "a speeding train", "a spaceship in flight", "a fast-moving shuttle", "a whirligig". To another, time was "a vast expanse of sky", "a quiet motionless ocean", "drifting clouds", "a wind-driven sand", while to a third group, time was a "winding spool", "a burning candle", "an old woman spinning", "a tedious song", "a large revolving wheel".

II. Determinations of Time Orientation:

Much theoretical discussion has been devoted to the factors that determine time orientation. Some researchers view time orientation as a part of human development, and emphasize the impact of age. Others studied culture and subculture as determinants of time orientation. Still, others emphasize individual characteristics as demographics and personality. These different determinants will be

discussed and analyzed as follows:

A. Time Orientation and Human Development:

There is agreement from both psychoanalytic theory and cognitive development that temporal awareness begins at birth and gradually emerges as the infant and then the child interacts with the natural and social environment in its striving to fulfill its bodily and social needs (Wessman and Gorman, 1977; Buhler, 1968; Piaget, 1966; Meerloo, 1966).

Empirical tests of these notions have been reported. Zern (1970) in a cross-cultural study concluded that perception of relationships with parents and the quality of nurturance during the first years of life both exerted an affect on attitude toward time during adult life. The author found that a relatively frustrating first year of life was correlated with a structured and salient sense of time in adulthood. Fisher and Fisher (1953) found that a consciousness of time as limited and controlled was correlated with subjects' perception of their parents as highly dominating during the early childhood years.

According to Piaget (1966), the development of cognitive functions parallels the development of temporal awareness. In many respects, the child's sense of time begins to conform with that of the adult at about the age of seven. Systematic observations by Ames (1946) indicated that awareness of the present time occurs first, followed by

awareness of the future, and then of the past.

Erikson (1968) pointed out that the adolescent years are characterized by an ability to achieve a sense of the future. In this period of the lifespan, there are increases in the ability to delay gratification and to view the realm of possibilities rather than only what is directly observable. The author has also suggested that among the cornerstones of adolescent adjustment is the development of a unified time orientation, that is, the ability to integrate the past, present, and future in a personally meaningful way. This hypothesis was tested empirically by Klineberg (1967), Davids et al. (1962), and Barndt et al. (1955). Klineberg found that normal adolescents were able to report a sense of the immediate and distant future whereas maladjusted adolescents were limited in their ability to do so. The studies by Barndt et al., and Davids et al., found significant differences in temporal orientation, greater present-orientation, and shortened time perspective in delinquent versus nondelinquent adolescents.

Buhler (1968) pointed out that it is during the early adult years, shortly before age 25, that a sense of one's lifespan as a time unit with a beginning and an end is first truly grasped. In the next phase, 25 to 45, life goals are set and actions taken to achieve them. She added that the healthy adult is one who lives predominantly in the present but is able to look toward the future as closely intertwined

with the present, and who performs realistic action and planning. An empirical demonstration of the relationship between present life assessment and affect regarding the future may be seen in a study by Bortner and Hultsch (1972).

Markson (1973) suggests that typically in their late forties, people become particularly concerned about their own aging. The passage of time appears to accelerate and time appears to have more value. Buhler (1968) also noted that during this latter period of the middle years, a time reorientation begins to take place. After age 65, life takes on a different character. Tasks of role relinquishment, and a greater preoccupation with the past appear. Peculiar to this period are greater retention of past memory and the decreased ability to absorb new information. The ability to delay gratification, a lifelong habit for the normal self-sufficient adult, is subordinated during the later years to a greater engrossment in the present and a utilization of the products of the past (Kastenbaum, 1966). Consistently, Gergen and Back (1965) found that, challenged to provide solutions to a number of international as well as national and domestic problems, older persons tended to prefer short-range solutions to those that would have required gradual unfolding of time.

Based on their assumptions that time orientation is determined by learning experience, Trommsdorff and Lamm (1975) argue that the learning experience of an adult will

be greater than of an adolescent. His ability to differentiate and his access to information will be more developed than for adolescents. In their empirical study, the authors found no difference in the variety of future-related concerns between adolescents and adults. However, persons from these two age groups differed significantly in the distribution of their concerns to specific categories of future events.

In summary, the studies relating time perspective and maturation point out that throughout the lifespan the personal experience and structure of time undergo constant change. This would suggest, therefore, an association between age and time sense that finds its peak during the middle adult years.

B. Impact of Culture and Subculture:

The relationship between culture and attitude towards time has been supported by a number of empirical studies. Kluckhohn and Strodtbeck (1961), studied five cultural communities in the American Southwest in the 1950's. The authors found that time orientation, defined as a preferential emphasis placed either on the past, present, or future, was one of a limited number of guiding principles or "value orientations" which people used in solving day-to-day problems. The authors observed differences in the temporal focus expressed in common behaviors of the subgroups they

studied. A group of Texan homesteaders, and a Mormon group--who most closely resembled "mainstream Americans" emphasized the future; Spanish-Americans and Navajos showed a preference for the present; while the Zuni Indian group was more oriented toward both present and past than the future.

Roberts and Greene (1971) found variations in time orientation among different subcultures in the U.S. The authors studied school children aged 10-16 from three subcultural communities--Anglo-American, Spanish-American, and American Indian--similar to those studied earlier by Kluckhohn and Strodtbeck (1961). In addition to providing supportive evidence of the latter's work, the study by Roberts and Greene suggested a further complexity of time orientation, i.e., that time norms were applied to different types of activities; social, religious, or economic.

A number of cross-cultural studies have been reported confirming cultural differences in time orientation. Meade (1971, 1972) found greater future orientation in male American college students and greater past orientation in male college students in Northern India. These types of differences in time orientation were found as well as by Melikian (1969), who compared "urbanized" Saudi Arabian students with those who came from more traditional families.

Social class differences in time attitudes have also been found. Gurvitch (1964) noted a correlation between salience of time awareness and social class. Le Shan (1962)

observed more present orientation among lower class children, and more future orientation in middle class children; while Rand and Ellis (1974) found more extensive and coherent future time perspective in middle class than in lower class men. Nowotny (1975) stated that "the poor have less time; they tend to live in the present" (p. 327). Luscher (1974) cites the findings of several studies that indicate that lower class children have a shorter time perspective than middle class children.

Trommsdorff and Lamm (1975) found that high social class persons are more extended future oriented than low status persons. The authors concluded that better educated among future oriented persons are characterized by a larger and greater variety of concerns, and a longer time extension in the future than is the case for less educated persons.

C. Time Orientation: The Impact of Gender:

Cottle (1976) points out that women may be more sensitive than men to the temporal features of their environment (public time). Men, however, seem to exhibit an orientation to chronological or moment-to-moment time which gives them a feeling of time's consistency. The author states that "women perceive the duration of the present in terms of the social context in which they are living. Their perception seems to be influenced, moreover, by a desire to make the present endure" (p. 174). In addition, Cottle

indicated that men, more than women, are more likely to have a "market orientation" towards time. He points out that "in the market orientation one must give up or pay something to get something.....This orientation encourages men to believe that each act or moment means one less act or one less moment in his reserve of acts and moments.....Women seem to experience the sense of growing deficit of time less than men. They seem to take each moment as it comes along without wondering how many moments are left.....Social roles, in other words, demand that men learn to deal with the future and women with the present" (p. 2). The author concluded in this psychological investigation that "men experience a feeling of being disengaged from the present which women do not feel.....Women tend to experience immediate gratification from their present efforts and work, whereas men consider expectation of future achievement to be more important than personal achievements experienced in the present" (p. 80).

Overall, men are more likely than women to accept the uncertainties of an orientation to the future and to treat the present as a series of preparations. On the other hand, women are more likely than men to have their time orientation changed as a result of marriage. Women who perceive marriage as a whole new start of life believe that their past has had little influence on the shape of their present and future (Cottle, 1967, p. 185).

Trommsdorff and Lamm (1975) hypothesize a different cognitive orientation toward specific future events for persons of different gender. The authors point out that research on sex-role learning has shown that sex-typed behavior and interests are socialized since early childhood. Females, Trommsdorff and Lamm argue, are more oriented toward social-emotional (expressive) behaviors while males are more oriented toward instrumental roles. The traditional socialization experience directs the concerns of females more toward family-related problems and the concerns of males toward public problems. The authors conducted a study to test these hypotheses. The results indicate that females had a more extended future time perspective, with more regard to family-related than job-related concerns. For males, the family and job-related concerns were viewed with about the same future time extension (with the exception of low status males who had a more extended future orientation with regard to job related concerns).

D. Time Orientation and Personality:

Persons diagnosed with mental illness, e.g., schizophrenia (Wallace, 1956) or alcoholism (Smart, 1968), were found to have a shortened and disordered perspective of time. In a study of adolescents in which social class was controlled, limited time orientation was found to relate with a greater tendency to steal that was not influenced by

race, sex, I.Q. or academic achievement (Brock and Del Guidice, 1963).

Knapp and Green (1959) found a relationship between n Achievement and the ability to judge duration of elapsed time. Knapp and Garbutt (1958) also found a relationship between n Ach and a more salient awareness of time. The authors found that subjects high in n Ach were more likely to denote time imagery denoting swift movement, whereas subjects low in n Ach preferred images with static connotations.

The ability to delay gratification, a characteristic also found in groups of adolescents who were high in n Ach, was found to relate with longer conception of future time and accuracy of perception of past events (Mischel and Metzner, 1962). As pointed out earlier, the ability to delay gratification in older subjects was found to decrease with changes in perception of the availability of future time (Gergen and Back, 1965).

Two studies on time and personality are noteworthy in that they investigated the association between the subjective experience of time with several rather than single personality dimensions in one study. The earlier one by Calabresi and Cohen (1968), based on responses from 539 subjects (male and psychiatric patients, and male and female students), identified four attitude factors (Time Anxiety, Time Submissiveness, Time Possessiveness, and Time Flexibil-

ity). These were related to specific psychiatric diagnoses and personality characteristics. A further factor analysis yielded two constellations of time attitude/personality relationships: Time anxiety and possessiveness were the dominant attitudes of persons who also experienced a high degree of emptiness and frustration, lacked self-confidence, and manifested dependence on old habits and directions from others; while time flexibility and time submissiveness was found in individuals who were comfortable with themselves and their environment. This typology is consistent with the Type A versus Type B characterization of the time sense put forth by Friedman and Rosenman (1974).

Wessman (1973) analyzed responses to a questionnaire obtained from 110 college students and identified four bipolar dimensions of temporal experience: Factor I, Immediate Time Pressure; Factor II, Longterm Personal Direction; Factor III, Time Utilization; and Factor IV, Personal Inconsistency. Each dimension was found to correlate with distinct clusters of personality variables. Of particular interest to this study is Factor I, which included items expressing the amount of time pressure characteristically felt by the individual, contrasting harassed lack of control versus relaxed mastery and adaptive flexibility. This factor loaded positively with personality measures indicating high emotionality, apprehensiveness, and nervous tension, and appears to be similar to Calabresi's

factor I, Time Anxiety. Wessman's Factor I loaded negatively with measures indicating low emotionality, self-confidence, calmness, but also with unimaginativeness and conventionality, somewhat reminiscent of Calabresi and Cohen's Factor II Time Submissiveness. Wessman's Factor II, Longterm Personal Direction, describes a sense of time that has continuity and is attuned to the effect of future events on current experience, denoting a sense of hope (the positive end) versus a lack of it (the negative end of the scale). This aspect of time sense is similar to that studied by Borthner and Hultsch (1972).

Both studies by Calabresi/Cohen and Wessman attest the intimate link between the awareness of time and general aspects of personality. Wessman's study is particularly significant because it captures in one investigation several apparently orthogonal dimensions by which time is experienced, thereby providing empirical support and justification to the panoply of time concepts and, consequently, of ways of measuring time that exists in literature. This allusion to the complex structure of the time concept raises the question about how time pressure is conceptualized/operationalized in the marketing and consumer research literature (Table II-1).

Hawes (1979) points out that "appropriate conceptualization of time pressure as a multifacted, subjective phenomena varying across different groups of people in

different ways at different times would seem to be a necessary first step. Simplifying the operationalization of this variable to "hours of employment", "hours spent shopping" or even "the inverse of time available" is not going to suffice if the true nature of the varying perception of time is to be determined" (p. 446).

In this study, "time pressure" refers to the psychological category of time. As we mentioned before this category includes the incorporation of predisposition related to time in the psychological makeup of the individual as durable personality traits (Settle et al., 1981a). Therefore, of particular importance here is to review the literature about two patterns of behavior Type A and Type B.

The identification of a particular time attitude that was characterized as a "chronic, incessant struggle to achieve more and more in less and less time" surfaced in the clinical practice of two cardiologists who in the 1960's observed a characteristic "action-emotion complex" among patients who they had seen over a number of years.

Although the initial focus of their research on cardiovascular disease was on the role of cholesterol and metabolic disturbances, they came to recognize a recurrent syndrome of overt "Type A" behaviors manifested by their patients who were predominantly male executives (Friedman and Rosenman, (1959). A central component of this behav-

TABLE (II-1)

TIME PRESSURE: HOW IT IS CONCEPTUALIZED
AND/OR OPERATIONALIZED IN THE LITERATURE

The Author(s)	Conceptualization and/or Operationalization
Engel, Kollat, and Blackwell (1973)	- In their first version of their model of buying behavior, time pressure was implicitly included as a familial factor-due in part to working condition. - Time pressure was not defined.
Engel, Kollat, and Blackwell (1978)	- In the last version of their model of buying behavior, time pressure was explicitly included as anticipated circumstances. - Time pressure was not defined.
Howard and Sheth (1969, 1974, 1977)	- Time pressure was included in their model of buying behavior as an exogenous situational variable. - The authors defined time pressure as the inverse of the amount of time the buyer has available to perform the behavior required for the acts of purchasing and consumption.
Hansen (1972)	- The author viewed time pressure as a cognitive conflict (arousal). - Time pressure was operationalized in terms of the time available before making the decision.
Becker (1976)	- The author defined time pressure as an economic constraint, objectively measured.
Schary (1971)	- The author defined time pressure in terms of the consumer perception of the available time supply.

TABLE (II-1) CONT.

The Author(s)	Conceptualization and/or Operationalization
Settle and Alreck (1976)	- Time pressure was defined subjectively in terms of perceived time supply relative to activity.
Wright and Weitz (1973)	- The authors viewed time pressure as a situational variable, and operationalized it in terms of the time spent on decision making. . The quick decision: A subject was told she had 10 seconds to review each profile before expressing her judgment. . The slow condition: A subject was told she would have 40 seconds to review each profile before expressing her judgment.
Moore and Lehmann (1980)	- Time pressure was viewed as a situational variable and subjectively measured in terms of the subject's perception. - The authors measured time pressure every week by obtaining subject's degree of agreement with the statement, "I feel especially rushed for time this week". They used 4 points scale.
Claxon, Fry, and Portis (1974)	- Time pressure was measured in terms of the deliberation time and the deliberation process respectively.
Katona and Mueller (1955)	- They measured time pressure objectively in terms of the actual time spent on decision making.
Farley and Ring (1974)	- Time pressure was measured as the inverse of the "wife's hours per week of employment".
Lehmann, et al. (1974)	- Time pressure was measured as time spent shopping.

TABLE (II-1) CONT.

The Author(s)	Conceptualization and/or Operationalization
Reilly (1981)	- Time pressure was defined in terms of perceived role overload, which the author defined as a type of role conflict that results from excessive demands on the time and energy supply of an individual.
Wessman (1973) and Calabresi and Cohen (1958)	- They defined time pressure as distressing feelings of being rush and pressured, being over-burdened with things to do, being scattered and disorganized and running out of time.
Schellinck (1981)	- Time pressure was viewed as an objective situational variable and was manipulated by having the high time pressure group evaluate pagers and then cameras in the time it took the low time pressure group to evaluate pagers.

ioral syndrome was the sense of time urgency. In subsequent papers, the time urgent Type A person was characterized as anxious to fill up time with purposeful, goal-oriented behavior, to accelerate the rate of all activities, and to be excessively punctual and time oriented (Matthews, 1982).

The importance of time urgency in Type A behavior was experimentally investigated in several studies by David Glass and his colleagues (1977) who based their findings mainly on data from male college undergraduates. Krantz, Glass and Snyder (1974) found that the Speed and Impatience items of Type A-B scale factored into a measure of time urgency that was more important in determining Type A versus Type B reactions to situations which typically elicited Type A behavior, than was the use of the total A-B scale. Glass, Snyder and Hollis (1974) and Gastorf (1980) also observed behavioral evidence of greater time urgency among persons identified as Type A's. These studies provide convincing support for earlier reports by Rosenman and Friedman that time urgency is an important aspect of Type A behavior.

Without exception, no empirical study tried to address the impact of an acute sense of time pressure as it is experienced by consumers and their behavior in the marketplace. Nevertheless, from the reviewed psychological studies, a consensus is apparent that being highly time pressured is associated with negative rather than pleasant

emotional states. As seen by Calabresi and Cohen, persons who are anxious and pressured about time tend to lack self-confidence and to express feelings of frustration. In Wessman's study, time pressured persons are emotional, apprehensive, and nervous. In Glass' studies, time pressured persons are likely to be impatient, and according to the gamut of Type A literature, time pressured persons, though hard-driving and hard-working, do not usually derive enjoyment from what they do (Jenkins, 1971).

In conclusion, individuals vary in their time perception and time orientation. These differences result in different organization of reality. As the literature suggests there are two different types of people: those who are harried, and those who are relaxed. Sense of time urgency is the major difference between these two types.

III. SHOPPING BEHAVIOR OF THE HARRIED CONSUMER: A GENERAL MODEL

Nicosia and Rosenberg (1972) point out that "if the study of buyer behavior is to make substantial advances towards development of a theory of buyer behavior, it is necessary to design models that translate known or postulated causal relationships into structures with more defined theoretical and empirical implication". Monroe and Guitinan (1975) point out that "such substantive models advance the efficiency of research by (1) clarifying the

structural relationships underlying the phenomena of interest, (2) uncovering meaningful alternative research hypotheses, (3) improving the understanding of the empirical results, and (4) facilitating the selection of an appropriate data analytic model. These results are achievable by a modeling process that seeks to define and then evaluate alternative causal networks" (p. 20).

As it was indicated in chapter I considerable theoretical models have been developed that include time in general and time pressure in particular as an important variable affecting buying behavior. Valuable insights into buyer behavior can be secured by examining time pressure as a major determinant of shopping behavior. Clearly, there is a real need for an integration of relevant knowledge into a structure that may aid our understanding of the shopping behavior of the harried consumer who is expected to dominate the market in the near future.

In the following section we will discuss a theoretical model that relates time pressure to shopping behavior. As it is indicated the theoretical base of this model draws on a modified economic production function model (Etger, 1978; Gronau, 1977), on role-overload concepts (Reilly, 1982), the subjective preference propositions in time use studies (Hornik, 1982), the concept of time perception (Fraise, 1963), and time orientation (Doob, 1971).

In addition to the literature review, this model was

the outcome of a qualitative exploratory research. In this exploratory research, twenty-one indepth interviews were completed with females aged 30-50 years. Each interview took between 25 to 45 minutes, in which subjects were informally asked about their attitude towards time and shopping, their shopping behavior, and their home and work involvement. These women were different with regard to their marital status, education, occupation, and social class. Nine of these interviews took place over the phone, whereas the remaining thirteen were personal interviews.

As it is shown in figure (II-1), the model consists of three components. The three central components of the model will be discussed in sequence. First, the factors that affect time pressure are delineated. Second, coping or adaptation strategies initiated by harried shopper are explored. Third, possible behavioral and attitudinal outcomes stemming from shopping under time pressure are discussed. The premise underlines this model is that psychological or perceived time pressure is a function of several environmental and individual variables. The presence of these conditions results in a feeling of time pressure. In turn, coping or adaptation strategies are evoked and behavior is altered.

A. Dimensions of Time Pressure:

Based on the previous literature review, it is post-

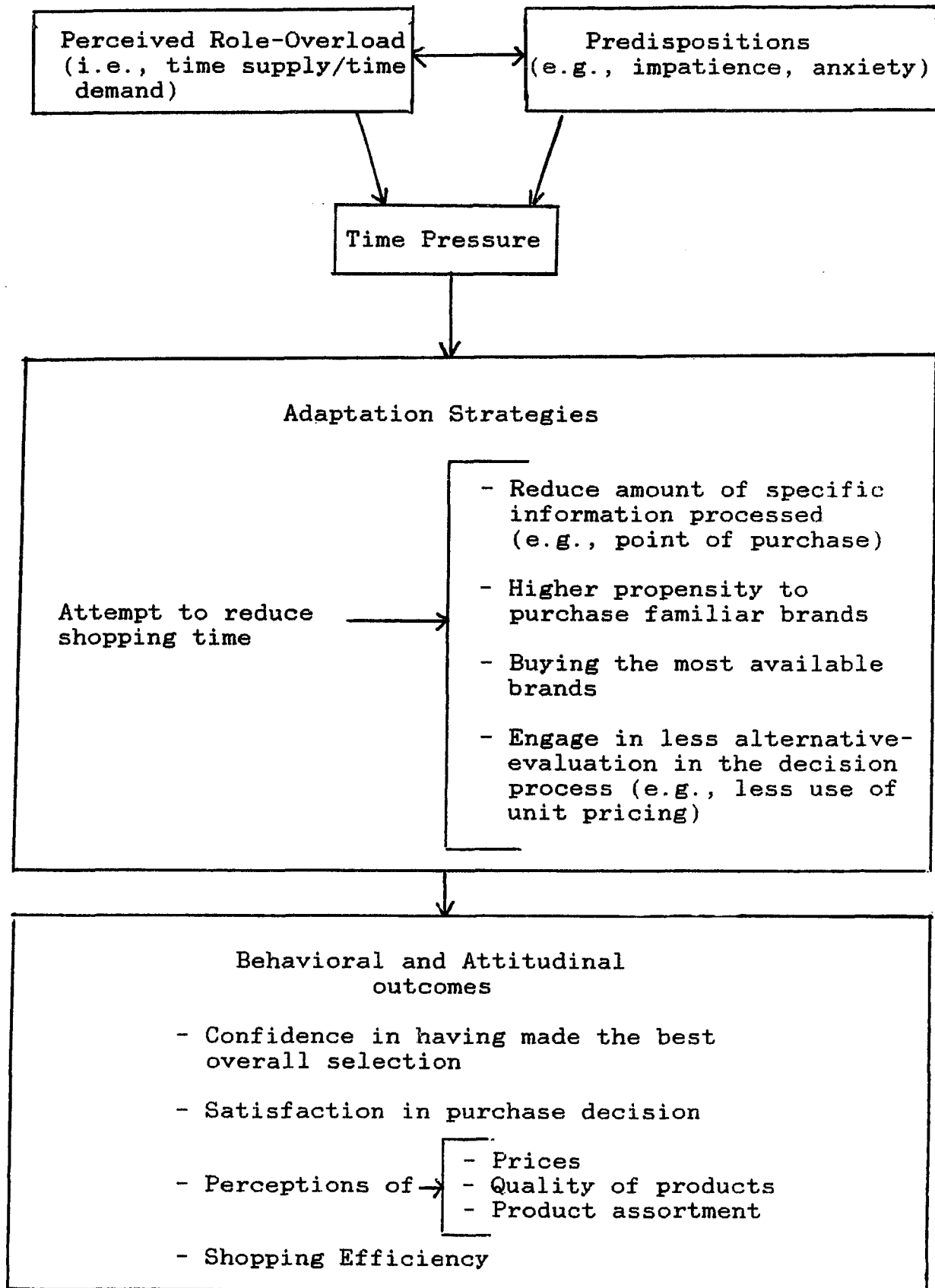
ulated that perceived time pressure consists of two fundamental dimensions, (1) Role-overload: a type of role conflict that results from excessive demands on the time and energy supply of an individual (Reilly, 1982), and (2) Personal predispositions (i.e., impatience and anxiety, Wessman (1973) and Friedman (1969)).

1. Role Overload

Role theory has been used by many researchers to explain some aspects of consumer behavior. Role theory attempts to explain how social structure is typically conceptualized as consisting of five types of social institutions, the family, the economic system, the political system, the educational system, and the religious institutions. Each institution contains a number of interrelating positions (Bates and Harvey, 1977; Levy, 1952). A position is defined as the behavior expected of an institutional member. Each individual in society occupies positions in a number of institutions. Merton (1957) pointed that each person has a position set which consists of all positions occupied by a given individual across social institutions. The behavior of an incumbent in a position is usually defined as individual's role enactment. According to Merton, different individuals enact similar positional expectations differently. Further, some latitude in individual interpretation of positional expectations is

FIGURE (II-1)

SHOPPING BEHAVIOR OF THE HARRIED CONSUMER



allowable because of innate individual difference. Another explanation for discrepancies between positional expectations and actual behavior recognizes some positional expectations conflict. This notion has generated extensive research in sociology, psychology, and organizational behavior (e.g., Sieber, 1974; Beehr, 1976).

Reilly (1982) and Schaninger and Allen (1981) stated the importance of the differences in levels of role overload experienced by working wives. Reilly (1982) proposed that role overload results in role conflict which occurs when demands on time and energy exceeds the amount of time and energy available. The role overload notion formalizes the thinking which led earlier researchers to the hypothesis that working wives would presumably be more convenience oriented in their consumption. Reilly (1982) postulates that "one might expect a working wife to experience more role overload than nonworking wife, since the work would create additional demands on her time and energy supplies. The working wife might try to minimize her role overload by saving time and energy in the performance of household chores, including serving convenience foods and/or buying time-saving appliances. Accordingly, the family in which the wife works should exhibit greater convenience consumption than a family in which the wife is not employed outside the home" (p. 408). Yet the data consistently fail to indicate any differences in convenience-consumption patterns

by a wife's employment. Reilly (1982) indicates that it may be that one of the two premises is incorrect, "Either working does not necessarily lead to role overload, or convenience consumption is not used by working wives to reduce their role overload" (p. 409).

Some theoretical support exists for the first of these possibilities. Sieber (1974) suggested that the positive outcomes from occupying an additional position might well outweigh any additional role conflict and role overload that such occupancy creates. He described four basic positive outcomes: role privileges, status security, status enhancement, and personality involvement. Because of these benefits, working wives might not perceive additional role overload, even though their total workload has increased.

Marks (1977) suggests that the time and energy devoted to a particular position may reflect the individual's commitment to that position, as well as the availability of time and energy. Reilly (1982) points out that "in some cases, excuses offered by uncommitted individuals for their lack of participation may be mistaken for role overload. He adds that the role overload expressed by working wives in their family role might be low because of their commitment to that role" (p. 409). The author introduced a third argument against increased role overload follows from the position set. He claimed that the time and energy demands of all positions in the position set contribute to the role

overload. He postulates that "working might not cause role overload for a wife if the rest of the positions in her position set are not demanding. She may experience less role overload than a non-working counterpart with several children in diapers. In fact, many women work because they are bored and thus, may experience very little role overload" (p. 409).

Joag, Gentry, and Hopper (1985) state that any relationships between Reilly's (1982) concept of the role overload and occupational status is based on the very tenuous assumption that role overload increases with the status of one's occupation. Thus, the use of a demographic variable (occupational status) is insufficient, as it is the perception of the role overload by the individual herself that would affect her behavior not the overload by itself. The authors state that "what constitutes role overload varies as the overall capacity of an individual to meet various time and energy demands is not a fixed quantity. This capacity is flexible, and it may depend upon the individual's motivation for performing these roles" (p. 583).

Several researchers have attempted to capture the work motivation construct by using various classification schemes. Bartos (1977) discusses a Yankelovich survey that asked working women: "Do you consider the work you do just a job or a career?". In her own research, Bartos (1977,

1978) defined groups of women: stay at home, plan to work just a job, and career-oriented. Larger (1982) suggested the use of four categories of working women, as based on their attitude toward their work: high energy achiever, involved worker, conscientious worker, and toiler. Hafstrom and Dunsing (1978) used monetarily-motivated and non-monetarily-motivated classifications, and suggested that those who work for monetary reasons may view their purchases as ends in themselves while those who work for non-monetary purposes may be more likely to regard their purchases of consumptive items as means to ends at the time of purchase. Similarly, Rosen and Granbois (1983) found that the wives' motivation for working (for monetary reasons or not) affects the husband's and wife's roles in the family's financial decision making. Joag, Gentry, and Hopper (1985) integrate the wife's work role (occupational status) with the wife's work goal (her motivation for working) in a broader model. The authors' view is that role overload is not just a function of the demands of a total position set as Reilly (1982) suggests, but rather a function of the match (or mismatch) of the wife's roles and goals. The authors state that the wife's perception of role conflict and role overload may not result from conflicting and competing demands and pressures caused by different roles in her position set. Rather the match (or mismatch) between her goals (which define her desired status) and her roles (which

define her actual status) would determine her motivation to carry out the various roles and, in turn, have an impact on her purchase behavior. They conclude that a working wife with a career as her goal may perceive role overload in house work, while one whose goal is that of being a good homemaker may perceive role overload in her job. Therefore, the actions taken by the two in reducing their perceived overload may be totally different.

2. Personal Predispositions:

Psychological time pressure encompasses more than perceived role overload. Several personal characteristics may moderate the degree to which time pressure is perceived. The most important variables appear to be impatience and anxiety.

Evidence has accumulated in recent years showing a specific behavior pattern called "type A" (Rosenman and Friedman, 1959, 1974; Jenkins and Messinger, 1966). The type A behavior is characterized by extremes of hard driving, competitiveness, time urgency, and preoccupation with vocational and related deadlines. Glass, Snyer, and Hollis (1974) point out that the type A pattern is not independent of eliciting circumstances: it is a behavioral effect of a challenging situation on a characterologically predisposed individual. Appropriate situations evoke an A reaction in specific types of individuals.

Classification of subjects as type A or type B is usually based on a standardized interview (e.g., Rosenman et al. 1966) or a self-administering questionnaire called the JAS, i.e., the Jenkins Activity Survey for Health Prediction (Jenkins, Zyzanski, and Rosenman, 1971). A modified version of the latter technique was used in the Krantz et al., (1974) research. Illustrative item from this version are (1) "Has your spouse or some friend ever told you that you eat too fast?", where a type A response is "Yes, often" and type B response "Yes, once or twice, or no", (2) How would your wife (or closest friend) rate you?", where definitely hard-driving and competitive are A responses, and definitely relaxed and easy going are B responses (Glass, Snyder, and Hollis, 1974).

Following Zyzanski and Jenkins (1970), Krantz et al., (1974) computed two factor scores from the JAS, along with the a prior: A-B scale score. These factors were called Hard-Driving (H), and speed-and-impatience (S). The results showed that while A-B scale contained items loading both H and S, the latter dimension--a measure of time urgency--was more important in determining the relationship between the type A pattern and reactions to uncontrollable noise. A sense of urgency, then, appeared as a dominant feature in the type A's differential responsiveness to uncontrollable stressful events.

Bortner and Rosenman (1967) indicate that time-

conscious people who work near maximum speed, have difficulty slowing down and overreact when required to slow down. Glass, Snyder, and Hollis (1974) found that A's became more impatient and irritated when their activities are needlessly delayed by others. Rosenman, Friedman, and Jenkins (1968), and Friedman (1969) report that type A exhibits considerable impatience at being slowed down. Theorell and Rahe (1972) have shown that A's report greater hostility after being delayed than type B's.

Mathew, et al. (1977) found that competitive drive and impatience are associated with type A behavior. By using item analysis the authors found that four items reliably discriminated type A's and type B's. These items are explosive voice modulation, rigorous answers, potential for hostility, and irritation at waiting in line. The authors used the items "competitive in games with peers", "feels that the time passes too slowly", "anger is directed outward", and "gets angry more than once a week".

Although type A research has commonly relied almost exclusively on the structured interview and JAS (Jenkins Activity Survey) to identify type A's and type B's, there has been increasing interest in fleshing out personality dimensions of pattern A. Wessman (1973) studied the relationship between personality and time perception. He found that people who feel harassed by, or lack control over time tended to be highly emotional, nervous, and apprehen-

sive. In addition they appear to have a high degree of imaginative fantasy and self-absorption. On the other hand, people who feel relaxed mastery of and flexibility toward time displayed low emotionality, confidence, calmness, ability to cope with stress, and orientation to the here and now. The author states that "characteristic ways of experiencing and utilizing time vary greatly among individuals among dimensions that can be assessed and measured, and that these differences are meaningfully related to personality characteristics" (p. 103).

Chesney et al. (1981) administered a large battery of standard personality inventories to male corporate employees along with five measures of the type A pattern. The results showed that the aggression scale best discriminated type A's from type B's and in fact did so more reliably than did the JAS. The authors suggested that type A's may be described as aggressive dominant, quick thinkers, self-confident, autonomous, and extroverted as well as hard-driving, competitive, and time urgent.

From the preceding, we argue that operationalizing time pressure, as one dimension concept, in terms of role overload is insufficient. In addition, we have to consider the other dimension. That is personality characteristics that reflect type A behavior. Our perspective is that these two dimensions interact together to create a distressing feeling of being rushed and pressured, being over-burdened

with things to do, being scattered and disorganized and running out of time.

B. Adaptation strategies:

In order to cope with these distressing feelings of being rushed and pressured, the harried consumer will adjust her activities. Several researchers adopt this perspective. Strober and Weinberg (1980) state that given the greater time pressures faced by employed wives, as compared to non-employed wives, employed wives will more frequently and/or intensively utilize strategies to reduce time pressures. Short of reducing hours of paid employment, they identified several possible strategies, or combinations of strategies, that wives can use to economize on time, the authors specify the following strategies: (a) substitute equipment for their own nonmarket labor, holding constant total quantity and quality of household production, (b) substitute the labor of other (paid help, husband, or children) for their own nonmarket labor, holding constant total quantity and quality of household production and/or use own labor more intensively or efficiently when engaging in such production, (d) decrease time, if any, allocated to volunteer and community work, and (e) decrease time allocated to leisure and/or sleep.

McGrath and Rotchford (1983) pointed out that under the feeling of time pressure, it is activities, rather than

time, that tend to be adjusted to resolve any mismatch there may be between the two. They add that individuals in either relaxed situation or harried situation can either decrease or increase, respectively, the number of activities to be performed and/or the time requirements associated with those activities. McGrath and Rotchford (1983) suggest the following coping strategies: (a) controlling the when activities, (b) balancing load in cyclical systems, (c) alteration of the subjective experience of time and load, (d) altering the rate of events/activities, and (e) recovery of wasted time.

How does the harried consumer cope with her feeling of time pressure? Several alternatives may be made in the shopping plan. First, she may attempt to reduce shopping time. The prevailing concern with time leads to a greater reliance on a shopping list and to a tendency to shop at the nearest store. A woman that experiences acute sense of time urgency may prefer to shop at a specialty store for her clothes rather than a department store.

Another shopping adaptation strategy is to devote less time to each purchase decision. This can be done by the elimination of a careful evaluation of alternatives. Thus a harried buyer relies on familiar brands and engages in minimal exploratory shopping. Similarly, the confusion and haste infused into a shopping trip by a feeling of time pressure may serve to reduce the amount of specific informa-

tion processed by the consumer. The harried consumer's willingness and/or ability to examine unit price information, ingredient listings, nutritional data, and in-store advertising may be constrained by her feelings of time pressure.

Time pressure may likewise influence patterns of interpersonal communication within the store. Fewer special requests (e.g., meat cuts) may be made by shoppers. The harried buyer may engage in weaker forms of involvement with store employees. Time pressure may be a contributing factor to this reduced level of communication.

A number of investigators have studied the effects of time pressure (viewed differently) on shopping behavior. Although most (if not all) of those studies have conceptualized time pressure as a situation variable, and operationalized it in terms of working status (e.g., working-non-working; full-time/part-time), some of those studies nevertheless help clarify the strategies that the harried consumer adapts in order to cope with her feeling of time pressure.

Wright (1974) investigated simplifying strategies that people use in adapting to a different information processing environment. He predicted that consumers under severe time pressure would tend to place greater weight on negative product information than would consumers under less pressure. Therefore, decision models assuming disproportion-

ately heavy weighing of negative information provided best-fits to more subjects in the high time-pressure conditions than in the low time-pressure conditions (Wright, 1974).

Jacoby and his colleagues have examined the relationship of information acquisition and time expenditures to consumer information displays. Jacoby (1974) stated that time considerations are becoming an increasingly important aspect of all forms of human behavior, with consumer behavior being no exception. He stated that time has value and consumers seek to reduce time for mandated activities (such as routine supermarket shopping chores) to gain free time for more desirable activities. This suggests that the relationship between time pressure and shopping behavior may be mediated by the consumer attitude towards shopping.

Stamm (1969) points out that under circumstances of high time pressure people were more likely to request information about a single alternative. In his study, Stamm used time pressure as a measurement of conflict and defined it as the amount of time remaining before one must make a decision.

Katona and Muller (1955) reported that when consumers felt urgent need for a product (form of time pressure), the extent of external search decreases. Jacoby, Szybillo, and Berning (1976) reached the same conclusion; the greater the perceived urgency, the less time devoted to information acquisition.

Bettman (1979) considers time pressure as a choice environment factor that influences the time devoted to external search. He argues that since time pressure influences the degree of control the consumer can have over internal processing rate, such pressure may affect search behavior. The author also indicated that time pressure could adversely affect consumer processing of the package's information.

Donohew and Tipton (1973) indicated that in many situations the search is cut off by running out of time, rather than by a decision on the part of the individual about whether or not information is sufficient.

Swan (1969) has shown that consumers who seek an optimal solution to a brand-choice problem search for more information about more brands than do those consumers who seek a satisfying solution. Therefore, time pressure may be the reason which makes consumers very often satisfice rather than optimize. Zaltman and Wallendorf (1973) stated that consumers choose a satisfactory brand from those which are immediately available rather than wait and make a detailed search of all stores in the neighborhood in order to choose the best brand. This result is more applicable for the harried consumer. Bettman (1979) also states that if the consumer is under time pressure in making a choice, inferences made from previous outcomes may not be implemented, but a previous choice simply be repeated.

Jacoby, Szybillo, and Berning (1976) point out that growing shortage of time in highly industrialized societies results in brand loyalty. Research indicates that working wives generally spend less time grocery shopping, buy more convenience foods and tend to be more brand loyal than non-working wives (Carman, 1970; Jacoby, Olson, and Kaplan, 1970). Carman (1970) found that the non-loyal consumer is a full-time housewife who has the time to shop, while the loyal consumer is the busy woman who is working and values her time in such a fashion as to devote little attention to entertaining, cooking, and being a careful shopper.

Roselius (1971) indicated that being brand loyal and purchasing major (national) brands are the two most common strategies that consumers employ to reduce perceived risk of time loss (time, convenience, and effort wasted in getting a product adjusted, repaired, or replaced). Anderson (1972b) and Douglas (1976) reached the same conclusion. They found that working women averaged fewer food-shopping trips in a given week than nonworking women. In addition they found that working women tend to be brand loyal in order to reduce shopping time.

Shraier (1974) suggests an alternative pattern of behavior when the consumer wants to economize on buying time. In order to avoid searching for information and deliberating on the brands to be bought, their sequence, and their shares in purchases, the consumer may buy at random.

Alternatively, she may buy brands according to the ease of acquiring them. For example, if a given brand is arranged in special display or in a convenient location, so that it attracts customers' attention, the consumer might buy it.

Howard and Sheth (1969) stated that buyers under time pressure are less apt to adopt a new brand. Jacoby, Szybillo, and Berning (1976) pointed out that the consumer is less likely to learn about new product offerings and less likely to try one even if she does learn about it. Empirical evidence (Frank, Massy, 1965; Myers, 1967) indicated that working wives (who experience more time pressure) were less inclined to adopt new brands.

Regarding time devoted to the act of shopping. McCall (1977) pointed out that since the working wife has 40 fewer hours per week to perform the shopping function, she is very dependent upon marketing efforts to provide the appropriate products and services to the market place. He adds that the convenience aspects of shopping are becoming so critical for a working wife in particular and all working women in general, that the function of price is less significant. In his study, McCall noted that working wives are less likely than non-working wives to (1) visit many stores, (2) make price comparisons of brands, and (3) read newspaper advertising.

Redman (1980) found that working wives buy more prepared foods than do nonworking wives. Nichols and Fox

(1983) found that working wives have a greater tendency than housewives to purchase meals outside the home. They also pointed out the additional time pressure on working wives, which manifests itself in time-buying and time-saving behavior. Jackson, Mcdaniel, and Rao (1985) propose that time consciousness may result in certain food purchase-and preparation-related psychographic differences between working wives and housewives. The authors compared the responses of 246 working wives and 181 housewives to several food shopping-and preparation-related psychographic statements. The results show that working wives tend to have a great dislike for food shopping and cooking and seemed to stem primarily from time considerations.

Covey (1983) examined the relationship between a sense of time urgency and various indicators of psychological and physical well-being. The author developed a measurement of time pressure that is composed of two factors: an over-concern with filling time productively, and speed-impatience. She found a positive association between time urgency and frequency of eating in fast food restaurants. This relationship was strongly borne out by the data.

Viewing time pressure as situational variable, Mattson (1982) and Hornick (1982) found a relationship between time pressure and store patronage. More specifically, consumers were found less likely to visit department stores for first or subsequent visits when they are time-pressured than when

not time-pressured (Mattson).

Palachek (1983) investigated consumption time when waiting in line; specifically the negative aspects associated with consumption time. The author limited consumption time to the time spent in the actual shopping situation. To describe what is viewed as negative, wasted or unproductive consumption time spent in waiting lines, the author used the term "regret time". The data suggests that individual regret levels affect shopping behavior for those individuals in long waiting lines. However, the regret levels of individuals in medium and short waiting lines have no significant impact on shopping behavior. In particular, it appears that individuals with high regret levels in long waiting lines will alter their shopping behavior by switching stores in the future and shopping at off-peak hours. In contrast, individuals with low regret levels in long waiting lines will tend to stand in the grocery store waiting line and not alter their shopping behavior. In this study, it is clear that the concept of regret time was operationalized in terms of consumer time consciousness.

An important branch of research concerns itself with shopping orientation. The aim is to develop a typology of shoppers, using time devoted to the act of shopping and the enjoyment derived from the activity as classification criteria.

Jacoby, Szybillo, and Berning (1976) point out that one

consideration in people's orientation towards shopping is their view of alternative uses and expenditures of time. Do they enjoy spending time shopping, or do other alternative uses of time have higher priority? It has been suggested that for some people shopping may be a very enjoyable use of time without respect to the purchase of goods or services.

In an exploratory study on why people shop, Tauber (1972) found that they do so for many reasons other than the need for products and services. Stone (1954) identified four types of shoppers: the economic shopper, the personalizing shopper, the ethical shopper, and the apathetic shopper. Again the author used time and enjoyment as criteria in his classification scheme. Demby (1972) distinguished between two types of consumer: the creative consumers, and the passive consumers. He used the shopping behavior as criterion.

Bellenger, Robertson, and Greenberg (1977) suggest two shopper types: (1) the convenience shopper and, (2) the recreational shopper. The authors state that the segment that value convenience most highly in selecting shopping centers also indicated a strong negative interest in shopping as a leisure activity. On the other hand, the segment that sought quality and variety in center selection expressed a strong and positive interest in shopping as a leisure activity. The authors found that differences in the level of interest in shopping were far greater between the

two types than any other demographic or life-style variables.

Bellenger and Korgaonkar (1980) found that recreational shoppers, as compared to economic shoppers: (1) spend more time shopping per trip on the average, (2) are less likely to have an idea of what they are going to buy when they go shopping, (3) are more likely to shop with others, (4) are more likely to prefer department stores and less likely to prefer discount stores, and (5) are more likely to prefer women's magazines and less likely to prefer news magazines. In addition, the authors found that recreational shoppers attach more importance to store decor in choosing a place to shop and less importance to distance to be travelled. These findings support the notion that distinguishing between recreational and convenience-oriented shoppers is a viable approach to general shopping orientation. The analysis shows that recreational shopping and information seeking are closely associated. The authors concluded that viewing shopping orientations in terms of alternative use of time and preferences may be very helpful in the quest for shopper types that can be generalized across different retail settings.

Kelly (1958) stressed the importance of convenience in consumer purchasing by noting that one key to understanding shopping behavior was the increased importance consumers were attaching to convenience considerations.

Moschis (1976) investigated six shopping orientations (1) special shopper, (2) brand-loyal shopper, (3) store-loyal shopper, (4) problem-solving shopper, (5) psycho-socializing shopper, and (6) name-conscious shopper. The author found shoppers possessing different orientations have different preferences for kinds of information.

In a recent study, Tatzel (1982) points out that motives for shopping for clothes are two main kinds: liking to shop and the need for clothes. Those who like to shop enjoy the search process, feel comfortable in the store environment, take pleasure in outfitting themselves, and are relatively tolerant of the inconvenience of shopping. Those who need clothes but do not like to shop experience conflict. The author categorizes four types of fashion shoppers: (1) those who are both able and motivated to shop constitute the group of fashion-conscious consumers, (2) those who have ability but lack enthusiasm can be characterized as independent consumers, (3) those who lack the skill but want to shop are likely to view shopping as a failure experience, these are anxious shoppers, and (4) those who are neither able nor willing to shop are apathetic. The author describes the apathetic consumer as one who does not like to shop and wants to get through the task with minimum time and efforts, who takes a negative view of stores and their policies, and who cares more about convenience than price. She adds that apathetic shoppers

may solve their problem by establishing a relationship with a salesperson, usually in a specialty store, whom they trust to select clothes. The author concludes that appeals to the apathetic clothes shopper as it will emphasize trouble-free and "no-bother" clothes. The store ideally will be convenient to reach, with no waiting line, with garments easy to find and choose from, and perhaps with salespeople to handle the entire transaction. The clothes will require little attention and last a long time.

To conclude this section we can say that there is enough evidence in the literature that causely relates time pressure to shopping strategies that attempt to reduce shopping time. However, this relationship will be mediated by the consumer's attitude towards the shopping activities (i.e., like-dislike, mandatory activity-recreational activity).

C. Outcomes of Shopping under Time Pressure:

Several behavioral and attitudinal propositions that appear to be worthy of further exploration are indicated in figure (II-1). As a result of shopping under the feeling of time pressure, the harried consumer may lack confidence that all necessary items were purchased and that the best values were measured. After shopping, the harried consumer may feel that she has deviated from her shopping plan. Thus the degree of satisfaction derived from the purchase selections

may be affected by shopping under the feeling of time pressure. In addition, several researchers stated a negative relationship between choice under time pressure and the quality of the choice.

In his book "The Harried Leisure Class" Linder (1970) states that "as the scarcity of time increases, we can expect a decline in the quality of decisions. People will deviate to an increasing extent from the behavioral presupposed in economic theory. Instead of possessing complete knowledge, we shall be acting on increasingly uncertain grounds" (p. 67). While there is no empirical work that indicates the impact of shopping under pressure and the choice quality, a number of studies that relate time pressure to problem solving, bargaining behavior, and task performance may shed light on the expected relationship.

Luchins (1942) looked at the effects of time pressure on subjects' use of a previously taught solution when they were faced with a problem in which that solution would lead to an incorrect answer. In a series of five studies, Luchins demonstrated that the tendency to use a previously learned, but not incorrect, solution method greatly increased when participants were under time pressure. Luchin's work demonstrates poorer quality.

The effects of high and low time pressure on bargaining behavior was examined by Yuki et al. (1976). The high time pressure manipulation decreased the time to settle, but also

decreased the bargainers' joint payoff.

McGrath and Kelly (1985) examined the effects of time limits and task types on the quality and quantity of group performance and patterns of group interaction. The results indicated that the higher the time pressure the less the quality. In addition, groups worked under time pressure engaged in proportionally more interpersonal activity.

One of the most important consequences of shopping under the feeling of pressure is the resulting satisfaction or dissatisfaction. Studies of consumer satisfaction and dissatisfaction have focused on postpurchase evaluation of products and services. Satisfaction typically is conceived as the extent to which consumers feel subjectively pleased with their ownership and usage of products (Westbrook and Newman, 1978). Laboratory studies have sought to relate satisfaction and dissatisfaction to cognitive processes such as confirmation and disconfirmation of expectancies (Anderson, 1973).

In an experimental research by Jacoby et al. (1974) on brand choice behavior it was suggested that satisfaction may be related to purchase decision activity. This and other studies found that feelings of satisfaction with brand choice decisions increased as respondents were exposed to greater amounts of prepurchase information. In an earlier experiment, Cardozo (1965) found that feelings of satisfaction with a product chosen were related positively to the

effort expended by the individual in making the choice.

Westbrook and Newman (1978) found that dissatisfaction is inversely related to level of personal competence or efficiency of the shopper (the extent to which an individual feels mastery over himself and his environment, and which when lacking produces anxiety). The authors also found that dissatisfaction is inversely related to (a) number of retail stores visited, (b) consultation of neutral information sources such as Consumer Reports, and (c) asking advice from personal sources such as friends, neighbors, and relatives.

It is commonly assumed and frequently stated that consumers should engage in relatively extensive shopping in order to maximize the value of their purchases. Sproles et al. (1980) used the concept of consumer efficiency to refer to the degree to which a consumer obtains the greatest possible utility from a consumption decision, given a fixed set of resources allocated to the decision. Research findings indicate that the more information which is available and used, the more efficient or better the outcome of the decision is likely to be (Jacoby, 1977; Sproles et al. 1978).

Walker and Cude (1983) examined differences in the savings potential and number of price comparisons required to implement seven grocery shopping strategies, using data on 19 specified products from three local supermarkets. Break-even times were computed using three hypothetical wage

rates to determine the point at which the value of time spend in implementing a strategy exceeds the monetary savings realized. This study found substantial differences in efficiency for the seven strategies.

To conclude our discussion in this section we hypothesize a causal relationship between the shopping behavior of the harried consumer and the consequences of her behavior. More specifically between the number of stores to be visited, the number of brands to be considered, and the number of attributes to be evaluated and consumer efficiency (i.e., quality, satisfaction, confidence).

CHAPTER III

HYPOTHESES AND RESEARCH METHODOLOGY

In Chapter II, the related literature was reviewed, and a general model that relates time pressure to shopping behavior was also presented. The specific model to be tested is presented in Figure VI-1. In this chapter, the hypotheses that predict the relationships between person type (Harried vs. Relaxed) and different demographic, attitudinal, and behavioral variables are stated. The chapter also presents the methodology to be used to test the two-variables hypotheses and the overall model. The following topics in relation to the experiment are described: (1) variables' measurement, (2) experimental design, (3) experimental procedure, (4) sample composition, (5) product selection, (6) questionnaire design, (7) pilot study, and (8) methods of analysis.

HYPOTHESES

Seven major hypotheses with a total of twenty-seven subhypotheses are suggested. The relationships described in these hypotheses differentiate between harried and relaxed consumers.

H₁: Harried consumers are demographically different from relaxed consumers.

H_{1a}: Harried consumers are more likely to work full-time

than relaxed consumers.

H1b: Harried consumers are more likely to occupy high-status jobs than relaxed consumers.

H1c: Harried consumers are more likely to be first born than relaxed consumers.

H1d: Harried consumers are more likely to have higher incomes than relaxed consumers.

H1e: Harried consumers are more likely to be married than relaxed consumers.

H1f: Harried consumers are more likely to have a higher social class than relaxed consumers.

H1g: Harried consumers are more likely to have children than relaxed consumers.

H1h: Harried consumers are more likely to have pre-school aged children than relaxed consumers.

H1i: Harried consumers are more likely to have more education than relaxed consumers.

H2: Harried consumers are more involved in their work and home than relaxed consumers.

H2a: Harried consumers are more likely to be involved in their work than relaxed consumers.

H2b: Harried consumers are more likely to be involved in their home than relaxed consumers.

H3: Harried consumers exhibit different attitudes towards shopping than relaxed consumers.

- H3₁: Harried consumers are less likely to enjoy shopping than relaxed consumers.
- H3_b: Harried consumers are more likely to view shopping as a mandatory activity than relaxed consumers.
- H4: Harried consumers are different in their shopping orientation than relaxed consumers.
- H4_a: Harried consumers are more likely to be convenience-oriented than relaxed consumers.
- H4_b: Harried consumers are less likely to be price-conscious than relaxed consumers.
- H5: Harried consumers behave differently in the marketplace than relaxed consumers.
- H5_a: Harried consumers will consider fewer brands than relaxed consumers.
- H5_b: Harried consumers will consider fewer attributes than relaxed consumers.
- H5_c: Harried consumers will visit fewer stores than relaxed consumers.
- H5_d: Harried consumers will use less informational cues than relaxed consumers.
- H5_e: Harried consumers will take less time in making choices than relaxed consumers.
- H5_f: Harried consumers are more likely to visit specialty stores than relaxed consumers, while relaxed consumers are more likely to visit department and discount stores

than harried consumers.

H₆: Harried consumers process information differently than relaxed consumers.

H_{6a}: Harried consumers are more likely to process information by attributes, while relaxed consumers are more likely to process information by brands.

H₇: Harried consumers are less efficient in their shopping behavior than relaxed consumers.

H_{7a}: Harried consumers are less likely to have confidence in their choice than relaxed consumers.

H_{7b}: Harried consumers are less likely to be satisfied with their choices than relaxed consumers.

H_{7c}: Harried consumers are less likely to make the best choice than relaxed consumers.

H_{7d}: Harried consumers are less likely to achieve their ideal choices than relaxed consumers.

H_{7e}: Harried consumers are less likely to consider themselves good shoppers than relaxed consumers.

RESEARCH METHODOLOGY

(1) Variables Measurement:

In addition to direct measurement of the demographic variables, the following are operational definitions of the different constructs. These operational definitions are

used to test the two-variables hypotheses and the overall model. For some of these constructs: time pressure and attitude towards shopping, paper-and-pencil measures were developed, and for other constructs: shopping behavior, shopping efficiency, price consciousness, convenience orientation, and information processing, self-report measures and/or observation by a second party were used.

A. Time Pressure:

In this research, time pressure is viewed as a two-dimensional concept: perceived role-overload and Type A personality traits. Based on their scores on time pressure scale each subject was identified as either harried or relaxed consumer are follows:

1. The Harried Consumer: high in perceived role-overload and Type A behavior.
2. The Relaxed consumer: low in perceived role-overload and Type B behavior.

Several researchers have measured these two dimensions of time pressure (Wessman, 1973; Calabresi and Cohen, 1968; Reilly, 1982; Jenkins et al. 1971). However this research modifies previously used measures for three important reasons: (1) most of the measures of Type A/B behaviors have been developed and tested using patients with abnormal behaviors, (2) Shopping related items are not included, and

(3) a complete test of reliability and validity assessment is never reported.

For the initial stage of test development, a large pool of items (64) containing 32 statements pertaining to perceived role-overload and 32 to Type A/B behaviors was created. The original set of items was derived from psychology and the consumer behavior literature. The items are intended to represent a large number of hypothetically important aspects of individual differences in the subjective experience of time (Nunnally, 1967).

A convenience sample of one hundred and thirty females, college students (graduate and undergraduate) was used for the first test. The aim of this test was to reduce the number of items. Item analysis was performed and 42 items were selected for the next stage of the scale development. The final wording of these 42 items was refined based on this first pretest and peer opinions.

A total of 118 relatives of undergraduate, marketing majors at Baruch College was used to assess the reliability and validity of the scale. A complete description of scale development and the results of reliability and validity tests is reported in the next chapter. The initial scale items are exhibited in Appendix I, and the items selected for the main study in part I of pre-experimental questionnaire (Appendix IV).

B. Attitude Towards Shopping:

A wide array of attitudes and preferences may affect the way consumers behave in the marketplace (Hawes and Arndt, 1980), particularly their attitudes towards shopping. Attitude towards shopping is measured here using three different but related measures: (1) enjoyment of shopping in general, (2) enjoyment shopping for specific products, and (3) view shopping as a mandatory or recreational activity.

In order to develop a scale that measures general "attitude towards shopping", fourteen items were selected from the marketing and consumer behavior literatures that have been used individually or in combination (Hendrix, 1979; Feldman, 1981). The results of the first pretest indicated that four items should be deleted because of low item-total correlation. Another two items were deleted as a result of reliability and validity assessment. The remaining eight items were used as a scale for specific attitude towards shopping after the wording was revised for relevance to the two experimental products: a pair of shoes and dinnerware.

In the next chapter, detailed descriptions of the validity and reliability tests are presented. The initial scale items are exhibited in Appendix I, and the items selected for the scale in part I of the pre-experimental

questionnaire (Appendix IV). The scale for specific attitude towards shopping is found in Appendix V.

In addition to these two summed measures, respondents were asked to agree or disagree with the following statement: "shopping is a mandatory (have to do) activity to me."

C. Shopping Behavior:

Shopping behavior has generally been viewed from an information seeking perspective (Bettman, 1979; Schary, 1971). Measures of shopping in previous research include type and number of stores visited (Bruce and Dommermuth, 1968; Bucklin, 1966; Mattson, 1982, Hornik, 1982); number of shopping trips made prior to purchase (Bucklin, 1966); time spent at a shopping center (Kleimenhagen, 1966, 1967); time spent in the purchase decision process (Newman and Staelin, 1971); number of brands examined (Dommermuth, 1965); number of price ranges considered (Katona and Muller, 1955); number of information sources used (Newman and Staelin, 1973); and extent to which information is sought about produce attributes, cost, and service (Katona and Muller, 1955; Douglas, 1982).

In this study, shopping behavior is measured on the following dimensions:

1. Number of brands considered before making a choice.
2. Number of attributes considered before making a

choice.

3. Number of stores visited.
4. Type of stores visited.
5. Number of informational cues used in making a choice.
6. Amount of time spent in making a choice.

Two separate samples and two different types of stimuli are used to test the research hypotheses. Because different manipulations are used (discussed in the Experiment Procedure Section), only the first measure (number of brands) is repeated in the two samples. The following measures (number of attributes, number of stores, and types of stores) are used in the second sample where scenarios are used as stimuli, whereas the last two measures (number of informational cues and time spent in making a choice) are used in the first sample where information boards are used as stimuli.

D. Shopping Efficiency:

Shopping efficiency is defined as the extent to which the consumer approaches optimal choice, given a fixed set of resources allocated to the decisions. Since optimal choice can be viewed subjectively from the consumer point of view, or objectively based on her actual choice, different measures are used to assess shopping efficiency as follows:

1. Consumer confidence in making the right choice.
2. Consumer satisfaction with her choice.
3. Closeness of actual choice to the ideal one.
4. Closeness of actual choice to the best one.

In order to measure confidence and satisfaction, each subject was asked to respond to the following items immediately after making a decision: (Jacoby et al. 1974).

1. How satisfied are you with your decision? (1 = very dissatisfied; 5 = very satisfied)
2. How certain are you that you made the best decision? (1 = very uncertain; 5 = very certain)

In order to assess how close the subject's actual is to her ideal choice, each subject was asked in the pre-experimental questionnaire to identify the attributes she considers important in her ideal shoes and dinnerware. Each subject was then asked to allocate 100 points among these attributes according to their importance. Three weeks later, after random assignment of the four different treatments (two products/two decision times), each subject was asked to identify the attributes she would consider in this specific situation. She was also asked to allocate 100 points among these attributes according to importance. A period of three weeks elapsed between the first and the second stage of the study to reduce the impact of repeated measures. The following formula was used to measure the

closeness of the subject's actual to her ideal choice:

$$SEI = \sum_{i=1}^k (w_{ijI} - w_{ijA})$$

where;

SEI = Subjective Efficiency Index that indicates closeness of the subject's actual to ideal choice.

w_{ijI} = Weight assigned to attribute i by subject j in her ideal choice.

w_{ijA} = Weight assigned to attribute i by her subject j in her actual choice.

k = The number of attributes identified by each subject in her ideal or actual choice, whichever is larger. Note that k is different from one subject to another.

In the second pretest, two different formats were used to identify the attributes of the ideal choice (constant sum scale/open-ended and 5-points Likert type scale/close-ended). Based on the pretest results, the first format was preferred because it gave more meaningful results. The reliability of the second format was obviously low, since most of the subjects identified most of the attributes as very important.

To calculate the Subjective Efficiency Index for each subject, the absolute value was used because the number of attributes identified by the subject in her ideal choice was not identical to the number identified by the same subject in her actual choice. Zero indicates a perfect match, with no deviation between the ideal and the actual choices. As the absolute value of this index increases, the consumer is demonstrating less efficiency.

In order to measure closeness of the subject's actual to the best choice, it was necessary to rank order the ten hypothetical brands presented in the information boards. This was done in two steps: (1) in the pretest stage, subjects were asked to identify different attributes considered important in a pair of shoes or dinnerware. In addition, they were asked to allocate a total of 100 points among these attributes. Twenty attributes were identified for the shoes, and twenty-two for the dinnerware. To calculate the average weight given to each attribute, the following formula was used;

$$w_i = \sum_{j=1}^k (w_{ij}/n)$$

where;

i = Specific attribute.

k = Number of attributes (20 for shoes and 22 for

dinnerware).

w_i = The average weight given to attribute i .

w_{ij} = The weight given to attribute i by subject j .

n = The pretest sample ($n = 118$).

E. Price Consciousness:

In the pre-experimental questionnaire, several items were used to measure price consciousness in general (Appendix IV). These items were selected from previous studies of shopping behavior and orientation (Holman and Wilson, 1982; Bruce et al., 1975; Bellenger and Korgaonkar, 1980; Gillett and Scott, 1974). The items cover a wide range of shopping behavior dealing with price such as watching ads for announcements of sale, looking for stores that sell at low prices, shopping for specials, and using coupons.

Price-consciousness was also measured in the context of experiment, by the weight/order given to the price as an evaluative criterion.

G. Type of Information Processing:

In order to test hypothesis H_{6a}, the type of information processing was inferred from the sequence of information cards acquired by those exposed to the information boards.

Bettman and Jacoby (1976) have identified three broad

patterns of information acquisition: Choice by Processing Brands, Choice by Processing Attributes, and Mixed Choice by Feedback Processing. Consumers using the first strategy tend to select one brand and gather information on several dimensions of that brand. They then move on to other brands, repeating the process, but without necessarily choosing information on the same dimensions. Consumers whose strategy is described as Processing by Attributes, first select a dimension such as price, and then determine the specific attributes for several brands on that dimension before moving to other dimensions. "Choice by Feedback Processing" involve a hybrid strategy of alternating sequences of brand and attribute processing in which subjects seem to use direct feedback from information acquired during search.

The classification scheme developed by Bettman and Kakkar (1977) was slightly modified in this research. This scheme rests on an analysis of transitions from one piece of information chosen to the next, where:

SB = Total number of same brand transitions/ $n-1$.

SA = Total number of same attribute transitions/ $n-1$.

n = Total number of information items chosen.

These indices, together with their normalized counterparts-a same brand index "SBI", and a same attribute index "SAI" obtained by taking into account the numbers of

information items, brands, and attributes considered in each process, are used to develop classificatory rules for each process type (Capon, 1977). The classificatory categories and methods for assignment are shown in Table III-1.

(2) Experimental Design:

The primary purpose of this research is to examine the differences in shopping behavior and shopping efficiency between two types of consumers: Harried and Relaxed. To test the individual hypotheses and the overall model, a shopping simulation game was employed using two separate samples and two different stimuli. For the first sample ($n_1 = 80$), an information board was used as a stimulus, whereas for the second sample ($n_2 = 206$) a simulated shopping situation is used (scenario) as a stimulus. In both samples, a $2 \times 2 \times 2$ factorial design is used combining the following three variables: (a) two types of consumers, (b) two products, and (c) two decision times.

Based on the time pressure scale scores, each subject was identified either as harried or relaxed. The methodology is presented in Chapter IV. The four treatments (two products/two decision times) were then randomly assigned to subjects, a design which results in eight cells;

1. Harried consumer/a pair of shoes/time constraint.
2. Harried consumer/a pair of shoes/no time constraint.

3. Harried consumer/dinnerware/time constraint.
4. Harried consumer/dinnerware/no time constraint.
5. Relaxed consumer/a pair of shoes/time constraint.
6. Relaxed consumer/a pair of shoes/no time constraint.
7. Relaxed consumer/dinnerware/time constraint.
8. Relaxed consumer/dinnerware/no time constraint.

A two-repeated experimental design is used to assess the impact of different situations on the shopping behavior of harried vs. relaxed consumers.

(3) Experiment Procedure:

Because each method of gathering information: self-report and observation by a second party is subject to limitations, the researcher decided to use both as follows:

(a) Information Board:

A variety of procedures has been suggested for measuring consumer choice and decision making (e.g., Bettman, 1979; Hughes and Ray, 1974). These approaches generally focus on the amount and type of external information acquired, and the way it is integrated. The most widely used procedures include: verbal protocols (Alexis, Haines and Simon, 1968; Bettman, 1970; Bettman and Zins, 1977; Payne and Ragsdale, 1978), physical monitoring (Russo, 1978;

TABLE (III-1)
CLASSIFICATION SCHEME FOR INFORMATION
PROCESSING

Type of Information Processing	Criteria
Process by Attributes	SA > .5, SAI > .6, SA-SB > .3
Process by Brands	SB > .5, SBI > .6, SB-SA > .3
Mixed	All sequences not meeting above criteria.

Russo and Rosen, 1975), and information board (Jacoby, Chestnut and Fisher, 1978; Jacoby et al. 1976; Payne, 1976).

While all of these methods produce measures that could conceivably be used for our purposes, an information board was employed. Physical measures were not used because of lack of equipment and our inability to analyze the results confidently. Verbal protocols were not used mainly because of the desire to employ a large sample. In addition, a tremendous amount of research has been conducted using information board in which the respondent is allowed to request information from a matrix prior to making a choice.

Three weeks before the experiment 320 females age 30 to 50 agreed to participate in the study. They all filled out the pre-experimental questionnaire that includes measures of time pressure, attitude towards shopping, and some other measures in addition to the demographic variables (Appendix II). From this initial sample 309 accurately completed the questionnaire. Based on their score on time pressure, each respondent was identified as harried or relaxed. From these 309 subjects 80 respondents (40 harried and 40 relaxed) were selected for the second part of the study in which the information board was used as a stimulus. These 80 subjects were all relatives of 40 undergraduate students at Baruch College. These students played the role of the interviewer for which they were trained for a month as part of their assignments for a marketing research course. Students were

given credit for doing the experiment.

These 80 subjects were presented with an information board of the type used in previous studies (Bettman and Kakkar, 1977; Lehmann, Moore, and Elrod, 1982). Prior to each choice, each subject was shown a blank matrix with 10 letters across the top (A to J) that represent 10 hypothetical brands of shoes or dinnerware. Each row of the matrix represented one attribute (20 attributes for shoes and 22 for dinnerware). Therefore, the matrix for the shoes consists of 200 cells, while for the dinnerware it consists of 220 cells. Each cell was given a number. In order for the respondent to acquire specific information, she has to give the interviewer the number that represents this specific information on the matrix. The actual information was written on index cards. These index cards were arranged in a file in the same order as in the matrix to be used. Ten cards were arranged in one page in a way that it is easy for the interviewer to attach and reattach the card. These cards were placed upside down and on the other side of the card that appears for the interviewer, only a number was written that indicates a combination of specific brand and specific attribute.

To avoid task complexity, each information dimension was simplified so that only a single bit would be required to determine the specific value involved (e.g., high/low; have/haven't; available/not available,...etc.) The specific

value of each dimension for each cell was randomly selected from the two values that each dimension was permitted to have. This approach has been used by Jacoby, Speller, and Berning, 1974.

In order to avoid any response bias due to the order of the stimulus, ten different information boards were used in which the ten brands and their attributes were rotated.

Experiment was run individually in the subject's home. Subjects were told that they were to imagine they were shopping for either a new pair of shoes or new dinnerware, and they had to make a decision of which brand to buy. They were told to act as if they were actually purchasing the same product under the same situation.

The information board was explained to the subject by the interviewer before the experiment. Also subjects were handed a sheet that included instructions for the experiment (Appendix VII). In the instructions, subjects were told that they could take information from anywhere in the matrix, in any order they liked, as much or as little as they liked, and were to stop only after two minutes in the time constrained situation or when they had made a decision. Also subjects were told that they can acquire only one piece of information at a time and that they can keep all the information acquired with them until they make their decision or stopped after two minutes.

Interviewers were instructed not to start the experi-

ment before it was clear that the subject understood the task. Subjects were allowed to ask as many questions as they wished but once the experiment started no further questions were allowed.

When it was clear that a subject understood the task, she was given a short questionnaire that includes the scale of specific attitude towards shopping (Appendix V). Interviewers were instructed to prepare their stopwatches at that time and use it to either stop the subject after two minutes or to measure decision time when it is less or more than two minutes. During the experiment, it was the interviewer's task to record the numbers that represent the information acquired in order. After two minutes or after making a decision the subject was asked about the brand she selected based on the information acquired. Immediately after arriving at a decision, the subject was given a short questionnaire designed to measure her confidence and satisfaction with her decision and the extent to which she was confused and pressured during the experiment.

Next, the subject was asked to answer one open-ended question to know if she had guessed the exact purpose of the study to probe for the existence of possible demand characteristics. Finally, the subject was asked to respond to two questions to measure her understanding of the instructions and how sincere she was while performing the assigned task (Appendix VIII).

(b) Scenarios:

Four different shopping situations were randomly assigned to 229 subjects in which two variables were manipulated as follows:

The First Situation:

"You just bought a new suit. Your husband told you today that you are invited to a surprise party that he and his coworkers are holding to celebrate their boss' promotion. The party will take place tomorrow. You realize that the new suit is the best thing to wear, but you don't have the right shoes to go with it."

The Second Situation:

"You just bought a new suit. Your husband told you today that you are invited to a surprise party that he and his coworkers are holding to celebrate their boss' promotion. The party will take place one month from today. You realized that the new suit is the best thing to wear, but you don't have the right shoes to go with it."

The Third Situation:

"Today, your husband told you that he has invited

his boss and his wife to a dinner party for tomorrow night. He told you that he wants to surprise his boss with a nice celebration for the promotion he has just received. Preparing the food isn't a problem, since there is someone who will help you. However, your dinnerware is not suitable for the occasion, since it has some broken pieces. You are thinking of buying new dinnerware which you were planning to buy anyway."

The Fourth Situation:

"Today your husband told you that he has invited his boss and his wife to a dinner party one month from today. He told you that he wants to surprise his boss with a nice celebration for the promotion he has just received. Preparing the food isn't a problem, since there is someone who will help you. However, your dinnerware is not suitable for the occasion, since it has some broken pieces. You are thinking of buying new dinnerware which you were planning to buy anyway."

After being presented with one of these four situations, each subject was asked if she would buy that product under this specific situation. Only those who said yes were considered for the analysis (206). Subjects were also asked

about the type of stores they are most likely to visit, the number of brands to be considered before making the purchase, and the product and store's characteristics that they would be likely to consider when buying this product under the same situation. Finally, subjects were presented with the same questions used in the post-experimental questionnaire that was given to those exposed to the information boards.

(4) The Sample:

A non-probability convenience sample of 350 female heads of households ages 30 to 50 were contacted in person. The sample was selected from the five boroughs of New York City. The subjects represent a wide array of demographic and socioeconomic backgrounds. This dispersion of interviews throughout the city provided a good cross-section of the New York City population. The complete profile of those who completed part one of the study, and those who completed the whole experiment, is portrayed in Tables III-2 and III-3.

Graduate and undergraduate students in three schools of Business (Baruch College of the City University, Manhattan College, and St. John's University) were asked to deliver an agreement letter to their female heads of households or any close relative or friend ages 30 to 50 and to return this letter within a week. A week later 350 questionnaires were

TABLE (III-2)
DEMOGRAPHIC PROFILE OF SAMPLE (1)*

Variable	Frequency	%
<u>Age</u>		
30 - 34	18	22.5
35 - 39	36	45.0
40 - 44	16	20.0
45 - 50	20	22.4
<u>Education</u>		
Graduated from Grammar School	3	3.7
Attended High School	4	5.0
Graduated from High School	30	37.0
Attended College	13	16.2
Graduated from College	20	25.0
Attended Post-Graduate	4	5.0
Completed Master or Doctorate	6	7.0
<u>Employment Status</u>		
Homemaker	14	17.5
Part-time Job	27	33.7
Full-time Job	39	48.7
<u>Occupation</u>		
Homemaker	14	17.5
Professional	20	25.0
Managerial	12	15.0
Clerical	24	30.0
Salesperson	4	5.0
Service Household Worker	6	7.5
<u>Birth Order</u>		
The First	37	33.7
The Middle	35	43.8
The Last	18	22.5

TABLE (III-2) - CONTINUED
DEMOGRAPHIC PROFILE OF SAMPLE (1)*

Variable	Frequency	%
<u>Annual Household Income</u>		
Under \$10,000	4	5.0
\$10,000 to \$19,999	9	11.2
\$20,000 to \$29,999	22	27.5
\$30,000 to \$39,999	13	16.2
\$40,000 to \$49,999	15	18.8
\$50,000 to \$59,000	11	13.7
\$60,000 to \$74,999	3	3.7
\$75,000 and Over	3	3.7
<u>Marital Status</u>		
Single	14	17.5
Married	50	62.5
Separated	2	2.5
Divorced	8	10.0
Widow	6	7.0
<u>Number of Household Including Self</u>		
One	16	20.0
Two	13	16.2
Three	17	21.2
Four	19	23.7
Five	12	15.0
Six	3	3.7
<u>Having Children</u>		
Yes	58	72.5
No	22	27.5
<u>Having Children Under School Age</u>		
Yes	17	21.2
No	63	78.7

TABLE (III-2) - CONTINUED
DEMOGRAPHIC PROFILE OF SAMPLE (1)*

Variable	Frequency	%
<u>Number of Children Living in Household</u>		
None	26	32.5
One	19	33.7
Two	24	12.5
Four	1	1.2
<u>Perceived Social Class</u>		
Lower Class	0	0.0
Lower Middle	11	13.7
Middle Class	48	60.0
Upper Middle	20	25.0
Upper Class	1	1.2
<u>Ethical Group</u>		
Black	19	23.7
White	50	62.5
Hispanic	2	2.5
Oriental	6	7.5
Others	3	3.7
<u>Borough</u>		
Brooklyn	28	35.0
Queens	22	27.5
Manhattan	14	17.5
Bronx	8	10.0
Staten Island	8	10.0

* 80 subjects exposed to information board as a stimulus.

TABLE (III-3)
DEMOGRAPHIC PROFILE OF SAMPLE (2)**

Variable	Frequency	%
<u>Age</u>		
30 - 34	46	22.4
35 - 39	89	43.2
40 - 44	61	29.6
45 - 50	10	4.9
<u>Education</u>		
Graduated from Grammar School	9	4.4
Attended High School	6	2.9
Graduated from High School	80	38.8
Attended College	46	22.3
Graduated from College	35	17.0
Attended Post-Graduate	13	6.3
Completed Master or Doctorate	17	8.3
<u>Employment Status</u>		
Homemaker	32	15.5
Part-time Job	25	12.1
Full-time Job	149	72.3
<u>Occupation</u>		
Homemaker	32	15.5
Professional	55	26.7
Managerial	31	15.0
Clerical	75	36.4
Salesperson	8	3.9
Service Household Worker	2	1.0
Others	1	0.5
<u>Birth Order</u>		
The First	70	34.0
The Middle	95	46.1
The Last	41	19.9

TABLE (III-3) - CONTINUED
DEMOGRAPHIC PROFILE OF SAMPLE (2)**

Variable	Frequency	%
<u>Annual Household Income</u>		
Under \$10,000	4	1.9
\$10,000 to \$19,999	26	12.6
\$20,000 to \$29,999	52	25.2
\$30,000 to \$39,999	26	12.2
\$40,000 to \$49,999	34	16.5
\$50,000 to \$59,000	23	11.2
\$60,000 to \$74,999	21	10.2
\$75,000 and Over	20	9.7
<u>Marital Status</u>		
Single	52	25.2
Married	107	51.9
Separated	13	6.3
Divorced	27	13.1
Widow	7	3.4
<u>Number of Household Including Self</u>		
One	30	14.6
Two	42	20.4
Three	46	22.3
Four	49	23.8
Five	23	11.2
Six	9	4.4
More than Six	7	3.4
<u>Having Children</u>		
Yes	143	69.4
No	63	30.6
<u>Having Children Under School Age</u>		
Yes	33	16.0
No	173	84.0

TABLE (III-3) - CONTINUED
DEMOGRAPHIC PROFILE OF SAMPLE (2)**

Variable	Frequency	%
<u>Number of Children Living in Household</u>		
None	75	36.4
One	42	20.4
Two	59	28.6
Three	19	9.2
Four	17	3.4
More than Four	4	2.0
<u>Perceived Social Class</u>		
Lower Class	6	2.9
Lower Middle	26	12.6
Middle Class	131	63.6
Upper Middle	41	19.9
Upper Class	2	1.0
<u>Ethical Group</u>		
Black	35	17.0
White	133	64.6
Hispanic	20	9.7
Oriental	9	4.4
Others	9	4.4
<u>Borough</u>		
Brooklyn	48	23.3
Queens	56	27.2
Manhattan	32	15.5
Bronx	51	24.8
Staten Island	17	9.2

** 206 subjects randomly assigned to four different shopping (scenarios)

delivered to those who signed the agreement letter.

In general, data collection took place during the Fall of 1986. A total of 320 questionnaires were returned representing a 90% response rate. After editing all returned questionnaires, eleven were terminated because of incompleteness or bias. A total of 309 subjects completed part one of the study.

In the second stage of the study 80 subjects participated in the experiment in which the information board was used, and the remaining 229 subjects were exposed to only one of the four shopping situations. From those 229 only 206 were used in the analysis.

Two restrictions were used in selecting the sample; ages (30 to 50) and gender (only females). The study was restricted to age 30-50 primarily because of the assumption that time orientation is a learning experience (Trommsdorff and Lamm, 1975). Studies relating time perspective and maturation point out that through the lifespan the personal experience and structure of time undergo constant change (Buhler, 1968). This suggests an association between age and time sense that finds its peak during the middle age (Covey, 1983).

The reason for selecting females rather than both genders to be included in the sample is that shopping traditionally has been viewed as the domain of women (Martineau, 1957). Also business has operated under the

assumption that up to 80% of all consumer purchasing is made by females (Walters, 1974).

(5) Product Selection:

Successful conduct of the experiment requires that the experimental products will force the subject to become involved in search. Five different products were presented to a group of marketing experts (microwave, food processor, toaster, shoes, and dinnerware). The last two products were selected. The rationale for this selection is based on the following criteria; (a) the two products are most likely to be purchased by women, (b) they are characterized by varying degree of brand substitutability, (c) no brand names are dominant, (d) they both are characterized by high involvement, and (e) they are most likely to be offered in different retailing stores.

(6) Questionnaire Design:

Two different questionnaires were used in this study. The final version of these questionnaires was the product of the efforts exerted in the pretests as well as the several revisions to which these questionnaires were subjected in order to improve their wording and appearance.

(a) Pre-experimental Questionnaire:

This questionnaire consists of four parts. Part I

includes the initial items that were used to measure time pressure, general attitude towards shopping, price consciousness, and convenience orientation. Part II of the pre-experimental questionnaire includes work involvement and home/mothering involvement scales. These two scales were required to test hypotheses H2a and H2b. In Part III of the same questionnaire respondents were also asked to identify the product and store characteristics that they would consider in their ideal shoes and dinnerware. This measure was required to test hypothesis H7a. Finally, in Part IV subjects were asked about their demographic variables which include age, education, occupation, birth order, income, marital status, number of children, and social class. This information was required to test hypotheses H1a through H1j. Pre-experimental questionnaire is exhibited in Appendix IV.

In addition to this questionnaire and just before the experiment, subjects were asked to complete a short questionnaire that includes specific attitude towards shopping (Appendix V). This measure was necessary to test H3a and H3b. Also attitude towards shopping is one of the constructs that are included in the model to be tested.

(b) Post-experimental Questionnaire:

This questionnaire was administered immediately after performing the task to which subjects were randomly assigned. The questionnaire includes measurements of confidence

and satisfaction with the choice. These measures are required to test H7a and H7b in addition to the model. Also in this part of the questionnaire subjects were asked to indicate how confused and pressured they were during the experiment.

In the last part of post-experimental questionnaire one question was designed to measure the possible existence of demand characteristics. Also subjects were asked to indicate their understanding of the instructions and how sincere they were during the experiment. Post-experimental questionnaire is exhibited in Appendix VIII.

(7) Pilot Study:

In addition to reliability and validity tests that were performed on time pressure scale and attitude towards shopping scale using the pre-test sample, more than one pilot study was undertaken. The specific objectives of these pretests were:

- (a) To select the two products to be used in the study. This was explained in the Product Selection Section.
- (b) To select the items to be included in time pressure scale.
- (c) To select the items to be included in attitude towards shopping scale.

- (d) To identify the evaluative criteria and the weight given to them by consumers.
- (e) To test familiarity with the two products selected for the study.
- (f) To assist in selecting the cut-point that differentiate Harried consumers from Relaxed consumers.

Two different samples were used to perform these tests. In the next chapter details of pretest results are presented in addition to validity and reliability assessments.

(8) Methods of Analysis:

To test the research hypotheses and the overall model, data analysis includes the following:

(a) To test hypotheses H1a, H1b, H1c, H1e, H1f, H1i, H2c, H5f, and H6a Contingency Tables are used in which the independent variable is cross classified with different dependent variables. In all these hypotheses the independent variable (Harried vs. Relaxed consumers) is measured using a two level nominal scale, whereas the dependent variables are either nominal or ordinal.

(b) To test hypotheses H1d, H1g, H1h, H2a, H2b, H3a, H3b, H4a through H5e, and H7a through H7e, analysis of variance (ANOVA) is used. The dependent variables in these hypotheses are measured using either interval or ratio

scales.

(c) In order to test the model that relates time pressure, attitude towards shopping, shopping behavior, and shopping efficiency, LISREL VI is used. This analytical technique provides an integrated approach to data analysis and theory construction. LISREL allows the researcher to simultaneously evaluate both the measurement and causal components of the model. Also it is known as a very versatile approach that best suits the analysis of causal models with multiple indicators of latent variables (as in this study). In addition, it allows for measurement error, correlated errors, correlated residuals, and testing different competing models that might explain the same data. Table III-4 summarizes the data analysis plan for the study.

TABLE (III-4)
DATA ANALYSIS PLAN

Hypotheses	Data Analysis Technique	Independent Variable	Measure Used	Dependent Variable(s)	Measure Used
H1a	Contingency Table	Person Type*	Nominal	Work Status	Ordinal
H1b	Contingency Table	Person Type	Nominal	Work Type	Ordinal
H1c	Contingency Table	Person Type	Nominal	Birth Order	Ordinal
H1d	ANOVA	Person Type	Nominal	Income	Ratio
H1e	Contingency Table	Person Type	Nominal	Marital Status	Nominal
H1f	Contingency Table	Person Type	Nominal	Social Class	Ordinal
H1g	ANOVA	Person Type	Nominal	Having Children	Nominal
H1h	ANOVA	Person Type	Nominal	Children under school age	Nominal
H1i	Contingency Table	Person Type	Nominal	Educa- tion	Ordinal
H2a	ANOVA	Person Type	Nominal	Work	Interval

* Harried consumer vs. Relaxed Consumer

TABLE (III-4)(Continued)

DATA ANALYSIS PLAN

Hypotheses	Data Analysis Technique	Independent Variable	Measure Used	Dependent Variable(s)	Measure Used
H2 b	ANOVA	Person Type	Nominal	Home & Mothering Involvement	Interval
H3 a	ANOVA	Person Type	Nominal	Attitude Towards Shopping	Interval
H3 b	ANOVA	Person Type	Nominal	Perception of Shopping	Interval
H4 a	ANOVA	Person Type	Nominal	Convenience Orientation	Interval
H4 b	ANOVA	Person Type	Nominal	Price Conscious	Interval
H5 a	ANOVA	Person Type	Nominal	Number of Brands	Ratio
H5 b	ANOVA	Person Type	Nominal	Number of Attributes	Ratio
H5 c	ANOVA	Person Type	Nominal	Number of Stores	Ratio

TABLE (III-4) (Continued)

DATA ANALYSIS PLAN

Hypotheses	Data Analysis Technique	Independent Variable	Measure Used	Dependent Variable(s)	Measure Used
H5d	ANOVA	Person Type	Nominal	Number of Informational Cues	Ratio
H5e	ANOVA	Person Type	Nominal	Decision Time	Ratio
H5f	Contingency Table	Person Type	Nominal	Type of Stores	Nominal
H6a	Contingency Table	Person Type	Nominal	Type of Information Processing	Nominal
H7a	ANOVA	Person Type	Nominal	Confidence	Interval
H7b	ANOVA	Person Type	Nominal	Satisfaction	Interval
H7c	ANOVA	Person Type	Nominal	Deviation from Best Choice	Ratio
H7d	ANOVA	Person Type	Nominal	Deviation from Ideal Choice	Ratio
H7e	ANOVA	Person Type	Nominal	Perception of self as good shopper	Interval

CHAPTER IV

PRETEST RESULTS

In this chapter the results of the pretests are presented. These results are introduced in four parts. The first part deals with the development of time pressure and attitude towards shopping scales, including reliability and validity assessments. The second part describes the pretest undertaken to identify the evaluative criteria for the two experimental products and the weights given to them. The third part discusses the approach used to identify the cut-point between the harried consumer and the relaxed consumers on time pressure scale. And the last part discusses the pretest undertaken to measure familiarity with the two experimental products.

Scale Development

(1) Time-Pressure Scale:

In this research, time pressure as a predisposition is viewed as a two-dimensional concept; perceived role-overload, and a sense of time urgency that characterized Type A behavior. Several researchers have introduced different measures of these two dimensions (Wessman, 1973; Calabresi and Cohen, 1968; Rielly, 1982; Jenkins et al., 1971).

A total of 64 items were selected for the initial state

of scale development. These items contain 32 statements pertaining to perceived role-overload and 32 to sense of time urgency.

A convenience sample of one hundred and thirty females, college students (graduate and undergraduate) was used to respond to these initial items. The aim of this test was to reduce the number of items. This was done by using the classical items analysis, which calls for the selection of those items having the highest item-total correlations. A total of 42 items were selected with item-total correlations higher than 0.30.

(a) Reliability Tests:

Reliability tests were performed using another independent convenience sample that reasonably represents the types of consumers that will be studied (females, ages 30-50). A total of 118 female relatives of undergraduate, marketing majors at Baruch College was used in this stage.

A series of reliability tests were performed on these 42 items. The purpose was to reach a scale that is highly reliable and use it to test the study hypotheses and the overall model.

Each scale item is stated in a Likert-type format with a 5-point, "strongly agree--strongly disagree" response continuum, such that the score "1" represents high pressure, and the score "5" represents low pressure. A few items were

negatively stated, and their scores were reversed.

The reliability tests focused on the internal consistency of the scale, and included Coefficient Alpha, Spearman-Brown, and Guttman split-half coefficients.

Coefficient Alpha:

Coefficient Alpha was first calculated using the forty-two items. The coefficient's value was 0.76. The analysis indicated that Alpha should improve if several items were deleted. After several deletions and a series of recalculations of Coefficient Alpha, it was concluded that the thirty-two item scale of time pressure exhibits a high degree of reliability in terms of its internal consistency (Alpha = 0.89).

Split-Half Reliability:

In a series of procedures similar to those used in measuring Coefficient Alpha, split-half reliability tests were performed starting with the forty-two items. Then the same tests were performed after deleting the same items that have been deleted when calculating Alpha. The results indicated an improvement in each of the four coefficients used to assess reliability. Table IV-1 portrays the results of reliability tests for time pressure scale.

TABLE (IV-1)
RELIABILITY TESTS FOR TIME PRESSURE SCALE*
(32 items)

Model	Coefficients
<u>Split:</u>	
Correlation Between Halves	0.799
Equal-Length Spearman-Brown	0.830
Unequal-Length Spearman-Brown	0.830
Guttman Split-Half	0.822

* n = 118

TABLE (IV-2)
RELIABILITY TESTS FOR ATTITUDE TOWARDS SHOPPING SCALE*
(8 items)

Model	Coefficients
<u>Split:</u>	
Correlation Between Halves	0.710
Equal-Length Spearman-Brown	0.790
Unequal-Length Spearman-Brown	0.790
Guttman Split-Half	0.784

* n = 118

(b) Validity Tests:

Nunnally (1967), Bagozzi (1980) and others suggest three methods for construct validation. These are: item-total correlations, factor analysis, and correlating the scale with measures. These three approaches are used in validating the time pressure scale.

Item-Total Correlations:

This procedure measured the correlation between the score of each item and the total score of all scale items. Pearson product moment correlation coefficients were calculated for the thirty-two item scale. As Table IV-3 indicates, the correlation coefficients for all items range between 0.46 and 0.78 and significantly differ from zero at $p = 0.0001$.

Factor Analysis:

Two-factors solution was first performed using the forty-two items. The factor loadings obtained were high and positive for the thirty-two items that have passed the reliability tests. Sixteen items from those initial items pertaining to perceived role-overload were loaded positively high on one factor, whereas the other sixteen items that pertain to the sense of time urgency were loaded positively high on the other factor. The remaining items were loaded either very low or negative on both factors. This analysis

TABLE (IV-3)
ITEM-TOTAL CORRELATIONS FOR TIME PRESSURE SCALE*
(32 items)

Items	Correlations
1. I feel that I have insufficient time to accomplish everything that I must do.	0.717
2. I try to do several things at the same time.	0.565
3. I experience pressure to speed up, and have to do things faster than I am able.	0.623
4. I feel overworked, weighted down by more tasks than I can possibly finish.	0.782
5. I run out of time with important things still to be done.	0.745
6. I feel there are just not enough hours in the day.	0.723
7. If I received an unexpected day off, I'd have a million things to do that day.	0.581
8. I always have a number of things I don't have time to do.	0.776
9. I can't ever seem to get caught up.	0.692
10. There are times when I cannot meet everyones' expectations.	0.548
11. Many times I have to cancel commitments.	0.513
12. I seem to have more commitments to fulfill than many of my friends.	0.472
13. I seem to have to overextend myself in order to be able to finish everything I have to do.	0.704
14. I find myself having to prepare priority lists to get done all the things I have to do.	0.573

TABLE (IV-3) CONT.

Items	Correlations
15. I feel it is hard to find time for hobbies or time for myself.	0.667
16. I just can't find the energy in me to do all the things expected of me.	0.683
17. I often feel that time spent sleeping is wasted time.	0.460
18. I try to save minutes during the day by rushing.	0.511
19. I find waiting in line, even for a short time, very annoying.	0.716
20. I get almost panicky when I don't have enough time.	0.543
21. It upsets me when I have to postpone things I planned.	0.455
22. I am almost never bored.	0.624**
23. I become impatient with delays and interruptions.	0.564
24. I put aside my work and relax when I feel like it.	0.543**
25. I find myself speeding up the car to get through yellow lights.	0.470
26. I don't like to stand in line at a restaurant even though it is one of my favorite eating places.	0.703
27. I have a tendency to talk quickly.	0.632
28. I have a tendency to hasten conversations.	0.585
29. I feel guilty if I'm relaxing.	0.504
30. I feel that to wait in line at a supermarket, movie theater, or a bank is not at all that bad.	0.663**

TABLE (IV-3) CONT.

Items	Correlations
31. I seem to be more active than most of my friends.	0.544
32. When waiting in a long line at the bank, I usually become irritated.	0.632

* n = 118

** The scores of items 22, 24, and 30 have been reversed.

represents the first evidence on the dimensionality of the time-pressure concept.

The same analysis was performed using only those thirty-two items. The results are portrayed in Table IV-4.

Fitting a Confirmatory Factor Model:

More tests were needed to ensure that a confirmatory factor model fits the thirty-two items selected for time pressure scale. LISREL VI was used to fit two-factor model. A Maximum-Likelihood two-factor solution was run using the correlations among these items as input.

Sixteen items pertain to perceived role-overload were loaded on one factor, whereas the other sixteen items pertain to sense of time urgency were loaded on the other factor. The results indicate that this two-factor model fits the data ($X^2 = 748.6$ with 463 df and $p = 0.212$).

The results obtained from this test confirmed the convergence of the thirty-two items to two factors. The correlation between the two factors was 0.72.

Convergent Validity:

Bagozzi (1980) defines convergent validity as the extent to which two or more attempts to measure the same concept are in agreement. In this context if perceived role-overload and sense of time urgency belong to the same construct they should be highly correlated. As it was

previously indicated the correlation between the two factors is high (0.72).

Discriminant Validity:

Bagozzi (1980) defines discriminant validity as the degree to which a concept differs from other concepts (Campbell and Fiske, 1959). This was assessed by correlating the two factors that constitute time pressure scale with another variable.

In addition to time pressure scale, the pretest respondents were given fourteen items pertaining to attitude towards shopping. The eight items selected for that scale were summed and correlated with the two dimensions of time pressure scale. The correlation between perceived role-overload and attitude towards shopping was 0.391, whereas the correlation between sense of time urgency and attitude towards shopping was 0.565. Therefore, the two dimensions are highly correlated (0.72) yet each dimension is unique (0.39 differs from 0.57).

Nomological Validity:

Campbell (1960) defines nomological validity as the degree to which predictions from the concept under study are confirmed. It was hypothesized that feeling pressured is associated with negative attitude towards shopping. This prediction was confirmed. The correlation between the time

TABLE (IV-4)
VARIMAX ROTATED FACTOR MATRIX
FOR TIME PRESSURE SCALE

Items	Factor 1	Factor 2
1. I feel that I have insufficient time to accomplish everything I must do.	<u>0.685</u>	0.222
2. I try to do several things at the same time.	<u>0.544</u>	0.271
3. I experience pressure to speed up, and have to do things faster than I'm able.	<u>0.569</u>	0.195
4. I feel overworked, weighted down by more tasks than I can possibly finish.	<u>0.739</u>	0.146
5. I run out of time with important things still to be done.	<u>0.717</u>	0.152
6. I feel there are just not enough hours in the day.	<u>0.691</u>	0.197
7. If I received an unexpected day off, I'd have a million things to do that day.	<u>0.565</u>	0.254
8. I always have a number of things that I do not have time to do.	<u>0.718</u>	0.187
9. I can't ever seem to get caught up.	<u>0.709</u>	0.264
10. There are times when I cannot meet everyones' expectations.	<u>0.523</u>	0.164
11. Many times I have to cancel commitments.	<u>0.504</u>	0.147
12. I seem to have more commitments to fulfill than many of my friends.	<u>0.441</u>	0.246

TABLE (IV-4) CONT.

Items	Factor 1	Factor 2
13. I seem to have to overextend myself in order to be able to finish everything I have to do.	<u>0.552</u>	0.261
14. I find myself having to prepare priority lists to get done all the things I have to do.	<u>0.680</u>	0.273
15. I feel it is hard to find time for hobbies and time for myself.	<u>0.623</u>	0.067
16. I just can't find the energy in me to do all the things expected of me.	<u>0.636</u>	0.177
17. I often feel that time spent sleeping is wasted time.	0.143	<u>0.447</u>
18. I try to save minutes during the day by rushing.	0.140	<u>0.483</u>
19. I find waiting in line, even for a short time, very annoying.	0.192	<u>0.670</u>
20. I get almost panicky when I don't have enough time.	0.261	<u>0.519</u>
21. It upsets me when I have to postpone things I planned.	0.135	<u>0.448</u>
22. I am almost never bored.	0.150	<u>0.583</u>
23. I become impatient with delays and interruptions.	0.283	<u>0.534</u>
24. I put aside my work and relax when I feel like it.	0.275	<u>0.512</u>
25. I find myself speeding up the car to get through yellow lights.	0.143	<u>0.492</u>

TABLE (IV-4) CONT.

Items	Factor 1	Factor 2
26. I don't like to stand in line at a restaurant even though it is one of my favorite eating places.	0.063	<u>0.680</u>
27. I have a tendency to talk quickly.	0.252	<u>0.570</u>
28. I have a tendency to hasten conversations.	0.253	<u>0.539</u>
29. I feel guilty if I'm relaxing.	0.197	0.460
30. I feel that to wait in line at a supermarket, movie, theatre, or a bank is not at all that bad	0.055	<u>0.632</u>
31. I seem to be more active than most of my friends.	0.030	<u>0.535</u>
32. When waiting in a long line at the bank, I usually become irritated.	0.071	<u>0.658</u>

pressure scale and the attitude towards shopping scale was 0.47.

To conclude this section it can be said that the high values of the coefficients obtained through the different tests and their high statistical significances establish the reliability and validity of the thirty-two item scale for time pressure which is used in the data collection instrument of the study. Note that all these tests were repeated when the causal model that includes this construct was tested (chapter VI).

(2) Attitude Towards Shopping:

Attitude is a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object (Fishbein and Ajzen, 1975, p. 61).

In order to develop a scale of attitude towards shopping a total of fourteen items were selected from the initial state of scale development. These items were derived from background reading in marketing and consumer behavior literature and represent a number of hypothetically important aspects of individual difference regarding shopping activities (chapter III).

The same pretest sample that was used to test time pressure scale was used to test this scale (118 females, ages 30-50). Also the same reliability tests that were performed on the time pressure scale were performed on the

attitude towards shopping scale. Therefore, the following sections indicate only the results since the same procedures were followed.

Before performing reliability tests, item-total analysis was performed to reduce the number of items. A total of ten items were selected with an item-total correlation higher than 0.30.

(a) Reliability Tests:

As in the case of time pressure measurement, a series of reliability tests were performed on these ten items.

Coefficient Alpha:

The Coefficient's value for these ten items was 0.78. After several deletions and a series of recalculations of Alpha, eight items that exhibited a high degree of reliability were selected as a measure of the attitude towards shopping scale. The Alpha coefficient for these eight items was 0.84.

Split-Half Reliability:

Table IV-2 portrays the results of reliability tests for the attitude towards shopping scale.

(b) Validity Tests:

Again, the same validity tests that were performed on

time pressure scale were used here. The following are the results of these tests.

Item-Total Correlations:

Table IV-5 portrays the statistical results. As it is shown in the table, correlation coefficients for the eight items range between 0.49 and 0.70 and significantly differ from zero at $p = 0.0001$.

Factor Analysis:

A one-factor solution was performed using the SPSS Principal Factor method. As it is shown in Table IV-6 all the factor loadings obtained were high and positive for all eight items.

Fitting a Confirmatory Factor Model:

In order to ensure that the eight items selected for attitude towards shopping scale belong to one factor, LISREL was used to fit one factor model. A Maximum-Likelihood one-factor solution was run using the correlations among these items as input. The results indicate that the eight items converge into one factor ($X^2 = 25.839$ with 21 df and $p = 0.385$).

Convergent Validity:

A one-question manipulation check was given to the

pretest sample as a second measure of attitude towards shopping. The respondents were asked to select a number between 1 and 5 that indicates their agreement with the following statement: "Shopping is a mandatory--have to do--activity to me". The score "1" represents strongly agree, and the score "5" represents strongly disagree.

Pearson product-moment correlation coefficient was calculated between the score of the one-question measure and the total score of the eight items scale. The correlation between these two measures was 0.29 with $p = 0.01$.

Discriminant Validity:

Discriminant validity was assessed by comparing the correlations of the one-item measure and the eight-items scale of attitude towards shopping with time pressure scale. The correlation between a one-item measure of attitude towards shopping and time pressure was 0.24 and the correlation between the eight-items scale and time pressure scale was 0.47.

Nomological Validity:

The same test that was performed to assess nomological validity for the time pressure scale was used here. As indicated, the prediction regarding the relationship between feeling pressured and attitude towards shopping was confirmed. The correlation between attitude towards shopping scale

TABLE (IV-5)

ITEM-TOTAL CORRELATIONS OR ATTITUDE TOWARDS SHOPPING SCALE
(8 items)*

Items	Correlations
1. I like to shop in new stores and shopping centers as soon as I hear about them.	0.702
2. I like to spend time browsing through stores without buying anything in particular.	0.453
3. I do not enjoy shopping.	0.725**
4. The quicker I get my shopping done, the better.	0.496**
5. I like to continue shopping after making a purchase.	0.517
6. If I have one day off, the first thing that would come to my mind is shopping.	0.534
7. When I am bored, I go shopping.	0.575
8. I derive my pleasure from the act of shopping rather than the products themselves.	0.644

* n = 118

** The scores of items 3 and 4 have been reversed.

TABLE (IV-6)

FACTOR LOADINGS FOR ATTITUDE TOWARDS SHOPPING SCALE
SCALE USING PRINCIPAL FACTOR METHOD

Items	Loadings
1. I like to shop in new stores and shopping centers as soon as I hear about them.	0.687
2. I like to spend time browsing through stores without buying anything in particular.	0.435
3. I do not enjoy shopping.	0.714
4. The quicker I get my shopping done, the better.	0.463
5. I like to continue shopping after making a purchase.	0.506
6. If I have one day off, the first thing that would come to my mind is shopping.	0.527
7. When I am bored, I go shopping.	0.568
8. I derive my pleasure from the act of shopping rather than the products themselves.	0.652

(8 items) and time pressure scale (32 items) was 0.47.

Identifying The Evaluative Criteria
And The Weights Given To Them

Two tests were performed to identify the different characteristics that are considered by consumers when buying the two experimental products and the weights given to them. First, a convenience sample of one hundred and thirty females, college students (graduate and undergraduate) was used. They were asked to identify all the characteristics that they considered important in a pair of shoes and dinnerware. Although the subjects were asked to identify products' characteristics they considered important when buying the two products, 87% of them reported both product and store related attributes. A total of twenty attributes for shoes (twelve product-related and eight store-related) and twenty-two for dinnerware (thirteen product-related and nine-store related).

Another pretest was performed using the 118 female relatives of undergraduate, marketing majors at Baruch College. First, they were asked to identify the different product and store characteristics they considered in a pair of shoes and dinnerware. They also were instructed to allocate 100 points among these attributes according to their importance. Secondly, they were given the attributes identified by the first pretest sample and asked to identify

the importance of each attribute. A Likert-type format with a 5-point, "extremely unimportant--extremely important" continuum was used such that the score "1" represents extremely unimportant and the score "5" represents extremely important. The subjects were instructed to give the first question first and then the second after completing the first question. The reason was to force them to make their own choice and not just select some of the list included in the second question. Two important results have emerged from this pretest. First, approximately the same attributes identified by the first pretest sample were identified by the second pretest sample (with very few slight differences). Secondly, it was obvious that the reliability of the second scale is questionable since most of the subjects identified all the attributes as extremely important.

Based on the results of these two pretests two decisions were made: (a) to incorporate both product and store attributes in the question (Appendix IV), and (b) to use the constant sum scale rather than the Likert scale to identify the importance of evaluative criteria for the two experimental products. The results of this pretest are portrayed in Table IV-7 and Table IV-8.

TABLE (IV-7)
WEIGHTS GIVEN TO EVALUATE CRITERIA
FOR THE FIRST PRODUCT: PRETEST RESULTS

Criterion	Weight %
1. Style/Design	20.00
2. Comfort	14.50
3. Price	13.50
4. Material	10.00
5. Color	8.75
6. Quality reputation of the store	6.25
7. Where it is made	5.00
8. Brand name	4.00
9. Size	3.50
10. Attractiveness	3.00
11. Availability of help in the store	2.00
12. Store assortment	1.75
13. Heel height	1.50
14. Store location (convenience)	1.50
15. Where it is sold	1.25
16. Store display	1.25
17. Versatility (number of uses)	1.00
18. Durability	0.50
19. Weight	0.50
20. Return policy of the store	<u>0.25</u>
Total	100.00

* A new pair of shoes; n = 118

TABLE (IV-8)

WEIGHTS GIVEN TO EVALUATE CRITERIA
FOR THE SECOND PRODUCT: PRETEST RESULTS

Criterion	Weight %
1. Price	33.00
2. Style/Design	14.25
3. Material	12.50
4. Color	5.00
5. Durability	4.25
6. How many can be served	4.00
7. Brand name	3.75
8. Number of pieces	3.00
9. Where it is sold	3.00
10. Attractiveness	3.00
11. Quality reputation of the Store	2.75
12. Where it is made	2.25
13. Store location (convenience)	2.25
14. Availability of help in the store	1.50
15. Versatility (number of uses)	1.25
16. Store assortment	1.00
17. Weight	0.75
18. Guarantee	0.75
19. Extra Pieces	0.50
20. How easy it will be cleaned	0.50
21. Store Display	0.50
22. Delivery	<u>0.25</u>
Total	100.00

* Dinnerware; n = 118

Identifying The Cut-Point Between Harried and Relaxed Consumers

All the two-variable hypotheses propose differences between two types of consumers: Harried and Relaxed. Therefore, it was important to make a decision regarding the cut-point between these two types on the time pressure scale.

In order to classify an individual respondent into one of these two groups the range of time pressure scale was established using a new approach. Instead of the arbitrary choice of the midpoint as a cut point without any theoretical justification or selecting the high and low scores that affect the sample size, a new approach was used. This approach is based on a comparison among three different, but related, measures of time pressure. These three measures are: (a) the score on time pressure scale (32 items), (b) the respondent's perception of himself as harried or relaxed, and (c) the other's perception (the interviewer) of the respondent as harried or relaxed.

The 118 female relatives of undergraduate, marketing majors at Baruch College were used to perform this test. The reason for selecting relatives is to ensure that the interviewers (students) can accurately identify them as harried or relaxed. The students were asked to identify the exact relationship to the respondent. The majority were mothers (87%), whereas the rest (23%) were aunts and

sisters.

First, the average score on the time pressure scale for those who were identified by both self and the others as harried was calculated (64). The same average was calculated for those who were identified by the self and the others as relaxed was calculated (116). The median ($(64+116=180/2=90)$) was selected as a cut point between harried and relaxed consumers. The reason for selecting the median is that the deviation around it will be minimal.

Two tests were made to assess the validity of this classification method. First, the score on the time pressure scale was used to place each respondent into one of these two groups, so that 90 or fewer are harried and more than 90 are relaxed. The results indicate the validity of this classification method since 92% of those who were identified by the self and/or the others as harried or relaxed were correctly assigned into one of the two groups. An interesting result of this test is the very correlation between the self-perception and the other-perception (0.96).

Secondly, the correlation between time pressure as a continuous scale and attitude toward shopping (0.47) was compared with the correlation between time pressure as a categorical scale (0.51). The results indicate that the difference is insignificant.

Testing Familiarity With The Two Experimental Products

There is enough evidence in the literature that familiarity with a product class is strongly related to shopping behavior. Olson (1977) concludes that familiarity with the product class strongly influences the relative effects of informational cues on product evaluation and thus warrants such attention.

Conceptually, product familiarity has been included in consumer behavior models as one of the determinants of product evaluation. Howard (1977) and Howard and Sheth (1969) postulate that consumers with little experience with, and knowledge of, the product engage in extensive evaluation.

In order to make sure that there is no difference between harried and relaxed consumers regarding experience with the two experimental products, it was important to measure product familiarity with these two products.

Product familiarity is often operationalized in terms of usage experience and purchase experience (ownership). Bettman and Park (1980) and Park and Lessig (1981) used information search, usage, and ownership to measure familiarity.

For the purpose of this study, five questions (Appendix II) were used to measure familiarity with shoes and dinnerware. In the second pretest, subjects were asked the

following questions:

- (a) Do you have dinnerware?
- (b) Did you ever buy dinnerware?
- (c) Did you ever look for dinnerware?
- (d) How often do you buy a new pair of shoes?
- (e) On the average, how many pairs of shoes do you usually buy in one shopping trip?

The statistical results of these tests are portrayed in Tables IV-8 and IV-9. As shown, no differences were found between harried and relaxed consumers regarding familiarity with the two experimental products.

TABLE (IV-9)
CHI-SQUARE TEST OF NO DIFFERENCE
BETWEEN HARRIED CONSUMERS AND
RELAXED CONSUMERS REGARDING
FAMILIARITY WITH SHOES*

Variable	X ²	df	P
1. Do you have dinnerware?	0.729	1	N.S.**
2. Did you ever have dinnerware?	0.011	1	N.S.
3. Did you ever look for dinnerware?	0.299	1	N.S.

* n = 118
** p > 0.05

TABLE (IV-10)
ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED CONSUMERS AND RELAXED CONSUMERS
REGARDING FAMILIARITY WITH DINNERWARE*

Variable	Mean	df	F	P
1. How often do you buy a new pair of shoes?	0.581	1	0.095	N.S.**
2. On the average, how many pairs of shoes do you usually buy in one shopping trip?	0.141	1	1.729	N.S.

* n = 118
** p > 0.05

CHAPTER V

DATA ANALYSIS AND RESEARCH FINDINGS

In chapter III the experimental design and research methodology employed in this study was presented. In chapter IV the results of pretests and validity and reliability assessments were explained. In this chapter, the results of the statistical analysis are first presented in sequence with the hypotheses suggested in chapter III. Then the findings are discussed and interpreted in the context of the conceptual relationships hypothesized. The next chapter will be devoted to testing and interpreting the proposed causal model.

Results of the Statistical Analysis

Hypothesis H1a: Harried consumers are more likely to work full-time than relaxed consumers.

To test this hypothesis, person type: Harried vs. Relaxed, was crosstabulated with the three levels of work status: not working, working part-time, and working full-time. Table V-1 presents the results of crosstabs analysis.

Data didn't support this hypothesis. Table V-1 shows that 64.2% of harried consumers work full-time, whereas 69.8% of relaxed consumers hold full-time jobs. Therefore H1a is rejected.

TABLE (V-1)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING WORK STATUS

Work Status	Person Type	
	Harried	Relaxed
	%	%
Homemakers	15.5	13.9
Part-Time	20.3	16.3
Full-Time	<u>64.2</u>	<u>69.8</u>
Total	100.0	100.0
Base	148	159

$\chi^2 = 1.26$ with 2 df; N.S.

Hypothesis H1b: Harried consumers are more likely to occupy high-status jobs than relaxed consumers.

This hypothesis also is rejected. Table V-2 shows that 29.7% of harried consumers are professionals, whereas 25.3% of relaxed consumers are professionals. Also 16.2% of the harried consumers hold managerial jobs, whereas 15.8% of the relaxed consumers are managers. Therefore, while data support the direction of the hypothesis, the difference between the two types is not significant.

Hypothesis H1c: Harried consumers are more likely to be first-borns than relaxed consumers.

As Table V-3 shows, 37.8% of the harried consumers were the first child in their families, whereas 29.7% of the relaxed consumers were the first. On the other hand 15.6% of the harried consumers were the last child in their families, whereas 25.4% of the relaxed consumers were the last child to be born in their families. For this hypothesis chi-square was 5.08 with 2 df. The result was significant at 0.07 level.

Hypothesis H1d: Harried consumers tend to have higher income than relaxed consumers.

To test this hypothesis, person type was crosstabulated with income (eight levels). As Table V-4 shows, no significant difference between harried and relaxed consumers regarding the income. However, there are fewer harried

consumers with income less than \$30,000, whereas, there are more harried consumers with income more than \$30,000. According to Table V-4 35.8% of the harried consumers earn less than \$30,000 a year whereas, 64.2% earn more than \$30,000 a year. On the other hand 43.1% of the relaxed consumers earn less than \$30,000, whereas 56.9% earn more than \$30,000 a year. Therefore, data didn't support this hypothesis that relates feeling pressure and income, although the direction of the relationship was as predicted.

In addition to contingency table, ANOVA analysis was performed in which person type is the independent variable and income is the dependent variable. Table V-5 indicates that the difference between the two groups is not significant.

Hypothesis H1e: Harried consumers are more likely to be married than relaxed consumers.

Table V-6 presents the results of the statistical analysis that test the association between person type and marital status. As the table shows, 60.8% of the harried consumers are married, whereas 48.7% of the relaxed consumers are married. On the other hand, 16.9% of the harried consumers are single, whereas, 29.7% of the relaxed consumers are single. Chi-square indicates that the difference is significant ($X^2 = 9.05$ with 4 df; significant at 0.05).

TABLE (V-2)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING WORK TYPE

Work Status	Person Type	
	Harried	Relaxed
	%	%
Homemakers	15.5	13.9
Professionals	29.7	25.3
Managers	16.2	15.8
Clerks	33.1	34.8
Salespersons	3.4	5.1
Service Household	1.4	3.8
Crafts Workers	1.0	1.0
Others	<u>0.0</u>	<u>1.0</u>
Total	100.0	100.0
Base	148	158

$\chi^2 = 3.95$ with 7 df; N.S.

TABLE (V-3)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING BIRTH ORDER

Birth Order	Person Type	
	Harried	Relaxed
	%	%
First	37.8	29.7
Middle	46.6	44.9
Last	<u>15.6</u>	<u>25.4</u>
Total	100.0	100.0
Base	148	158

$\chi^2 = 5.08$ with 2 df; significance 0.07

TABLE (V-4)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING FAMILY INCOME

Income Categories	Person Type	
	Harried	Relaxed
	%	%
Under \$1000	2.7	3.2
\$10,000 - \$19,000	10.8	12.7
\$20,000 - \$29,000	22.3	27.2
\$30,000 - \$39,000	14.2	15.2
\$40,000 - \$49,000	18.9	13.9
\$50,000 - \$59,000	12.8	12.0
\$60,000 - \$74,000	8.9	9.5
\$75,000 or over	<u>9.4</u>	<u>6.3</u>
Total	100.0	100.0
Base	148	158

$\chi^2 = 3.28$ with 7 df; N.S.

TABLE (V-5)
ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING FAMILY INCOME

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	5.935	1	5.935	1.678	0.196*
Residual	1078.897	305	3.538		
Total	1084.922	306	3.545		

* N.S.

TABLE (V-6)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING MARITAL STATUS

Marital Status	Person Type	
	Harried	Relaxed
	%	%
Single	16.9	29.7
Married	60.8	48.7
Separated	4.7	5.7
Divorced	11.5	12.7
Widowed	<u>6.1</u>	<u>3.2</u>
Total	100.0	100.0
Base	148	158

$\chi^2 = 9.05$ with 4 df; significant at 0.05 level

Hypothesis H_{1f}: Harried consumers tend to belong to a higher social class than relaxed consumers.

Table V-7 displays the results of the statistical analysis of the association between person type and social class. Chi-square is not significant (0.319). However the direction of the relationship is as predicted.

Hypothesis H_{1g}: Harried consumers are more likely to have children than relaxed consumers.

A two by two contingency table was used to assess the association between person type and having children. As it is shown in Table V-8, 76.4% of the harried consumers have children, whereas only 63.3% of the relaxed consumers have children. The statistical results for this test are significant at 0.01 level.

Hypothesis H_{1h}: Harried consumers are more likely to have pre-school children than relaxed consumers.

From Table V-9 it is observed that the statistical results of this test support the predicted relationship. 21% of the harried consumers have children under school age, whereas only 12.2% of the relaxed consumers have children under school age. Chi-Square test was significant at .025 level.

TABLE (V-7)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING SOCIAL CLASS

Social Class	Person Type	
	Harried	Relaxed
	%	%
Lower Class	1.4	2.5
Lower Middle	10.1	15.2
Middle Class	64.9	58.9
Upper Middle	22.3	23.4
Upper Class	1.3	0.0

$\chi^2 = 4.70$ with 4 df; N.S.

TABLE (V-8)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING HAVING CHILDREN

Having Children	Person Type	
	Harried	Relaxed
	%	%
Yes	76.4	63.3
No	<u>23.6</u>	<u>36.7</u>
Total	100.0	100.0
Base	148	158

$\chi^2 = 6.16$ with 1 df; significance level 0.01

TABLE (V-9)

COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING HAVING PRE-SCHOOL CHILDREN

Having Children Under School Age	Person Type	
	Harried	Relaxed
	%	%
Yes	21.8	12.2
No	<u>78.2</u>	<u>87.8</u>
Total	100.0	100.0

$\chi^2 = 4.97$ with 1 df; significant at .025 level

Hypothesis H1: Harried consumers tend to have a higher education than relaxed consumers.

Table V-10 portrays the results of the statistical analysis of the association between education and person type. While the statistical test supports the expected direction of this hypothesis, however, Chi-square was only significant at .064 level.

Hypothesis H2a: Harried consumers are more likely to in be involved in work than relaxed consumers.

Table V-12 shows the ANOVA analysis of no difference between harried consumers and relaxed consumers regarding work involvement. As we can see the difference is significant at 0.010 level.

Additional analysis was performed to assess the association between harried consumers and relaxed consumers regarding their attitude towards work (i.e., a career or just a job). Table V-14 indicates that 59.5% of the harried consumers perceive work as a career, where as only 36.7% of the relaxed consumers perceive work as a career. On the other hand only 25% of the harried consumers perceive work as just a job, whereas 49.4% of the relaxed consumers view work as just a job. Chi-Square is significant at 0.000 level.

TABLE (V-10)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING EDUCATION

Education	Person Type	
	Harried	Relaxed
	%	%
Graduated from Grammar School	6.1	1.9
Attended High School	2.7	3.8
Graduated from High School	38.5	37.1
Attended College	15.5	25.8
Graduated from College	20.9	20.1
Attended Post-Graduate	4.7	6.3
Completed Master or Doctorate	<u>11.6</u>	<u>5.0</u>
Total	100.0	100.0
Base	148	159

$\chi^2 = 11.90$ with 6 df; significance level is 0.064

TABLE (V-11)
MEASURE OF ASSOCIATION BETWEEN PERSON TYPE*
AND DEMOGRAPHIC VARIABLES

Variable	Chi Square			Gamma	Contin- gency Coeff't	Cramer's	Pearson Corr.		n
	X ²	df	p				r	p	
Education	11.90	6	0.064	0.004	0.193	0.197	0.018	N.S.	307
Work Status	1.26	2	N.S.	0.122	0.064	0.064	0.064	N.S.	307
Occupation	3.45	7	N.S.	0.113	0.113	0.113	0.086	N.S.	307
Birth Order	5.08	2	0.078	0.202	0.128	0.129	0.123	0.015	306
Family Income	3.28	7	N.S.	0.098	0.103	0.103	0.071	N.S.	306
Marital	9.05	4	0.059	0.178	0.170	0.172	0.085	0.067	306
Social Class	4.69	4	N.S.	0.097	0.123	0.124	0.066	N.S.	306
Having Children	6.16	1	0.013	0.304	0.140	0.142 (Phi)	0.142	0.006	306
Having Pre-School Children	4.97	1	0.025	0.335	0.127	0.128 (Phi)	0.128	0.012	303

* Harried Consumer vs. Relaxed Consumer
N.S. = Not Significant

TABLE (V-12)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING WORK INVOLVEMENT

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	9.589	1	9.589	6.741	0.010
Residual	433.872	305	1.423		
Total	433	306	1.449		

Hypothesis H2b: Harried consumers are more likely to be involved at home than relaxed consumers.

Table V-13 displays the results of ANOVA test of no difference between the harried consumers and relaxed consumers regarding home and mothering involvement. As the statistical analysis indicates the difference is significant which means that data support the suggested relationship between feeling pressured and home and mothering involvement.

Hypothesis H3a: Harried consumers are less likely to enjoy shopping than relaxed consumers.

Table V-15 present the ANOVA test of no difference between harried consumers and relaxed consumers regarding their attitude towards shopping. The test is significant and supports the hypothesis that relaxed consumers enjoy shopping more than harried consumers. This was true regarding shopping in general and shopping for the two products used in the study (shoes and dinnerware).

Hypothesis H3b: Harried consumers are more likely to view shopping as a mandatory activity than relaxed consumers.

Table V-16 presents the ANOVA test of no difference between harried consumers and relaxed consumers regarding perception of shopping as a mandatory activity. The large F value supports the hypothesized relationship. This result

indicates that not only do harried consumers not enjoy shopping, but they also view it as a mandatory activity.

Hypothesis H4a: Harried consumers are more likely to be Convenience-oriented than relaxed consumers.

As it is shown in Tables V-17 and V-18, in general, there is no difference between harried consumers and relaxed consumers regarding the importance attached to store location. Also the same result was obtained when the two experimental products and decision time were combined together. However, the relationship was significant ($X^2 = 0.041$) when buying dinnerware under time constraints.

Hypothesis H4b: Harried consumers are less likely to be price conscious than relaxed consumers.

The statistical results obtained from ANOVA indicate that there is no significant difference between harried and relaxed consumers regarding the price as an evaluative criterion. As it is observed from Table V-20, these results are held in general and in all the experimental situations. However, as it is indicated in Table V-19, harried consumers are less likely to consider price when shopping than relaxed consumers. Also harried consumers are found to believe less in saving money when shopping than relaxed consumers. In addition it was found that harried consumers are more likely to believe that price and quality go hand in hand than relaxed consumers.

TABLE (V-13)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING HOME INVOLVEMENT

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	48.986	1	48.986	41.075	0.000
Residual	363.743	305	1.423		
Total	412.729	306			

TABLE (V-14)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING ATTITUDE TOWARDS WORK

Attitude Towards Work	Person Type	
	Harried	Relaxed
	%	%
Homemaker	15.5	13.9
Just a Job	25.0	49.4
A Career	59.5	36.6

$\chi^2 = 20.90$ with 2 df; significant at 0.000 level

TABLE (V-15)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING ATTITUDE TOWARDS SHOPPING

Attitude Towards Shopping	Mean	F	df	P
General Attitude Towards Shopping	47.95	46.68	1	0.000
Specific Attitude Towards Shopping for Shoes and Dinnerware	82.73	36.88	1	0.000
Specific Attitude Towards Shopping for Shoes	47.98	70.78	1	0.000
Specific Attitude Towards Shopping For Dinnerware	51.46	79.23	1	0.000

TABLE (V-16)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING PERCEPTION OF SHOPPING
AS A MANDATORY ACTIVITY

Perception of shopping as a Mandatory Activity	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	56.801	1	56.801	51.589	0.000
Residual	335.812	306	1.101		
Total	392.613	306	1.283		

TABLE (V-17)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
IMPORTANCE OF STORE LOCATION: GENERAL ORIENTATION

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	0.148	1	0.148	0.089	0.765*
Residual	505.079	305	1.656		
Total	505.227	306	1.651		

* N.S.

TABLE (V-18)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
IMPORTANCE OF STORE LOCATION: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample (N.A.)*				
2. Second Sample	3.954	1	0.239	N.S.
<u>Shoes in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	0.652	1	0.010	N.S.
<u>Dinnerware in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	6.556	1	0.627	N.S.
<u>The Two Products Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	2.676	1	0.481	N.S.
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	3.190	1	0.138	N.S.
<u>Shoes Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	3.266	1	0.832	N.S.
<u>Shoes Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	3.712	1	1.831	N.S.
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	9.773	1	4.371	0.041
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	4.186	1	0.073	N.S.

* Not Applicable

TABLE (V-19)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
IMPORTANCE OF PRICE: GENERAL ORIENTATION

Variables	Mean	df	F	Signif. of P
1. Watch advertising for sale.	1.912	1	1.883	N.S.
2. Looking for stores that sell at low price.	0.385	1	0.148	N.S.
3. Shopping for specials.	0.479	1	0.154	N.S.
4. Using Coupons.	0.734	1	0.268	N.S.
5. Price is an object when shopping.	4.033	1	15.361	0.000
6. Price and quality go hand in hand.	5.140	1	15.751	0.000
7. It is worth it to try to save money when shopping	5.957	1	22.013	0.000

TABLE (V-20)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
IMPORTANCE OF PRICE: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample (N.A.)*				
2. Second Sample	10.817	1	0.314	N.S.
<u>Shoes in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	1.528	1	0.456	N.S.
<u>Dinnerware in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	12.848	1	0.646	N.S.
<u>The Two Products Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	8.427	1	0.118	N.S.
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	4.602	1	0.125	N.S.
<u>Shoes Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	10.554	1	0.708	N.S.
<u>Shoes Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	1.608	1	0.027	N.S.
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	0.181	1	0.000	0.041
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	11.403	1	1.023	N.S.

* Not Applicable

Hypothesis H5a: Harried consumers will consider fewer brands than relaxed consumers.

In general this hypothesis was supported when the experimental products and decision times were combined together. Also it was supported for both products under no time constraints for the two samples. However, the same hypothesis was rejected for both products under time constraints in the first sample. Table V-21 portrays the results of ANOVA test.

Hypothesis H5b: Harried consumers will consider fewer attributes than relaxed consumers.

The statistical results indicate that the difference between harried consumers and relaxed consumers are significant in general and also for the two products under two different decision times. However the level of significance is different between the two products. Table V-22 displays the results of ANOVA test. This hypothesis was tested for the second sample only.

Hypothesis H5c: Harried consumers will visit fewer stores than relaxed consumers.

This hypothesis suggests that harried consumers visit fewer stores when shopping than relaxed consumers. This was tested using the second sample only. The statistical results shown in Table V-23, indicate that data support this hypothesis in general and in each one of the experimental

groups.

Hypothesis H_{5a}: Harried consumers will use less informational cues than relaxed consumers.

To test this hypothesis, ANOVA was performed first for the two products and the two decision times combined together. Then the same test was performed for each product and each decision time independently. Finally, ANOVA was performed on the four experimental groups. The statistical results shown in Table V-24 indicate that data support this hypothesis for the two products under no time constraints. However the same hypothesis was rejected for the two products under time constraints.

Hypothesis H_{5e}: Harried consumers will take less time in making their choice than relaxed consumers.

Table V-25 indicates that ANOVA test of no difference between the harried consumers and the relaxed consumers regarding decision time. Again this hypothesis was supported for the two products and the two decision levels combined together. Also it was supported for the two products under no time constraints. This hypothesis was tested using data generated from the first sample.

TABLE (V-21)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING NUMBER OF BRANDS: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample	8.603	1	17.344	0.0001
2. Second Sample	21.087	1	45.637	0.000
<u>Shoes in General:</u>				
1. First Sample	5.937	1	8.357	0.006
2. Second Sample	16.608	1	18.734	0.000
<u>Dinnerware in General:</u>				
1. First Sample	6.166	1	8.512	0.006
2. Second Sample	12.709	1	32.997	0.000
<u>The Two Products Under Time Constraints:</u>				
1. First Sample	0.472	1	0.214	N.S.
2. Second Sample	8.670	1	9.157	0.003
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample	7.379	1	15.195	0.001
2. Second Sample	20.695	1	55.714	0.000
<u>Shoes Under Time Constraints:</u>				
1. First Sample	0.472	1	0.214	N.S.
2. Second Sample	7.252	1	3.396	0.072
<u>Shoes Under No Time Constraints:</u>				
1. First Sample	7.379	1	15.195	0.001
2. Second Sample	15.573	1	23.357	0.000
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample	1.789	1	2.215	N.S.
2. Second Sample	4.761	1	12.073	0.001
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample	6.932	1	15.754	0.001
2. Second Sample	13.135	1	36.327	0.000

TABLE (V-22)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING NUMBER OF ATTRIBUTES: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample (N.A.)*				
2. Second Sample	21.306	1	27.130	0.000
<u>Shoes in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	12.000	1	11.199	0.001
<u>Dinnerware in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	11.509	1	31.004	0.000
<u>The Two Products Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	13.609	1	6.664	0.011
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	16.107	1	71.951	0.000
<u>Shoes Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	12.945	1	2.960	0.092
<u>Shoes Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	12.743	1	45.711	0.000
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	5.948	1	14.292	0.000
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	10.0228	1	27.800	0.000

* Not Applicable

TABLE (V-23)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING NUMBER OF STORES: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample (N.A.)*				
2. Second Sample	15.930	1	66.667	0.000
<u>Shoes in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	12.000	1	32.641	0.001
<u>Dinnerware in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	10.148	1	32.639	0.000
<u>The Two Products Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	7.963	1	26.465	0.000
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	14.302	1	48.835	0.000
<u>Shoes Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	6.833	1	14.624	0.000
<u>Shoes Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	9.856	1	20.339	0.000
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	4.244	1	11.434	0.001
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	10.104	1	27.800	0.000

* Not Applicable

TABLE (V-24)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING TOTAL INFORMATION ACQUIRED: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample	49.500	1	14.882	0.0002
2. Second Sample (N.A.)*				
<u>Shoes in General:</u>				
1. First Sample	26.030	1	7.166	0.011
2. Second Sample (N.A.)				
<u>Dinnerware in General:</u>				
1. First Sample	44.11	1	8.074	0.007
2. Second Sample (N.A.)				
<u>The Two Products Under Time Constraints:</u>				
1. First Sample	3.435	1	0.766	N.S.
2. Second Sample (N.A.)				
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample	35.541	1	11.698	0.003
2. Second Sample (N.A.)				
<u>Shoes Under Time Constraints:</u>				
1. First Sample	0.876	1	0.046	N.S.
2. Second Sample (N.A.)				
<u>Shoes Under No Time Constraints:</u>				
1. First Sample	33.541	1	11.698	0.003
2. Second Sample (N.A.)				
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample	4.249	1	1.241	N.S.
2. Second Sample (N.A.)				
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample	58.138	1	15.943	0.001
2. Second Sample (N.A.)				

* Not Applicable

TABLE (V-25)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING DECISION TIME: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample	478.690	1	11.095	0.001
2. Second Sample (N.A.)*				
<u>Shoes in General:</u>				
1. First Sample	232.204	1	6.449	0.015
2. Second Sample (N.A.)				
<u>Dinnerware in General:</u>				
1. First Sample	436.070	1	5.912	0.020
2. Second Sample (N.A.)				
<u>The Two Products Under Time Constraints:</u>				
1. First Sample	7.567	1	0.209	N.S.
2. Second Sample (N.A.)				
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample	303.210	1	10.960	0.004
2. Second Sample (N.A.)				
<u>Shoes Under Time Constraints:</u>				
1. First Sample	0.247	1	0.000	N.S.
2. Second Sample (N.A.)				
<u>Shoes Under No Time Constraints:</u>				
1. First Sample	303.211	1	10.960	0.004
2. Second Sample (N.A.)				
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample	10.060	1	1.000	N.S.
2. Second Sample (N.A.)				
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample	607.763	1	10.773	0.004
2. Second Sample (N.A.)				

* Not Applicable

Hypothesis H_{5f}: Harried consumers are more likely to visit specialty stores than relaxed consumers, whereas relaxed consumers are more likely to visit department and discount stores than relaxed consumers.

Tables V-26 through V-29 indicate the chi-square test of no difference between harried and relaxed consumers regarding store patronage. All the statistical result indicate that the difference is insignificant. Moreover, the direction of the relationship was the opposite of what has been expected. As it is shown in Table V-29, 58.8% of the harried consumers indicate that they would buy the two products from a department store, whereas 50% of the relaxed consumers would buy them from a department store. On the other hand, 37.1% of the harried consumers reported that they would buy the two products from specialty stores, whereas 43.3% of the relaxed consumers would buy them from specialty stores. The same results were obtained for each product, in each decision time, and in the four experimental manipulations.

Hypothesis H_{6a}: Harried consumers are more likely to process information by attributes, whereas relaxed consumers are more likely to process information by brands.

The first step in testing this hypothesis was to cross-tabulate person type (two levels) with the three approaches of information processing. In general, the chi-square test indicates no significant difference. However, the difference

TABLE (V-26)

CHI-SQUARE TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING STORE VISITING: DIFFERENT SITUATIONS

Situation	X ²	df	P
<u>In General:</u>			
1. First Sample (N.A.)*			
2. Second Sample	1.039	2	N.S.
<u>Shoes in General:</u>			
1. First Sample (N.A.)			
2. Second Sample	0.264	2	N.S.
<u>Dinnerware in General:</u>			
1. First Sample (N.A.)			
2. Second Sample	2.142	2	N.S.
<u>The Two Products Under Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	4.278	2	N.S.
<u>The Two Products Under No Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	3.889	2	N.S.
<u>Shoes Under Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	1.480	2	N.S.
<u>Shoes Under No Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	3.067	2	N.S.
<u>Dinnerware Under Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	4.126	2	N.S.
<u>Dinnerware Under No Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	2.458	2	N.S.

* Not Applicable

TABLE (V-27)

CHI-SQUARE TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING STORE PATRONAGE: DIFFERENT SITUATIONS

Situation	X ²	df	P
<u>In General:</u>			
1. First Sample (N.A.)*			
2. Second Sample	1.788	2	N.S.
<u>Shoes in General:</u>			
1. First Sample (N.A.)			
2. Second Sample	0.093	2	N.S.
<u>Dinnerware in General:</u>			
1. First Sample (N.A.)			
2. Second Sample	1.402	2	N.S.
<u>The Two Products Under Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	3.273	2	N.S.
<u>The Two Products Under No Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	0.914	2	N.S.
<u>Shoes Under Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	0.778	2	N.S.
<u>Shoes Under No Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	0.859	2	N.S.
<u>Dinnerware Under Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	1.795	2	N.S.
<u>Dinnerware Under No Time Constraints:</u>			
1. First Sample (N.A.)			
2. Second Sample	0.056	2	N.S.

* Not Applicable

TABLE (V-28)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING STORE PATRONAGE

Type of Store	Person Type	
	Harried	Relaxed
	%	%
1. Department Stores	58.8	50.0
2. Discount Stores	4.1	6.6
3. Specialty Stores	<u>37.1</u>	<u>43.4</u>
Total	100.0	100.0
Base	(97)	(106)

$X^2 = 1.799$ with 2 df; N.S.

TABLE (V-29)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING STORE PATRONAGE:
THE TWO PRODUCTS

Store Type	Person Type	
	Harried	Relaxed
<u>Shoes:</u>	%	%
1. Department Stores	37.2	34.5
2. Discount Stores	4.7	5.5
3. Specialty Stores	<u>58.1</u>	<u>60.0</u>
Total	100.0	100.0
Base	(43)	(55)
 <u>Dinnerware:</u>		
1. Department Stores	75.9	66.7
2. Discount Stores	3.7	7.8
3. Specialty Stores	<u>20.4</u>	<u>25.5</u>
Total	100.0	100.0
Base	(54)	(51)

was significant when buying shoes under time constraints (Table V-30). From Table V-31, 31.7% of the harried consumers process by attributes, whereas, only 15.4% of the relaxed consumers process by attributes. On the other hand, 31.7% of the harried consumers process by brands, whereas 48.7% of the relaxed consumers process by brands. Also 36.6% of the harried consumers use hybrid (mixed) approach, whereas 35.9% of the relaxed consumers use the mixed approach.

As shown in Table V-32, more analysis was performed in which only the first two approaches were considered. The results indicate that, in general, harried consumers tend to process information by attributes, whereas relaxed consumers tend to process information by brands. ($X^2 = 3.69$ with 1 df; significant at 0.055 level.) This comparison was performed using all the experimental groups combined, whereas it was meaningless to do the analysis for each experimental group independently because of small cell size.

Hypothesis H7a: Harried consumers are less likely to have confidence in their choice than relaxed consumers:

Table V-33 indicates the ANOVA test of no difference between harried consumes and relaxed consumers regarding confidence in choice. The statistical results indicate that the hypothesized relationship is supported in general and in both sample. However data did not support the same hypoth-

TABLE (V-30)

CHI-SQUARE TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
TYPE OF INFORMATION PROCESSING: DIFFERENT SITUATIONS

Situation	X ²	df	P
<u>In General:</u>			
1. First Sample	3.691	2	N.S.
2. Second Sample (N.A.)*.			
<u>Shoes in General:</u>			
1. First Sample	6.427	2	0.040
2. Second Sample(N.A.)			
<u>Dinnerware in General:</u>			
1. First Sample	3.394	2	N.S.
2. Second Sample (N.A.)			
<u>The Two Products Under Time Constraints:</u>			
1. First Sample	1.526	2	N.S.
2. Second Sample (N.A.)			
<u>The Two Products Under No Time Constraints:</u>			
1. First Sample	3.587	2	N.S.
2. Second Sample (N.A.)			
<u>Shoes Under Time Constraints:</u>			
1. First Sample	1.065	2	N.S.
2. Second Sample (N.A.)			
<u>Shoes Under No Time Constraints:</u>			
1. First Sample	6.786	2	0.034
2. Second Sample (N.A.)			
<u>Dinnerware Under Time Constraints:</u>			
1. First Sample	4.667	2	N.S.
2. Second Sample (N.A.)			
<u>Dinnerware Under No Time Constraints:</u>			
1. First Sample	0.291	2	N.S.
2. Second Sample (N.A.)			

* Not Applicable

TABLE (V-31)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING TYPE OF
INFORMATION PROCESSING

Type of Information Processing	Person Type	
	Harried	Relaxed
	%	%
1. Process By Attributes	31.7	15.4
2. Process by Brands	31.7	48.7
3. Mixed	<u>36.6</u>	<u>35.9</u>
Total	100.0	100.0
Base	(40)	(40)

$\chi^2 = 3.69$ with 2 df; N.S.

TABLE (V-32)
COMPARISON BETWEEN HARRIED AND RELAXED
CONSUMERS REGARDING TYPE OF
INFORMATION PROCESSING

Type of Process	Person Type	
	Harried	Relaxed
	%	%
1. Process By Attributes	50.0	24.0
2. Process by Brands	<u>50.0</u>	<u>76.0</u>
Total	100.0	100.0
Base	(26)	(25)

$X^2 = 3.69$ with 1 df; significant at 0.055 level

esis when buying dinnerware under time constraints. For all the other experimental groups the significance level was less than .05.

Hypothesis H7b: Harried consumers are less likely to be satisfied with their choice than relaxed consumers.

Table V-34 presents the results of ANOVA test of no difference between harried consumers and relaxed consumers regarding satisfaction with their choice. In general data support the predicted relationship in both samples. Also the statistical results indicate that the same hypothesis is supported when the two products are combined. However, the relationship was rejected when buying dinnerware under time constraints. Again the significance level was less than .05 for all other experimental groups.

Hypothesis H7c: Harried consumers are less likely to make the best choice than relaxed consumers.

This hypothesis was tested using the data generated from the first sample. As shown in Table V-35, the hypothesis is supported for the two products and two decision times combined. Also, it is supported for the two products independently, and for three of the four experimental situations. However, the same hypothesis is rejected for the two experimental products combined under time constraints. Also, it is rejected when buying dinnerware under

TABLE (V-33)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING CONFIDENCE IN CHOICE: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample	3.604	1	13.331	0.0005
2. Second Sample	6.948	1	45.586	0.000
<u>Shoes in General:</u>				
1. First Sample	2.723	1	9.334	0.004
2. Second Sample	5.259	1	29.396	0.000
<u>Dinnerware in General:</u>				
1. First Sample	2.372	1	4.672	0.037
2. Second Sample	4.424	1	16.761	0.0001
<u>The Two Products Under Time Constraints:</u>				
1. First Sample	0.966	1	1.690	N.S.
2. Second Sample	4.178	1	15.719	0.0001
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample	2.236	1	50.709	0.000
2. Second Sample	5.390	1	19.984	0.000
<u>Shoes Under Time Constraints:</u>				
1. First Sample	1.348	1	7.826	0.012
2. Second Sample	3.405	1	11.041	0.002
<u>Shoes Under No Time Constraints:</u>				
1. First Sample	2.236	1	7.377	0.014
2. Second Sample	3.876	1	24.761	0.000
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample	0.000	1	0.000	N.S.
2. Second Sample	2.359	1	4.927	0.031
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample	3.354	1	15.226	0.001
2. Second Sample	3.753	1	25.078	0.000

TABLE (V-34)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
SATISFACTION WITH CHOICE: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample	5.600	1	35.701	0.000
2. Second Sample	8.338	1	63.625	0.000
<u>Shoes in General:</u>				
1. First Sample	4.456	1	27.035	0.000
2. Second Sample	5.304	1	26.875	0.000
<u>Dinnerware in General:</u>				
1. First Sample	3.479	1	11.524	0.002
2. Second Sample	6.399	1	35.556	0.000
<u>The Two Products Under Time Constraints:</u>				
1. First Sample	2.683	1	15.394	0.0004
2. Second Sample	5.441	1	27.272	0.000
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample	3.354	1	21.774	0.000
2. Second Sample	6.022	1	73.149	0.000
<u>Shoes Under Time Constraints:</u>				
1. First Sample	2.696	1	19.459	0.000
2. Second Sample	3.365	1	10.443	0.002
<u>Shoes Under No Time Constraints:</u>				
1. First Sample	3.354	1	21.774	0.000
2. Second Sample	3.918	1	28.463	0.000
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample	1.110	1	2.320	N.S.
2. Second Sample	4.230	1	16.040	0.000
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample	3.801	1	17.9381	0.000
2. Second Sample	4.619	1	46.000	0.000

time constraints.

Hypothesis H7a: Harried consumers are less likely to approach their ideal choice than relaxed consumers.

Table V-37 portrays the ANOVA test of no difference between harried consumers and relaxed consumers regarding approaching their ideal choices. The F values obtained for the two products under two different time constraints are statistically significant (p less than 0.05).

Hypothesis H7e: Harried consumers are less likely to consider themselves good shoppers than relaxed consumers.

This hypothesis suggests that harried consumers are less likely to perceive themselves as good shoppers than relaxed consumers. Data did not support this hypothesis. As shown in Table V-37, the statistical results indicate that the difference is insignificant. However the direction of the relationship is as expected.

Discussion and Interpretation of Findings

The general thesis of this study is that there are two types of consumers: Harried vs. Relaxed. These two types possess different demographic, attitudinal, perceptual, and behavioral characteristics. To a great extent, the findings presented so far strongly support these claims.

The first major hypothesis suggests that harried con-

TABLE (V-35)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
APPROACHING BEST CHOICE: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample	9.420	1	16.075	0.0001
2. Second Sample (N.A.)*				
<u>Shoes in General:</u>				
1. First Sample	9.048	1	17.005	0.0002
2. Second Sample (N.A.)				
<u>Dinnerware in General:</u>				
1. First Sample	4.269	1	2.925	0.095
2. Second Sample (N.A.)				
<u>The Two Products Under Time Constraints:</u>				
1. First Sample	2.501	1	1.757	N.S.
2. Second Sample (N.A.)				
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample	10.436	1	28.599	0.000
2. Second Sample (N.A.)				
<u>Shoes Under Time Constraints:</u>				
1. First Sample	3.596	1	3.811	0.067
2. Second Sample (N.A.)				
<u>Shoes Under No Time Constraints:</u>				
1. First Sample	8.721	1	19.984	0.000
2. Second Sample (N.A.)				
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample	1.789	1	2.215	N.S.
2. Second Sample (N.A.)				
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample	6.037	1	9.359	0.007
2. Second Sample (N.A.)				

* Not Applicable

TABLE (V-36)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
APPROACHING IDEAL CHOICE: DIFFERENT SITUATIONS

Situation	Mean	df	F	Signif. of F
<u>In General:</u>				
1. First Sample (N.A.)*				
2. Second Sample	357.044	1	51.699	0.000
<u>Shoes in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	271.410	1	35.669	0.000
<u>Dinnerware in General:</u>				
1. First Sample (N.A.)				
2. Second Sample	224.269	1	17.985	0.000
<u>The Two Products Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	155.826	1	10.600	0.002
<u>The Two Products Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	517.268	1	72.816	0.000
<u>Shoes Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	111.373	1	6.182	0.016
<u>Shoes Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	340.732	1	72.817	0.000
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	100.595	1	4.093	0.048
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample (N.A.)				
2. Second Sample	212.754	1	23.411	0.000

* Not Applicable

TABLE (V-37)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS
REGARDING THE PERCEPTION OF THE SELF AS A GOOD
SHOPPER

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	2.329	1	2.329	1.947	0.194*
Residual	364.854	305	1.196		
Total	367.184	306	1.999		

* N.S.

sumers are demographically different from relaxed consumers. Nine different demographic characteristics were tested: work status, work type, birth order, income, marital status, social class, having children, having children under school age, and education.

As it is shown in Table V-11, which summarizes these tests, five of these hypotheses are accepted. No significant differences are found between harried consumers and relaxed consumers regarding education, work status, occupation, family income, and social class. Whereas, significant differences are found between harried and relaxed consumers regarding birth-order, marital status, having children, and having pre-school aged children.

With regard to work status, many researchers associate feeling of time pressure with working outside the home (Reilly, 1982; Schaninger and Allen, 1981). However the result of this study didn't confirm this relationship. This result can be interpreted in terms of the positive outcomes resulting from occupying an additional position which might well outweigh and additional role-overload (Sieber, 1974). Sieber, 1974 states that because of role privileges, status security, status enhancement, and personality involvement associated with working, working women might not perceive additional role-overload, even though their total workload has increased.

Also the hypothesis that relates occupation to time

pressure has been rejected, although many researchers relate high status jobs (i.e., managerial jobs), to the sense of time urgency (Rosenman and Friedman, 1959; Jenkins and Messinger, 1966). This can be interpreted in terms of work involvement. Marks (1977) suggests that the time and energy devoted to a particular position may reflect the individual's commitment to that position, as well as the availability of time and energy.

Reilly (1982) states that another argument against increased role overload follows from the position set. He claimed that the time and energy demands of all positions in the position set contribute to the role overload. He postulates that "working might not cause role overload for a wife if the rest of the positions in her position set are not demanding. She may experience less role-overload than a non-working counterpart with several children in diapers. In fact, many work because they are bored" (p. 409).

The results of this study support both Marks (1977) and Reilly (1982). Harried consumers are found to be more highly involved in their work (Table V-12) and in their home (Table V-13) than relaxed consumers. Also they are more likely to view their work as a career (Table V-14), not just a job.

One of the interesting results of this study is the association between birth order and feeling pressured. It was hypothesized that harried consumers are more likely to

be the first born child in their family. This hypothesis is accepted (Table V-3). The rationale behind this hypothesis is that many characteristics of a type A behavior person who always experiences a sense of time urgency (Calabresi and Cohen, 1968; Wessman, 1973; Chesney et al., 1981) are found to be related to birth order (Muntroe and Munroe, 1983; Schneider and David, 1983). Parents may push their first child to work hard to either follow their foot-steps or to achieve whatever they had failed to reach. This may increase n-achievement which is found to be related to both role-overload and sense of time urgency (the two dimensions of time pressure scale).

The hypothesis that relates family income to time pressure is also rejected. However, the direction of the relationship is as expected. Income may relate to feeling pressured if it is the result of hard work on the behalf of the husband not the wife. Therefore, it might be said that what really matters is the source of income, not the amount. For this hypothesis F value was 1.678 with 1 df and significance level 0.196 (Table V-5).

The subhypothesis H_{1e} suggests a positive relationship between being married and feeling pressured. This hypothesis is accepted at 0.05 level (Table V-6). Again this result indicates that marriage may create additional demands on the woman's time and energy.

The proposed relationship between social class and

feeling pressure is rejected (Table V-7). There are two explanations of this result. First, the way social class was measured had forced most of the respondents to identify themselves as middle class. As it is shown in Table III-1 and Table III-2, 56% of the respondents identified themselves as middle class. The second explanation is that life style may be what has to be accounted for, not social class. Filling time with many competing activities may attribute to this feeling of being rushed and pressured. Berry (1979) states that people now reserve considerable amount of time for their physical and mental well-being. More and more people are spending considerable amounts of "me-time" (Leonard, 1977). Berry (1977) suggests that a "things-first, people-second" culture was in the beginning stages of becoming a "people-first, things-second" culture. He added that the message was not that people would lose interest in material acquisitions, but rather a growing and eventually large number of people would become more interested in the quality of lives.

No doubt that "me-time" activities contribute to the quality of life. Feeling good, both mentally and physically, is valued, and yet feeling good takes time which is taken away from other activities.

Harried consumers are found to have children more than relaxed consumers (Table V-8). Not only that but they also tend to have pre-school aged children more than relaxed

consumers (Table V-9). Hypothesis H_{1g} and H_{1h} are supported. These results are consistent with the literature. Many researchers identified the presence of children, specifically, pre-school aged, as one of the major family characteristics that found to have a significant effect on the time spent at housework (Hall and Schroeder, 1970). In this study, as it was indicated earlier, home and mothering are found to be positively related to the feeling of time pressure (Table V-13).

The last demographic variable that was related to time pressure is education. It was hypothesized that education is positively related to time pressure. This hypothesis is partially accepted ($X^2=11.90$ with 6 df and significant level 0.064). Again education may mean more responsibilities, more demand on time, and high n-Achievement, which are related to perceived role-overload and sense of time pressure (the two dimensions of time pressure scale).

The second major hypothesis suggests a positive relationship between time pressure and both work involvement and mothering and home involvement. The two hypotheses that correspond to this hypothesized relationship are supported (Table V-12 and Table V-13). These results indicate that harried consumers are involved not only in their work, but also in their homes and with their responsibilities as mothers. Doing many things at the same time is one characteristic of those who experience time pressure. This high

involvement in both work and home means too many commitments and competing demands on the limited time available.

The third major hypothesis states that harried consumers exhibit different attitudes towards shopping from relaxed consumers. More specifically, they tend to enjoy shopping less than relaxed consumers, and view shopping as a mandatory activity. As it is shown in Table V-15, these two hypotheses are supported in general attitude towards shopping. Also they are supported in the context of the experiment for both experimental products (shoes and dinnerware), and for each product independently.

These strong results introduce a new challenge to many scholars who still hold Martineau's view (1957) regarding shopping. Martineau (1957) speculated that "shopping is a woman's equivalent of a man's hunting trip,....It's vicarious enjoyment of higher status,....It's the woman's way to wield power" (p. 182). No doubt that the validity of this hypothesis is questioned in today's market with shifting female attitudes and life styles. The statistical results of testing the hypothesized relationship between time pressure and attitude towards shopping are consistent with the few empirical investigations that have examined this relationship. For example, McDaniel and Rao (1985) compared the response of 246 working wives and 181 housewives to several food shopping- and preparation-related psychographic statements and found that working wives tend to have a great

dislike for food shopping and cooking that seemed to stem primarily from time considerations. Also, Hendrix (1979) found that "grocery shopping" ranked 21 and "other kinds of shopping" was ranked 18 in a list of 22 activities, where 22 was the least desirable. Hendrix (1979) also concluded that "some types of shopping can be seen as discretionary by particular groups of consumers, so that the assumption that shopping is an onerous task is undoubtedly an oversimplification" (p. 432). In this study, relaxed consumers are found to belong to one of these groups suggested by Hendrix, whereas harried consumers tend to view shopping as a mandatory activity.

The fourth major hypothesis suggests that harried consumers are different in their shopping orientation from relaxed consumers. More specifically, it was hypothesized that harried consumers shop for convenience, whereas relaxed consumers shop for bargains. Convenience was measured in the pre-experimental questionnaire as a general orientation. Store location was used as an indicator of convenience. As it is shown in Table V-17, no significant differences are found between harried and relaxed consumers regarding the importance of store location. Also, convenience was measured in the experiment (second sample) using the weights that are given to store location as choice criterion. As it is observed in Table V-18, the hypothesis that relates time pressure to convenience is rejected in general and in all

experimental situations except when shopping for dinnerware under time constraints.

One explanation of the lack of support for this hypothesis may lie in the concept of convenience itself. Yale and Venkatesh (1986) call for reevaluation of the notion of convenience as it appears in the existing marketing/consumer behavior literature and explore the multidimensionality of the concept. Convenience may mean different things to different people. In this study convenience was measured in terms of store location, but with the existence of a car, the distance may be of little importance.

Another explanation may be the nature of the two experimental products. The pre-test indicates that both products are characterized with high involvement and a great deal of search activities. Traditionally, convenience is always associated with a specific group of products. Copland (1923), in his HBR article suggests the now-classic product typology: convenience, shopping, and specialty goods. His original classification has been criticized and modified over the years but the idea of a convenience good as one which requires little if any cognitive decision making has survived.

Now the question is why the hypothesis is supported when buying dinnerware under time pressure. This may be because of both the product and the situation. Dinnerware

set is heavy and delivery may be important. The store location may be associated with fast delivery in the mind of consumers. By examining the weights given to the evaluative criterion identified by this group, delivery was the most important criterion after store location.

The second subhypothesis regarding shopping orientation is rejected too. No significant difference is found between harried consumers and relaxed consumers regarding price as an evaluative criterion as it is shown in Table V-19 and V-20. This result is held in general and in all the experimental situations. No differences are found between the two groups regarding watching advertising for sales, looking for stores that sell at low price, shopping for specials, or using coupons. Demand artifacts may be the cause for these results. Sawyer (1975) states that demand artifacts may have affected experimental studies investigating the quality connotations of price.

In this study, the harried consumers may not want to appear as bad shoppers and/or the relaxed consumers may not want to appear to emphasize price too much or look for bargains on the expense of quality. However, as indicated in Table V-19, harried consumers are less likely to consider price when shopping than relaxed consumers. Also harried consumers are found to believe less in saving money when shopping than relaxed consumers. In addition it is found that harried consumers are more likely to believe that price

and quality go hand in hand than relaxed consumers. Therefore, while reporting the actual behaviors didn't support the hypothesized relationship between feeling pressured and price-consciousness, the attitudinal and perceptual measures support the same hypothesis.

The fifth major hypothesis deals with shopping behavior. It was hypothesized that harried consumers behave differently in the marketplace. Six subhypotheses were tested regarding number of brands, number of attributes, number of informational cues, decision time, number of stores, type of store, and type of information processing that both harried and relaxed consumers confront.

In the first subhypothesis it is hypothesized that harried consumers are more likely to consider fewer brands than relaxed consumers. In general this hypothesis was supported in the two samples when the experimental products and decision times were combined together. Also it was supported for both products under no time constraints for the two samples. Also it was supported for both products under time constraints for the second sample. However, the same hypothesis was rejected for both products under time constraints in the first sample (Table V-21). The same exact results were obtained with the number of informational cues (Table V-24) and decision time (Table V-25). These results point at the differences in the manipulation levels in the two samples used in the study. In the first sample

where the subjects were presented with information boards as stimuli, time was manipulated in two levels: two minutes and no time constraints at all, whereas in the second sample time was manipulated differently: one day and a month. It might be that the task of making a decision in only two minutes caused a pressure and confusion on both harried and relaxed consumers, whereas it did not make a difference to shop for the two experimental products within a day and a month. Indeed, the statistical results portrayed in Table V-38 and Table V-39 support this explanation.

Regarding number of attributes, the hypothesis that negatively relates the number of attributes considered when shopping, with feeling pressured, is supported in general and in each one of the experimental groups. These results are consistent with literature (Jacoby, 1974; Stamm, 1969; Jacoby, Szybillo, and Berning, 1976).

The same results have been obtained regarding the number of stores. As shown in Table V-23, the hypothesized relationship between number of stores and feeling pressured is strongly borne out by the data. This result also is consistent with the literature (McCall, 1977).

In hypothesis H5f it is suggested that harried consumers tend to prefer specialty stores whereas relaxed consumers tend to prefer department stores. The statistical results displayed in Tables V-23 through V-29 indicate that this hypothesis is rejected. No differences are found be-

TABLE (V-38)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING CONFUSION
WHILE PERFORMING THE TASK: DIFFERENT SITUATIONS

Confusion	Mean	F	df	P
<u>Shoes Under Time Constraints:</u>				
1. First Sample	1.764	3.800	1	0.070
2. Second Sample	2.188	3.987	1	0.060
<u>Shoes Under No Time Constraints:</u>				
1. First Sample	1.342	1.82	1	N.S.
2. Second Sample	2.351	10.057	1	0.003
<u>Dinnerware Under Time Constraints:</u>				
1. First Sample	2.736	6.923	1	0.020
2. Second Sample	2.750	6.211	1	0.016
<u>Dinnerware Under No Time Constraints:</u>				
1. First Sample	0.224	0.049	1	N.S.
2. Second Sample	2.887	11.414	1	0.002

TABLE (V-39)

ANOVA TEST OF NO DIFFERENCE BETWEEN
HARRIED AND RELAXED CONSUMERS REGARDING
FEELING PRESSURED WHILE PERFORMING THE TASK

Pressure	Mean	F	df	P
<u>Shoes Under Time</u>				
<u>Constraints:</u>				
1. First Sample	3.150	8.611	1	0.009
2. Second Sample	2.406	4.388	1	0.042
<u>Shoes Under No Time</u>				
<u>Constraints:</u>				
1. First Sample	0.242	0.037	1	N.S.
2. Second Sample	2.763	12.470	1	0.001
<u>Dinnerware Under Time</u>				
<u>Constraints:</u>				
1. First Sample	2.210	4.628	1	0.046
2. Second Sample	5.222	20.209	1	0.000
<u>Dinnerware Under No Time</u>				
<u>Constraints:</u>				
1. First Sample	0.894	1.286	1	N.S.
2. Second Sample	3.753	23.276	1	0.000

tween the harried and relaxed consumers regarding store patronage. This was true when the subjects were asked about the store they are most likely to visit and the store they are most likely to buy from. Considering the two products together, for both harried consumers and relaxed consumers, department stores rank number one followed by specialty stores then discount stores (Table V-28). But when each product was considered independently, the results were different. For shoes both harried consumers and relaxed consumers prefer specialty stores whereas they prefer department stores when it comes to dinnerware (Table V-29). In addition, when harried consumers are compared with relaxed consumers in general, the direction of the relationship was the opposite of what has been expected. As it is shown in Table V-29 60% of the relaxed consumers tend to buy their shoes from specialty stores, whereas 58.1% of the harried consumers tend to buy their shoes from the same type of stores. Also, in the case of dinnerware, 75.9% of the harried consumers tend to buy their dinnerware from department stores, whereas 66.7% of the relaxed consumers tend to buy their dinnerware from department stores. These results may be interpreted in terms of store image. It might be that different types of stores are associated with high quality images regarding different product categories. Also it might be that department stores offer more help with regard to dinnerware (e.g., delivery), and specialty stores

offer more help regarding shoes (salespeople).

Table V-29 also indicates that more relaxed consumers buy both products from discount stores than harried consumers. While the results are not significant, it is another indication that relaxed consumers are more likely than relaxed consumers to look for bargains.

The last subhypothesis in this group proposes differences between harried consumers and relaxed consumers regarding type of information processing. As it is shown in Table V-30, and in general, no significant differences are found. 36% of the respondents processed using hybrid (mixed) approaches, 37% processed by brands, and 27% processed by attributes. These results are consistent with the previous research (Capon and Burke, 1977; Bettman and Kakkar, 1977) that the majority of people process information use a mixed approach. The high percentages of subjects that processed information by brands (37%) may be due to the presentation of information boards. However, this study indicates that more harried consumers process information by attributes than relaxed consumers (Table V-32) when only process by brands and process by attributes are considered. These results support the hypothesized relationship and also are consistent with the previous research. Tversky (1969) pointed out that if decision-makers are actually simplifiers than we should find empirical support for attribute-based models since they are simpler than model based on brand

processing. Indeed, empirical support for the simpler lexicographic attribute-based model has been found in many studies (Bettman and Jacoby, 1976; Capon and Burke, 1977; Russ, 1971; Russo and Doshier, 1975; Russo and Rosen, 1975; Wright and Weitz, 1977.) Therefore, it might be that the harried consumer wants to simplify his task and make a quick decision.

The last major hypothesis concerns the differences between the harried consumers and the relaxed consumers regarding shopping efficiency. More specifically, it concerns confidence, satisfaction, approaching ideal choice, approaching the best choice, and the perception of the self as a good shopper.

With regard to confidence and satisfaction, the statistical results portrayed in Tables V-33 and V-34, in general, support the hypothesized relationship between confidence in choice and satisfaction with the choice and feeling pressured. However, these relationships are rejected in the first sample when buying dinnerware under time constraints. Also, no differences are found (first sample) regarding confidence when shopping for shoes under time constraints. Again these results are consistent with the other relationships which support the previous explanation for the lack of support for the proposed relationships between feeling pressured, the number of brands, and the number of informational cues. As it is shown in Tables V-38

and V-39, no differences are found between the harried and relaxed consumers regarding confusion and pressure while performing the task under time constraints in the first sample.

With regard to approaching ideal choice, the hypothesized relationship is supported in general and in each one of the experimental situations. This result is logical since the relaxed consumers shop more, visit more stores, consider more brands, consider more attributes, and take their time while shopping. Also it is consistent with previous research (Jacoby, Speller, and Berning, 1974).

Hypothesis H7c suggests that harried consumers are less likely to make the best choice than relaxed consumers. Once again the same pattern has emerged, that is, data supported the hypothesis for both products under no time constraints, and did not support the same hypothesis for the two products under time constraints. This consistency points out a very important result of this research regarding the nature of time-pressure concept, which will be discussed shortly.

The last hypothesis for this group suggests that relaxed consumers are more likely to consider themselves good shoppers than harried consumers. As indicated in Table V-37, this hypothesis is rejected. There are two different explanations for the lack of support for this hypothesis. First, it might be that harried consumers don't want to admit that they are not good shoppers. Second, both groups

might perceive good shoppers differently. For example, harried consumers might view the good shopper as the one who looks for high quality and brand names, whereas relaxed consumers view a good shopper as the one who looks for bargains.

Before ending this part of the research, a very important point needs to be explained and discussed, that is the consistent pattern of results. Most of the proposed hypotheses have been supported for the two products, under time constraints and no time constraints, when scenarios were used as the research stimuli. Also most of the proposed hypotheses have been supported for the two products under no time constraints, when information boards were used as the research stimuli. However, the same hypotheses are rejected for both products under time constraints using the same stimulus. These results raise a question about the real nature of time pressure. In other words; is time pressure a personality trait, a situational variable, or both? In this research time pressure is considered and measured as a predisposition (Harried/Relaxed), and as a situational variable (time constraints), which might help in sheading some light on the nature of the time-pressure concept.

The classical trait view suggests that an individual's behavior should be relatively constant from one situation to the next, and that in the same situation individual dif-

ferences should emerge (Allport, 1961; Cattell, 1965; Eysenck, 1970). In the context of this research, if this view is true, the behavior of harried consumers should differ from the behavior of relaxed consumers under the same experimental situations. Also, the behaviors of both should be constant across the experimental situations. Indeed, the results of this research support this view.

Table V-41 indicates that the behaviors of both the harried consumers and relaxed consumers are consistent under different time constraints. This means that there is no significant impact of the situation. Also there are significant differences between the harried consumers and the relaxed consumers in terms of four out of six dependent variables. This means the significant impact of the trait (feeling pressure). These results strongly support the researcher's claim that feeling pressure is part of the person's personality.

On the other hand, Situationism (Farber, 1964; Mischel, 1968) suggests that an individual's behavior should change from one situation to another. They regard individual differences in behavior within the same situation as something of an embarrassment to be conceptualized as the result of past experience or simply as error variance (Bower, 1973). Again the results of this research support these claims.

Table V-40 indicates that the behaviors of both the

TABLE (V-40)

MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR
OF HARRIED AND RELAXED CONSUMERS
UNDER DIFFERENT TIME CONSTRAINTS

(THE FIRST SAMPLE)

Variables	Harried			Relaxed			Differ.
	Mean Square	F	P	Mean Square	F	P	
Number of brands	15.283	7.122	0.011	148.400	64.222	0.000	133.118*
Number of informa- tional cues	262.933	6.942	0.012	5838.547	39.346	0.000	5575.919*
Decision time	34090.852	4.812	0.034	653569.188	37.372	0.000	31265.336*
Confidence	4.265	8.012	0.007	24.616	34.555	0.000	20.351*
Satisfaction	5.438	9.936	0.003	21.312	38.594	0.000	15.874*
Closeness to the best choice	15.402	4.087	0.050	135.868	37.782	0.000	22.379*

* $p < 0.05$

TABLE (V-41)
 MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR
 OF HARRIED AND RELAXED CONSUMERS
 UNDER DIFFERENT TIME CONSTRAINTS
 (THE SECOND SAMPLE)

Variables	Harried			Relaxed			Differ.
	Mean Square	F	P	Mean Square	F	P	
Number of brands	1.662	1.215	N.S.	34.354	1.984	N.S.	32.692*
Number of attributes	1.161	0.596	N.S.	40.287	1.329	N.S.	39.126
Number of stores	2.177	1.335	N.S.	14.705	2.564	N.S.	12.528*
Confidence	0.186	0.180	N.S.	2.185	2.026	N.S.	1.840*(N.S.)
Satisfaction	0.569	0.516	N.S.	0.015	0.013	N.S.	0.840*(N.S.)
Closeness to the ideal choice	1153.026	0.587	N.S.	8574.809	2.975	0.088	7420.783*

* $p < 0.05$

harried and the relaxed consumers are significantly different under different time constraints. This means that time pressure as a situational variable, has a significant impact on the behavior of both the harried consumers and relaxed consumers. But it is interesting enough to notice (Table V-40) that there are significant differences between the mean-square of the behaviors of the harried and relaxed consumers. These statistical results, portrayed in Table V-40), suggest that time pressure has an impact on the consumer behavior, not only as a situational variable, but also as a predisposition.

Differences in the results obtained from the first sample and the second sample can be attributed to the operationalization of time pressure as one of the two experimental manipulations. For the first sample, two levels were used: two minutes, and no constraints at all. For the second sample, two different levels were used: one day, and a month. The statistical results portrayed in Table V-39 indicate that no significant differences are found between harried and relaxed consumers regarding feeling pressured while performing the task. This means that for the first sample, time pressure as a situational variable was much stronger than time pressure as a predisposition, and no differences were found between the harried consumers and the relaxed consumers. On the other hand, as indicated in Table V-39, significant differences

are found between harried and relaxed consumers regarding feeling pressured while performing the task under time constraints and no time constraints. This means that for the second sample, time pressure as a situational variable was not strong enough (Table V-41), whereas time pressure as a predisposition was strong enough to exert a significant impact on the behaviors of the harried consumers and relaxed consumers.

Time pressure as a concept can be operationalized as an objective situational variable (Wright and Weitz, 1974), as a perception of the situation (Lutz and Kakkar, 1975) or as a predisposition (Wessman, 1973); Calabresi and Cohen, 1968; Settle and Alreck). In this research three operationalizations were used, and all proved to be important in explaining the behavior. Therefore, all have to be considered in any study that includes time pressure as a concept.

Mischel (1977) suggests that there are some settings where personality traits can be used to predict behavior and other settings where personality traits cannot be used to predict behavior. Monson, Hesley, and Chernick, 1982) indicate that traits are most likely to be useful in those settings where situational pressures are weak and where there are considerable differences in the behaviors exhibited. However, traits are least likely to be useful in those settings where situational pressures are strong and where there are few individual differences in the behaviors

TABLE (V-42)
 MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR
 OF HARRIED AND RELAXED CONSUMERS
 WHEN SHOPPING FOR TWO DIFFERENT PRODUCTS
 (THE FIRST SAMPLE)

Variables	Harried			Relaxed			Differ.
	Mean Square	F	P	Mean Square	F	P	
Number of brands	1.204	0.480	N.S.	1.663	0.265	N.S.	1.06 (N.S.)
Number of informa- tional cues	0.001	0.000	N.S.	316.284	1.063	N.S.	316.28*
Decision Time	2720.919	0.345	N.S.	63810.934	1.909	N.S.	61090.02*
Confidence	0.036	0.057	N.S.	0.027	0.020	N.S.	0.65 (N.S.)
Satisfaction	0.021	0.031	N.S.	0.688	0.620	N.S.	0.68 (N.S.)
Closeness to the ideal choice	7.154	1.797	N.S.	4.491	0.628	N.S.	2.66**

* $p < 0.05$

** $p < 0.099$

TABLE (V-43)

MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR
OF HARRIED AND RELAXED CONSUMERS
WHEN SHOPPING FOR TWO DIFFERENT PRODUCTS

(THE SECOND SAMPLE)

Variables	Harried			Relaxed			Differ.
	Mean Square	F	P	Mean Square	F	P	
Number of brands	1.662	1.215	N.S.	34.354	1.984	N.S.	32.69*
Number of attributes	1.161	0.596	N.S.	40.287	1.329	N.S.	39.13*
Number of stores	2.177	1.335	N.S.	14.705	2.564	N.S.	12.53*
Confidence	0.186	0.180	N.S.	2.185	2.026	N.S.	2.00 (N.S.)
Satisfaction	0.569	0.516	N.S.	0.015	0.013	N.S.	0.55 (N.S.)
Closeness to the ideal choice	1153.021	0.587	N.S.	8574.809	2.975	0.088	7421.79*

* $p < 0.05$

TABLE (V-44)

MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR
OF THE SAME PERSON TYPE UNDER TWO DIFFERENT TIME CONSTRAINTS
(USING TWO SEPARATE SAMPLES)

Variables	First Sample			Second Sample			Differ.
	Mean Square	F	P	Mean Square	F	P	
1. <u>HARRIED CONSUMERS:</u>							
Number of brands	15.283	7.122	0.011	1.662	1.215	N.S.	5.91*
Confidence	4.265	8.012	0.003	0.186	0.180	N.S.	7.83*
Satisfaction	5.438	9.936	0.003	0.569	0.516	N.S.	4.42*
2. <u>RELAXED CONSUMERS:</u>							
Number of brands	148.400	64.222	0.000	34.354	1.984	N.S.	114.05*
Confidence	24.616	34.555	0.000	2.185	2.026	N.S.	22.43*
Satisfaction	21.312	38.594	0.000	0.015	0.013	N.S.	21.30*

* $p < 0.05$

TABLE (V-45)

MEAN SQUARE DIFFERENCES BETWEEN THE BEHAVIOR
OF THE SAME PERSON TYPE WHEN SHOPPING FOR TWO DIFFERENT PRODUCTS

(USING TWO SEPARATE SAMPLES)

Variables	First Sample			Second Sample			Differ.
	Mean Square	F	P	Mean Square	F	P	
1. <u>HARRIED CONSUMERS:</u>							
Number of brands	1.204	0.480	N.S.	1.662	1.215	N.S.	0.458 (N.S.)
Confidence	0.036	0.057	N.S.	0.186	0.180	N.S.	0.150 (N.S.)
Satisfaction	0.021	0.031	N.S.	0.569	0.516	N.S.	0.548 (N.S.)
2. <u>RELAXED CONSUMERS:</u>							
Number of brands	1.663	0.265	N.S.	34.354	1.984	N.S.	32.691*
Confidence	0.027	0.020	N.S.	2.185	2.026	N.S.	2.000 (N.S.)
Satisfaction	0.688	0.628	N.S.	0.015	0.013	N.S.	0.675 (N.S.)

* $p < 0.05$

those settings where situational pressures are strong and where there are few individual differences in the behaviors exhibited. The results of these research provide support for these claims.

More analyses were performed to assess the impact of the person and the situation. As shown in Table V-45, significant differences are found between the two samples with regard to the three dependent variables that are measured in both. This in fact can be attributed to experimental manipulations. From Table V-46, it can be said that the product type has little impact on the behavior of both consumers. Therefore, the difference between the two samples caused mainly by the manipulation of time pressure as a situational constraints, (two minutes/no constraints vs. one day/one month), and to the two different research stimuli (information board vs. scenarios). However, comparing Table V-40 with Table V-45 indicates that the impact of the trait (feeling pressured) is much more significant than the impact of the sample in general. The same result is obtained when Table V-41 is compared with Table V-46.

CHAPTER VI

TESTING AND INTERPRETING THE CAUSAL MODEL

In order to test the hypothesized causal relationships between time pressure, attitude towards shopping, shopping behavior, and shopping efficiency, LISREL VI (Joreskog and Sorbom, 1984) was used. LISREL (Analysis of Linear Structural Relationships) is used to specify the phenomenon under study in terms of cause and effect variables and their indicators by a means of maximum likelihood estimation. This estimation is a full information approach, which means that all of the parameters are estimated simultaneously (Dillon and Goldstein, 1984).

The LISREL model consists of two parts: the measurement model and the structural equation model. The measurement model specifies how the latent variables or hypothetical constructs are measured in terms of the observed variables and is used to describe the measurement properties (validities and reliabilities) of the observed variables. The structural equation model specifies the causal relationship among the latent variables and is used to describe the causal effects and the amount of unexplained variance. Tables VI-1 and VI-2 include the two correlation matrices that are generated from the two samples used in the study. These correlations are the input for LISREL program. The first model to be tested is indicated in Figure VI-1.

Evaluating LISREL Solutions

(1) Evaluating the Overall Goodness-Of-Fit:

Four different measures are used to assess the overall fit of the proposed model: Chi-Square, Goodness of Fit Index (GFI). Adjusted Goodness of Fit Index (AGFI), and Root Mean Square Residual (RMR).

(a) Chi-Square:

Regarding X^2 , it is 29.15 with 35 df (X^2/df 0.832), and a probability of 0.746, for the first data set, whereas X^2 184.51 with 35 df (X^2/df 5.72), and a probability 0.000, for the second data set. While it is unfair to compare these results since two different samples are used ($n_1=80$ and $n_2=206$), X^2 itself is also criticized (Bentler and Bonett, 1980) on the basis of computational and probability-significance aspects. Therefore, three other measures are used to assess the goodness of fit of the overall model.

(b) Goodness-Of-Fit Index (GFI):

This measures the relative amount of variances and covariances jointly accounted for by the model. Unlike X^2 , GFI is independent of the sample size and relatively robust against departures from normality. For the first data set GFI is 0.943, whereas it is 0.868 for the second data set.

TABLE (VI-1)
CORRELATION MATRIX (1)*

Variables	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	X ₁	X ₂
Y ₁	1.0										
Y ₂	.761	1.0									
Y ₃	.480	.515	1.0								
Y ₄	.367	.405	.676	1.0							
Y ₅	.288	.393	.650	.715	1.0						
Y ₆	.316	.363	.640	.789	.695	1.0					
Y ₇	.432	.477	.717	.737	.651	.762	1.0				
Y ₈	.351	.372	.609	.667	.618	.730	.825	1.0			
Y ₉	.344	.347	.677	.699	.594	.681	.735	.696	1.0		
X ₁	.082	.106	.137	.094	.109	.166	-.034	.012	.029	1.0	
X ₂	-.008	.075	.380	.571	.531	.522	.503	.533	.490	0.0	1.0

* n = 80; Data generated from the first sample (using information board as a stimulus)

Y₁ = perceived role-overload

Y₂ = sense of time urgency

Y₃ = specific attitude towards shopping

Y₄ = number of brands

Y₅ = number of information cues

Y₆ = decision time

Y₇ = satisfaction

Y₈ = confidence

Y₉ = closeness to best choice

X₁ = the first dummy variable (products)

X₂ = the second dummy variable
(time constraints)

FIGURE (VI-1)
THE PROPOSED MODEL (1)

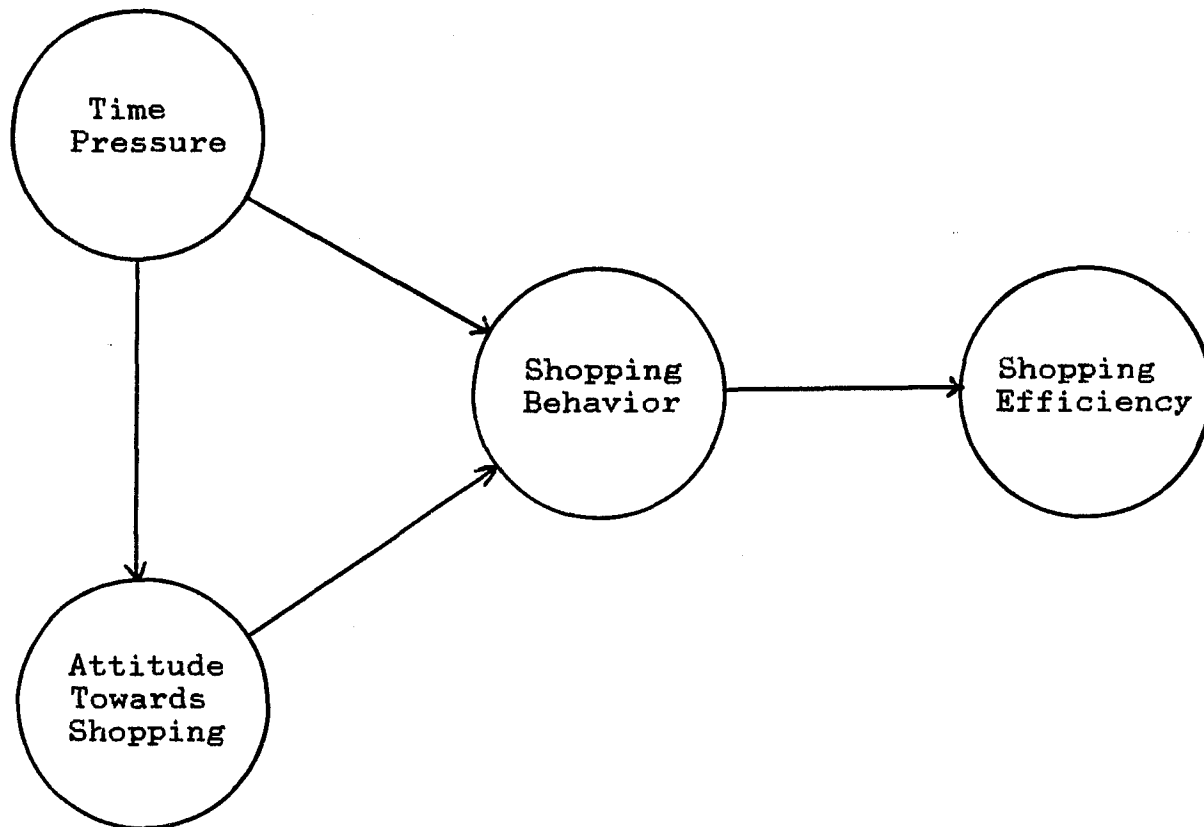


TABLE (VI-2)
CORRELATION MATRIX (2)*

Variables	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	X ₁	X ₂
Y ₁	1.0										
Y ₂	.788	1.0									
Y ₃	.525	.567	1.0								
Y ₄	.380	.406	.661	1.0							
Y ₅	.292	.306	.523	.777	1.0						
Y ₆	.452	.495	.741	.766	.568	1.0					
Y ₇	.434	.479	.678	.551	.419	.588	1.0				
Y ₈	.361	.414	.672	.528	.384	.574	.805	1.0			
Y ₉	.386	.429	.720	.546	.385	.565	.718	.699	1.0		
X ₁	-.047	-.018	-.179	-.136	-.090	-.167	-.038	-.117	-.142	1.0	
X ₂	.037	.037	.350	.362	.180	.310	.460	.416	.395	-.037	1.0

* n = 206; Data generated from the second sample (using scenarios as stimulus)

Y₁ = perceived role-overload

Y₂ = sense of time urgency

Y₃ = specific attitude towards shopping

Y₄ = number of brands

Y₅ = number of attributes

Y₆ = number of stores

Y₇ = satisfaction

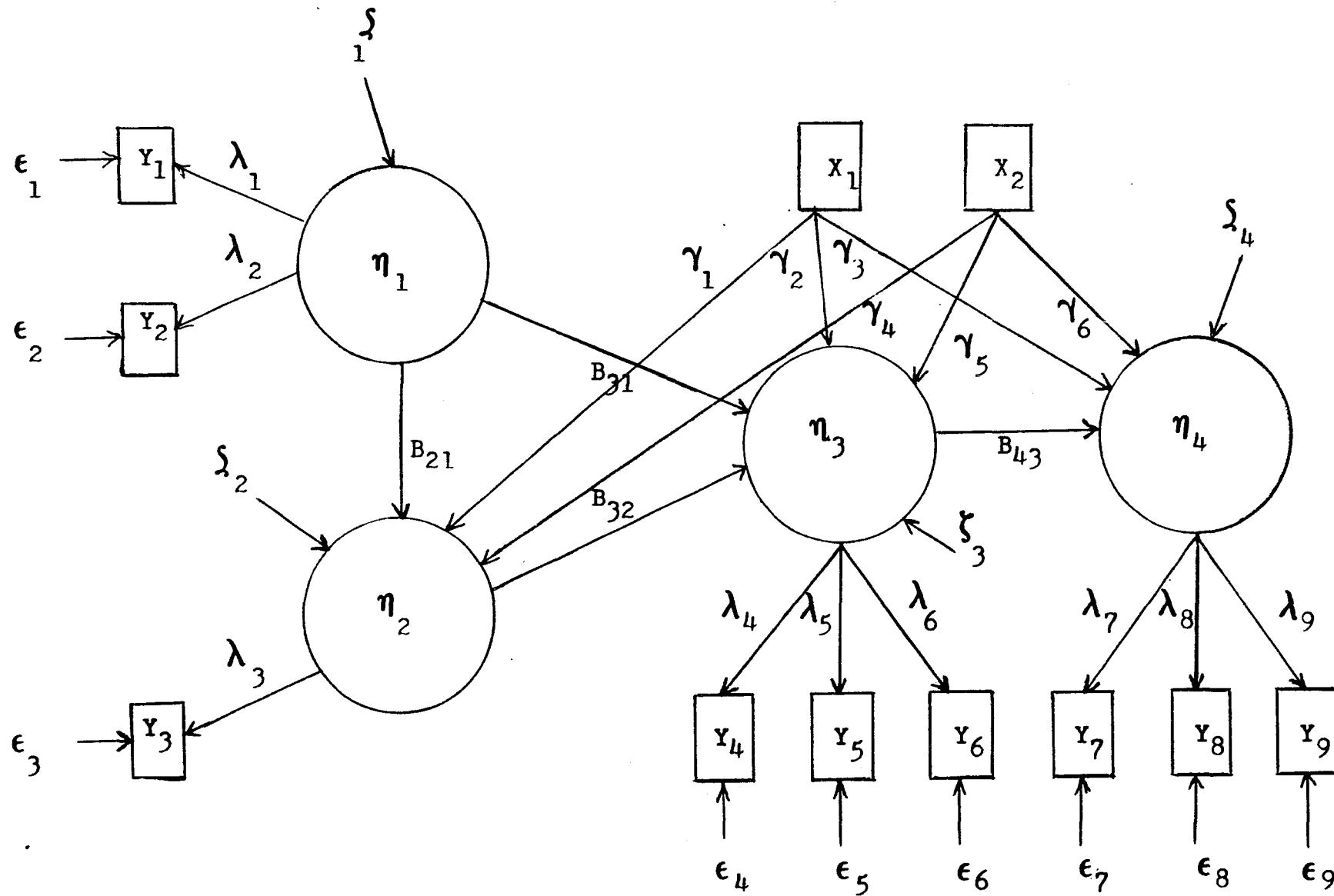
Y₈ = confidence

Y₉ = closeness to ideal choice

X₁ = the first dummy variable (products)

X₂ = the second dummy variable
(time constraints)

FIGURE (VI-2)
THE PROPOSED MODEL IN LISREL FORMAT



* x_1 and x_2 are the two experimental manipulation

These results indicate that the data obtained from the first sample support the hypothesized causal model better than the data obtained from the second sample.

(c) Adjusted-Goodness-Of-Fit Index (AGFI):

This is the same as GFI but adjusted for degrees of freedom. For the first data set, AGFI is 0.892, whereas it is 0.752 for the second data set. Again the results indicate that data obtained from the first sample is better in explaining the proposed causal relationships than the data obtained from the second sample.

(d) Root Mean Square Residual:

This is a measure of the average of the residual variances and covariances. For the first data set MRM is 0.039, whereas it is 0.066 for the second data set.

Adding these four measures together, it is obvious that the data generated from the first sample support the model very well, whereas the data generated from the second sample did not support the same model very well. However, it should be emphasized that X^2 , GFI, AGFI, and RMR are measures of the overall fit of the model to the data and do not express the quality of the model judged by any other internal or external criteria.

A more detailed assessment of fit can be obtained by an inspection of the normalized residuals (Tables VI-3 and

TABLE (VI-3)
THE NORMALIZED RESIDUALS
DATA SEL (1); MODEL (1)

Variables	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	X ₁	X ₂
Y ₁	-.000										
Y ₂	.000	-.000									
Y ₃	.036	.295	.144								
Y ₄	.070	.368	.093	.143							
Y ₅	-.322	.552	.366	.284	.117						
Y ₆	-.350	.025	-.159	.335	.154	.142					
Y ₇	.451	.803	.372	-.045	-.178	.155	.072				
Y ₈	-.016	.138	-.107	-.199	-.093	.285	.177	.062			
Y ₉	.130	.134	.753	.397	.055	.280	-.063	-.011	.054		
X ₁	.729	.942	-.458	.044	.251	.691	.151	.531	.653	0.0	
X ₂	-.071	.667	.159	.233	.316	-.137	-.106	.409	.334	0.0	0.0

TABLE (VI-4)
THE NORMALIZED RESIDUALS
DATA SET (2); MODEL (1)

Variables	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	Y ₉	X ₁	X ₂
Y ₁	-.000										
Y ₂	-.000	-.000									
Y ₃	.250	.183	.196								
Y ₄	-.425	-.580	-.488	.142							
Y ₅	-.637	.866	.683	1.975	.095						
Y ₆	.557	.613	.495	.228	.563	.140					
Y ₇	1.866	2.088	1.407	-.579	-.940	-.089	.115				
Y ₈	1.088	1.361	1.598	-.606	-1.175	.001	.292	.107			
Y ₉	1.643	1.883	2.742	.132	-.733	.403	-.072	-.066	.092		
X ₁	-.673	-.258	-.229	-.051	.271	-.502	-.302	-1.447	2.262	0.0	
X ₂	.530	.530	.300	.825	-.957	-.125	-.347	-.031	.084	0.0	0.0

VI-4). Values that are larger than two in magnitude indicate a specification error in the model and the corresponding indices and usually give a hint as to where the error is. As it is shown in Tables VI-3 and VI-4, none of the normalized residuals are greater than two for the first data set, whereas three normalized residuals are more than two in magnitude for the second data set.

An effective summary of the fit, as judged by all the normalized residuals, is given by the Q-plot (Figure VI-3 and Figure VI-4). Joreskog and Sorbom (1984) suggest that Q-plot may be examined by fitting a straight line to the plotted points. If the slope of this line is larger than one, as compared with the 45-degree line, this is an indication of a good fit. Slopes which are close to one correspond to poor fits. Non-linearities in the plotted points indicate a specification error in the model or departures from normality. Again by comparing Figure VI-3 with Figure VI-4, the same result is reached: data obtained from the first sample support the model better than data obtained from the second sample.

(2) Evaluating from Measurement Model:

Before turning to the question of whether there exist significant relationships among the theoretical constructs in the structural model, one must demonstrate that the measurement model has a satisfactory level of validity and

FIGURE (VI-3)

Q-PLOT OF THE NORMALIZED RESIDUALS:
DATA SET (1); MODEL (1)

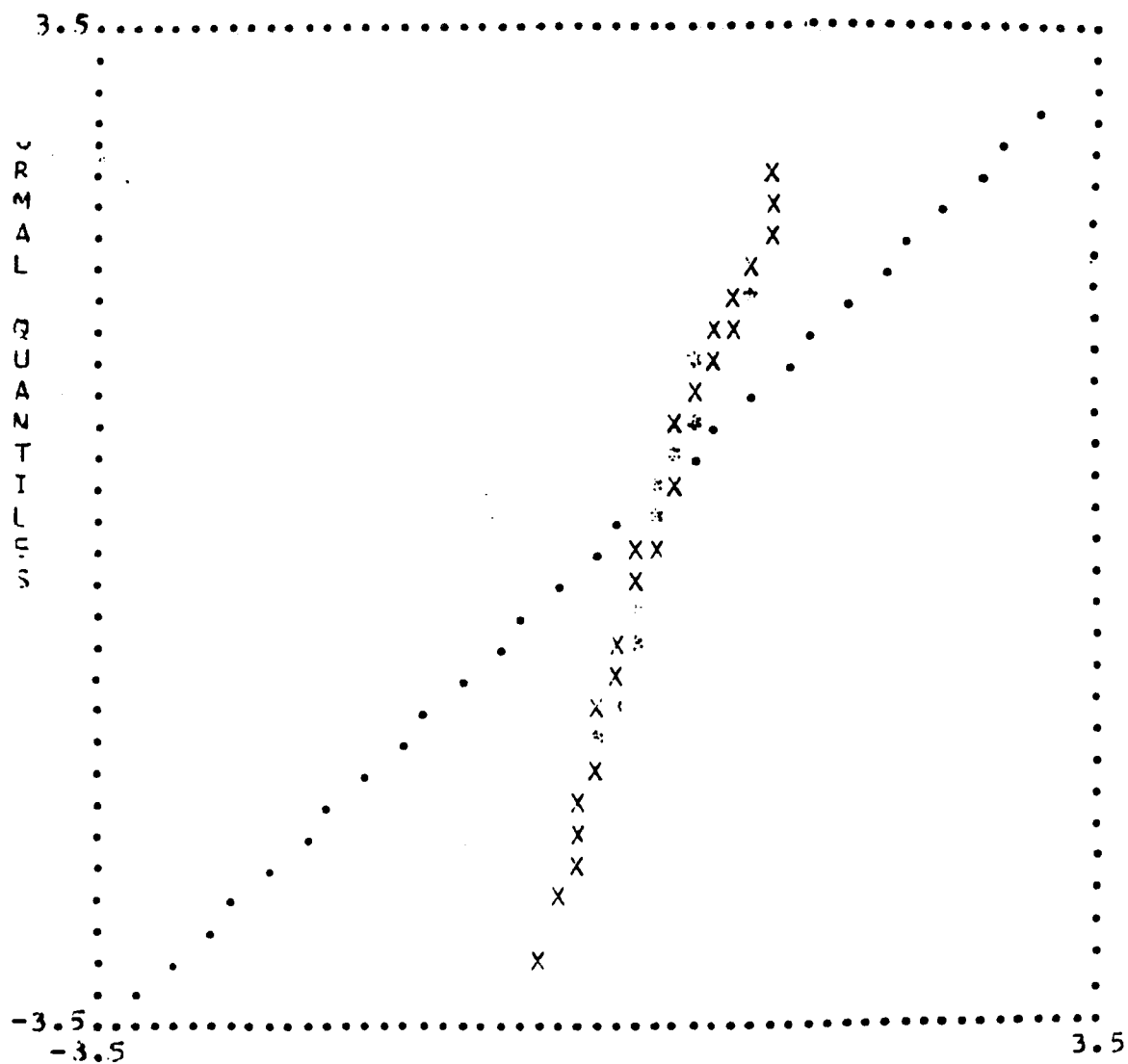
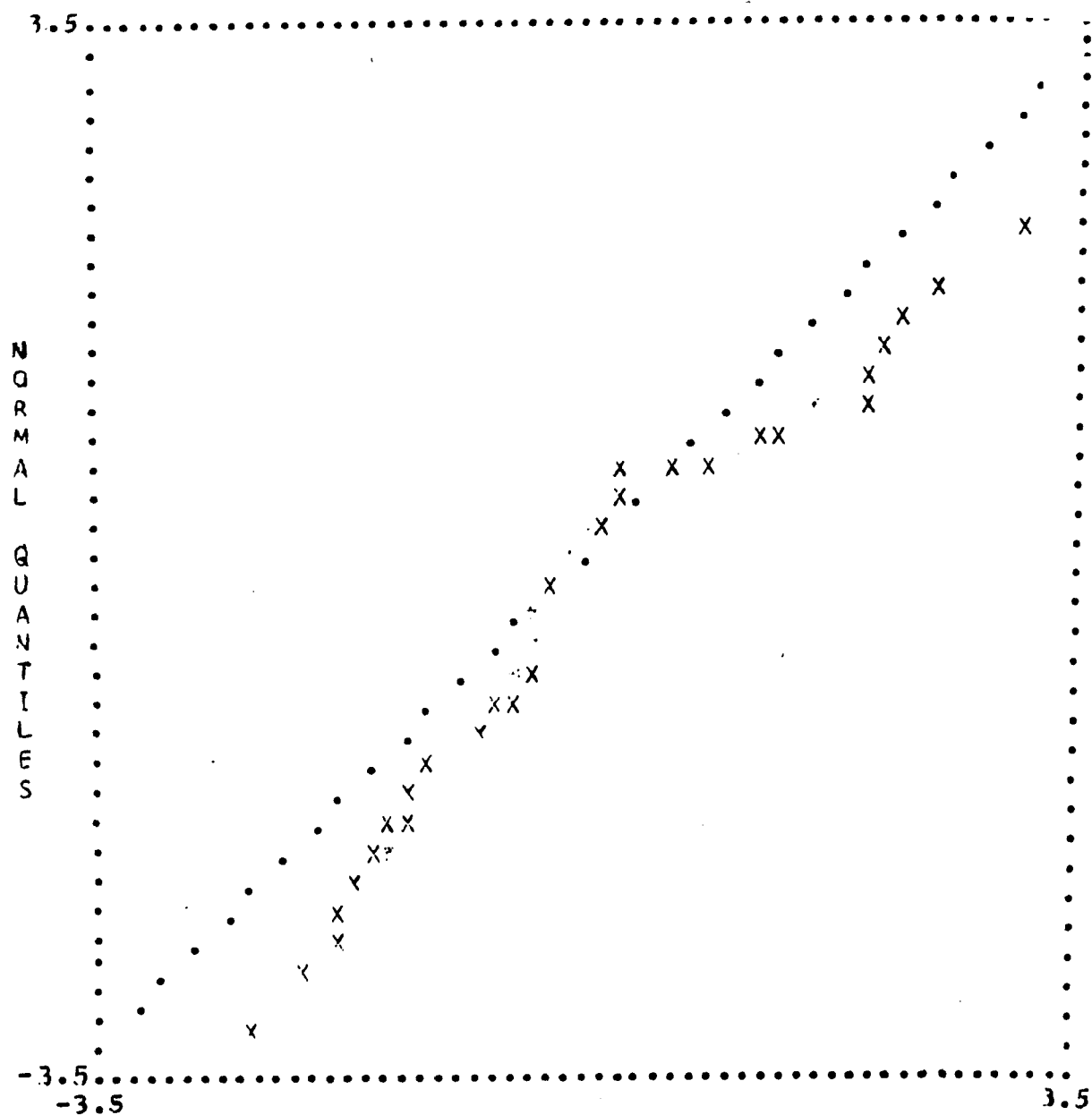


FIGURE (VI-4)

Q-PLOT OF THE NORMALIZED RESIDUALS:
DATA SET (2); MODEL (1)



reliability (Dillon and Goldstein, 1984; Bagozzi, 1980). This can be assessed by inspecting the reliability for each observed variable separately and the composite reliability for all the observed variables jointly. In addition to different measures of validity.

(a) Square Multiple Correlations:

As shown in Table VI-5, the reliabilities for all the observed variables are high for both data sets.

(b) Composite Reliability:

Constructs are typically composite indices and their reliabilities can be computed also (Dillon and Goldstein, 1984). Table VI-5 indicates that the composite reliability for the latent constructs is high for both data sets.

(c) The Average Variance Extracted: Convergent Validity:

Square multiple correlations and composite reliability do not present evidence as to the amount of shared variance in the measurement model. In other words, they do not measure the amount of variance due to measurement error. Fornell and Larcker (1981) introduce a shared variance measure. The authors point out that if this measure is less than 0.50, the variance due to measurement error is larger than the variance captured by the construct and the validity of the individual indicators as well as the construct is

TABLE (VI-5)

RELIABILITY AND VALIDITY ASSESSMENT FOR THE OBSERVED
VARIABLES, THE CONSTRUCTS, AND THE MODEL:*
A COMPARISON BETWEEN THE TWO DATA SETS

	Data Set (1)	Data Set (2)
<u>1. SQUARE MULTIPLE CORRELATION:</u>		
Y1	.881	.817
Y2	.765	.860
Y3	1.000	1.000**
Y4	.768	.763
Y5	.631	.516
Y6	.761	.757
Y7	.866	.819
Y8	.755	.762
Y9	.656	.658
<u>2. COMPOSITE RELIABILITY:</u>		
n1	.86	.88
n2	1.00	1.00
n3	.88	.86
n4	.90	.89
<u>3. AVERAGE VARIANCE EXTRACTED:</u> <u>(CONVERGENT VALIDITY)</u>		
n1	.76	.79
n2	1.00	1.00
n3	.75	.67
n4	.76	.74

* Model (1)

** One indicator, no measurement error

TABLE (VI-5) CONT.

	Data Set (1)	Data Set (2)
4. <u>DISCRIMINANT VALIDITY:</u>		
a. $P_{vc}(n_2) > B_{21}$	1.00 > .31	1.00 > .36
b. $P_{vc}(n_3) > B_{31}$ and B_{32}	.75 > .06 .75 > .25	.67 > .23 .67 > .47
c. $P_{vc}(n_4) > B_{43}$	.76 < .96	.74 > .49

TABLE (VI-6)

EVALUATING THE STRUCTURAL MODEL:
A COMPARISON BETWEEN THE TWO DATA SETS
MODEL (1)

	Data Set (1)	Data Set (2)
1. <u>SQUARE MULTIPLE CORRELATION FOR STRUCTURAL EQUATIONS:</u>		
n1	0	0
n2	.556	.494
n3	.754	.691
n4	.779	.651
2. <u>TOTAL CORRELATION OF DETERMINATION FOR STRUCTURAL EQUATIONS:</u>		
	.750	.350

suspect. Again, as it is indicated in Table VI-5, all values are larger than 0.50.

(d) Discriminant Validity:

The average variance extracted can also be used to test for discriminant validity. To satisfy the requirement for discriminant validity, the shared variance for a specific construct should exceed the variance due to another construct. The results indicate that although data set (1) support the causal model very well, yet the shared variance for n_4 is less than the variance due to n_3 . On the other hand, data set (2) satisfy the requirement of discriminant validity for the four constructs (Table VI-5).

(3) Evaluating the Structural Model:

Two measures are used to evaluate the structural model. These are the squared multiple correlation for each structural equation separately, and the coefficient of determination for all the structural equations jointly.

(a) Squared Multiple Correlations:

These coefficients indicate the strength of causal relationship for each structural equation. Table VI-6 indicates the statistical results. Note that there are only three equations since no relationships are assumed to be between n_1 (feeling pressure) and the two experimental

manipulations since treatments were randomly assigned to groups.

(b) Coefficient of Determination:

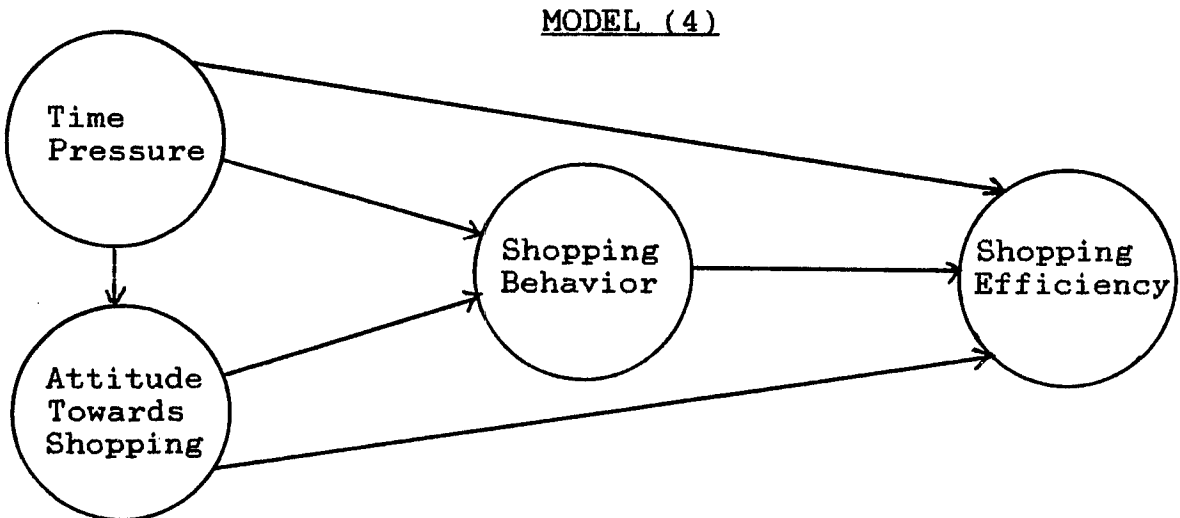
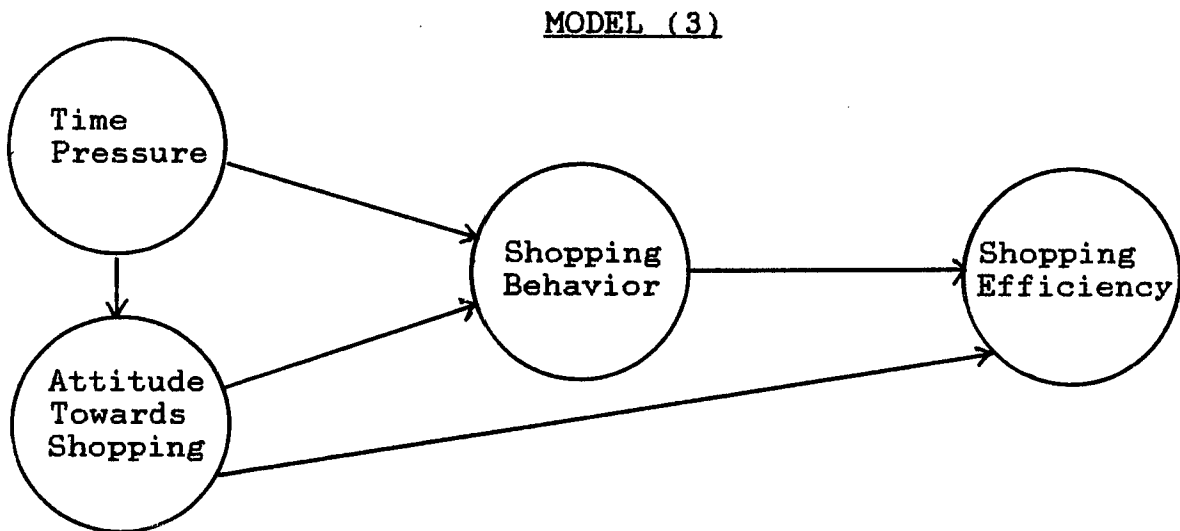
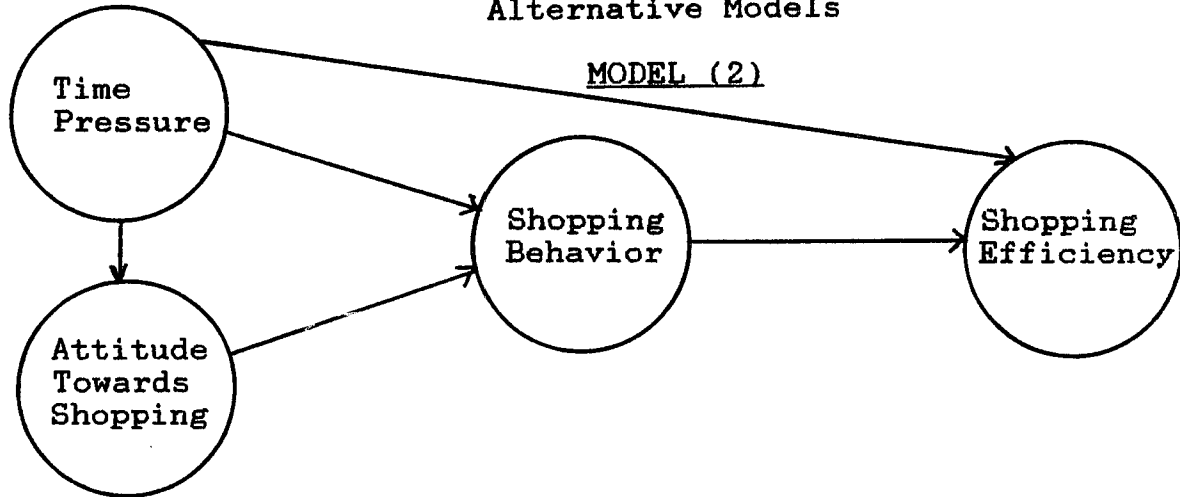
As it is shown in Table VI-6, this coefficient is much higher for data set (1) than data set (2).

Testing Alternative Models

There are other plausible alternative models that are conceptually consistent with the original model (Figure VI-5). In model (2), time pressure is allowed to be linked directly to shopping efficiency. In model (3), attitude towards shopping is allowed to be linked to shopping efficiency. In model (4) both linkages are added.

Fornell (1983) states that any modifications in the original model should be based on a substantive theory. The literature review presented in Chapter III indicates that lack of confidence, frustration, speed, anxiety, and impatience are major traits of the harried person (Friedman and Rosenman, 1959; Wessman, 1973; Calabresi and Cohen, 1968). All these traits may affect shopping efficiency directly and in a way that is independent of shopping behavior. Indeed the statistical analysis presented in Chapter V support this claim (Tables V-33 through V-36). In addition, harried consumers were less likely to consider themselves good shoppers than relaxed consumers, yet the

FIGURE (VI-5)
Alternative Models



significance level was less than 0.05 (Table V-37).

Regarding the linkage between attitude towards shopping and shopping efficiency, it can also be theoretically justified. It may be that the relaxed consumers tend to develop self-confidence and satisfaction with their shopping that are accumulated from their past experience. Therefore, they have more confidence and more satisfaction even before starting their shopping trips.

In addition to these justification for adding new parameters to the original model, LISREL provides some information from the data analysis that would lead to a decision of how to modify the original model. This is provided by the modification indices that indicate the decrease in X^2 if a specific parameter alone would be free (Sorbom and Joreskog, 1982b). Table VI-7 summarizes the result of LISREL analysis. As it is shown in this table model (4) fits both data sets, and also satisfies reliabilities and validity requirement for the four latent variables.

Interpretational Confounding:

Fornell and Larcker (1981a, 1981b) point out that a valid structural model cannot be obtained unless the product of the pairs of cross-correlations exhibit uniformity. Moreover, according to Burt (1976) interpretational confounding is likely to surface when (a) the indicants of the

TABLE (VI-7)
GOODNESS-OF-FIT: COMPARISONS
AMONG FOUR RIVAL MODELS

	χ^2	df	p	χ^2/df	GFI	AGFI	MRM
<u>DATA SET #1:</u>							
Model (1)	29.15	35	0.746	0.833	0.943	0.892	0.039
Model (2)	27.09	34	0.794	0.797	0.946	0.895	0.039
Model (3)	109.41	34	0.000	3.218	0.830	0.670	0.186
Model (4)	25.56	33	0.819	0.775	0.947	0.893	0.039
<u>DATA SET #2:</u>							
Model (1)	184.51	35	0.000	5.271	0.868	0.752	0.066
Model (2)	164.25	34	0.000	4.870	0.880	0.767	0.056
Model (3)	132.81	34	0.000	3.905	0.895	0.797	0.058
Model (4)	127.80	33	0.000	3.873	0.901	0.803	0.054

unobserved variable have low covariances among themselves and (b) the covariances of the indicants of the unobserved variable with the indicants of other unobserved variables in the model are widely different. Data obtained from both samples satisfy the first requirement but not the second. As shown in Table VI-1 and Table VI-2, Y_6 and Y_9 correlate higher across constructs than within construct. Therefore the same analysis was performed after eliminating these two indicators. Table VI-7 portrays the statistical results. It is obvious that a better fit is obtained after this deletion.

TABLE (VI-8)
GOODNESS-OF-FIT: COMPARISONS
AMONG FOUR RIVAL MODELS
AFTER DELETING Y₆ AND Y₉

	X ²	df	p	X ² /df	GFI	AGFI	MRM
<u>DATA SET #1:</u>							
Model (1)	10.97	18	0.900	0.604	0.973	0.931	0.037
Model (2)	9.96	17	0.905	0.586	0.975	0.934	0.038
Model (3)	10.52	17	0.880	0.618	0.973	0.929	0.038
Model (4)	9.25	16	0.903	0.568	0.977	0.934	0.038
<u>DATA SET #2:</u>							
Model (1)	84.52	18	0.000	4.696	0.923	0.807	0.095
Model (2)	39.50	17	0.002	2.323	0.960	0.894	0.041
Model (3)	28.10	17	0.044	1.653	0.972	0.926	0.047
Model (4)	17.15	16	0.376	1.072	0.983	0.952	0.031

CHAPTER VII SUMMARY, CONCLUSIONS, IMPLICATIONS, AND DIRECTIONS FOR FUTURE RESEARCH

In this chapter, a summary of the theoretical background of the study, hypothesis, research design, and the results is first presented. Then, the contribution of the study, its implications, limitations, and conclusions are discussed in the next section. Finally, directions for future research are suggested.

1. Theoretical Background:

The ability to understand how consumers behave in the marketplace is essential to consumer research. Many researchers attempted to conceptualize this process. Some focus on a detailed description of the choice (Howard and Sheth, 1969; Nicosia, 1966), whereas others emphasize the choice outcome (Bass, 1974; Massy et al., 1970). In both approaches one or more of the following assumptions is made: (a) time is given, (b) time is perceived the same by all consumers, and (c) choice is optimal. These three assumptions have been questioned by many researchers (Linder, 1970; Hall, 1959; Wessman, 1973; Doob, 1971; Cottle, 1976; Berning, 1976).

In marketing, researchers have largely ignored time as a facet of consumer behavior, focusing instead on the acquisition of goods and services (Handrix, 1983). But

recently, marketing discipline has begun to recognize the fundamental importance of time, primarily as a resource which, like money, consumers spend (Becker, 1965; Bentler, 1964; Schary, 1971).

The economic perspective of time, however, is only one of several worthy of attention by consumer behavior researchers (Settle, 1980). Although the literature contains numerous examples of the subjective approach (Jacoby, Szybillo, and Berning, 1976), relatively few works directly address how consumer behavior is affected by individuals' subjective experience of time.

Few empirical contributions appear in the marketing literature that treat time pressure as a major variable of interest. These studies have focused on time pressure as a situational variable viewed as objective/physical/universal rather than subjective/psychological/individualistic. Stroud (1955) indicates that we have had for a century or more ample evidence that physical and psychological time are by no means identical in nature. Wessman (1973) points out that the use of the physical time concept in the description of human events is often misleading and artificial. It fails to account for the fact that human time estimates rarely match clock and calendar time, and that individuals demonstrate vast differences in their construction and uses of time.

There is an increasing awareness that many activities

require the use of scarce resources such as time, energy, information, money, and space. Shopping is one consumer activity that requires the use of most of these scarce resources. Of the various resources involved in shopping, time has been researched the least (Hornik, 1985), although in most writings one would find the arguments that shopping is a time-consuming activity (Berry, 1979; Granbois, 1977).

Business has operated under the assumption that up to 80% of all consumer purchasing was done by females, the majority of whom were housewives who achieved social pleasure from shopping activity. No doubt the validity of this hypothesis is questioned in today's market with shifting female attitudes and lifestyles.

Many researchers stated that at all income levels and life-cycle stages, working wives appear to face greater time pressure than do nonworking wives (Strober and Weinberg, 1980). However, most of the studies that have investigated differences in consumption and shopping behavior between working and nonworking wives have found very little differences, and the literature review indicates a great deal of opposing results. These conflicting findings may be attributable to a failure to consider time pressure as a major variable of interest which is experienced differently by individuals.

Holman and Wilson (1982) claimed that consumers respond to retail environments in relation to their time needs and

how these environments help to satisfy those needs. The authors state that the consumer that suffers from time shortage experiences time disequilibrium and attempts to restore balance through shopping behavior.

Buckling (1966) points out that consumers are likely to spend more time in shopping activities if they place a high value on the benefits to be gained from such an activity, relative to the benefits expected for other activities.

The role of information in consumer decision making has been studied from a variety of perspectives; however little theory or empirical research has been focused on the role of information acquisition (shopping around) on shopping efficiency. Sproles et al., (1978) found that consumer information enhances the likelihood that consumers will make efficient choices of products. Jacoby et al., 1974; Cardozo, 1965; Westbrook and Newman, 1978) found that satisfaction is related to prepurchase information acquisition.

Three major objectives are identified for this inquiry: (a) to develop a measurement of time pressure that is based on a new conceptualization, (b) to identify the profiles of two different consumers: Harried vs. Relaxed, and (c) to test a broader model that relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency. To achieve these objectives, related literature was reviewed. This review included time and consumer behavior,

the time dimension of shopping behavior, attitude towards shopping, shopping behavior, and shopping efficiency. Based on these reviews, in addition to the indepth interviews, the researcher was able to develop a general model that relate time pressure to shopping behavior and shopping efficiency. Also the specific model that was tested was derived from this general model.

In order to develop a measurement of time pressure, more literature review was needed. This includes the concept of time, economic time, socio-cultural time, and psychological time. More emphasis was given to time perception, time orientation and its determinations.

Based on these different literature reviews and the indepth interviews, it is postulated that time pressure, as a subjective phenomenon, is a two-facet concept: (a) perceived role-overload, a type of role conflict that results from excessive demands on the time and energy supply of an individual, and (b) personal predispositions that reflect a sense of time urgency (i.e., impatience and anxiety).

2. Hypotheses:

Seven major hypotheses with a total of twenty-seven subhypotheses are suggested. The relationships described in these hypotheses differentiate between harried and relaxed consumers.

The first major hypothesis suggests that harried consumers are demographically different from relaxed consumers. More specifically, they are more likely to work full-time, occupy high-status jobs, first born, have higher incomes, be married, have a higher social class, have children, have pre-school aged children, and have more education than relaxed consumers.

The second major hypothesis predicts that harried consumers are more involved in their work and home than relaxed consumers.

The third major hypothesis postulates that harried consumers exhibit different attitudes towards shopping than relaxed consumers. More specifically, they are less likely to enjoy shopping, and more likely to view shopping as a mandatory activity than relaxed consumers.

The fourth major hypothesis proposes that harried consumers are different in their shopping orientation from relaxed consumers. It was hypothesized that harried consumers are more likely to be convenience-oriented, whereas relaxed consumers are more likely to be price-conscious.

The fifth major hypothesis predicts that harried consumers behave differently in the market-place from relaxed consumers. More specifically, they are more likely to consider fewer brands, consider fewer attributes, visit fewer stores, use fewer informational cues, take less time

in making choices, and visit specialty stores than relaxed consumers.

The sixth major hypothesis predicts that harried consumers process information differently than relaxed consumers. In other words, harried consumers are more likely to process information by attributes, whereas relaxed consumers are more likely to process information by brands.

The seventh and the last major hypothesis suggests that harried consumers are less efficient in their shopping behavior than relaxed consumers. More specifically, harried consumers are less likely to have confidence in their choice, to be satisfied with their choices, to make the best choice, to achieve their ideal choice, and to consider themselves good shoppers than relaxed consumers.

3. Pretests:

A series of pretests were undertaken using different samples. In the first pretest, five different products were presented to a group of marketing experts who were asked to select two products that are most likely purchased by women, are characterized by varying degrees of brand substitutability, are not dominated by specific brand names, are characterized by high involvement, and are most likely offered in different retailing stores. As a result of this pretest, shoes and dinnerware were selected for the study.

A second pretest was performed using a convenience

sample of one hundred and thirty female college students. The aims of this pretest were to select the items that would be included in time pressure and attitude towards shopping scales, and to identify the attributes that are considered important in a pair of shoes and dinnerware. As a result of this pretest, 42 items were initially selected for time pressure scale, whereas 10 items were selected for attitude towards shopping scale. In addition, a total of 20 attributes for shoes and 22 for dinnerware were identified as important.

A third pretest was performed using 118 female relatives of undergraduate, marketing majors at Baruch College. This sample was used to assess the reliability and validity tests for time pressure and attitude towards shopping scales, to perform more tests on the evaluative criteria and the weights given to them by the consumers, to test familiarity with the two products selected for the study, and to assist in selecting the cut-point that differentiates hurried consumer from relaxed consumer.

The reliability tests focused on the scale's internal consistency and included Coefficient Alpha, and split-half tests. Whereas validity tests focused on construct validity and included item-total analysis, factor analysis, convergent validity, and discriminant validity. In addition, nomological validity for both time pressure and attitude towards shopping was assessed.

This series of tests indicated that both reliability and validity were high after several items were deleted from the two scales. Thirty-two items were selected for time pressure scale (16 pertaining to perceived role-overload and 16 pertaining to sense of time urgency), and 8 items were selected for attitude towards shopping scale. These two scales were used in the main study.

These 118 females were also asked to identify the different product attributes they considered in a pair of shoes and dinnerware. They were also instructed to allocate 100 points among these attributes according to their importance. In addition they were given the attributes identified by the first pretest sample and asked to identify the importance of each attribute using a Likert-type format.

Based on the results of these pretests two decisions were made: (a) to incorporate both product and store attributes in the question, and (b) to use the constant sum scale rather than the Likert-scale to identify the importance of evaluative criteria for the two experimental products.

Since all the two-variable hypotheses propose differences between two types of consumers, Harried and Relaxed, it was important to make a decision regarding the cut-point between these two types on the time pressure scale.

A new approach was used that is based on a comparison among three different, but related, measures of time

pressure: (a) the score on time pressure scale (32 items), (b) the respondents's perception of herself as harried or relaxed, and (c) the other's perception (the interviewer who is also a close relative to the respondent). As a result of this approach 90 was selected as a cut-point between harried and relaxed consumer.

Two different tests were performed to assess the validity of this classification method. The results indicate high validity.

The last pretest was performed to assess familiarity with the two experimental products since there is enough evidence in the literature that familiarity with a product class is strongly related to shopping behavior. In the second pretest, subjects were asked five questions regarding usage experience and purchase experience in order to assess familiarity with shoes and dinnerware. No differences were found between harried and relaxed consumers.

4. The Sample:

A non-probability convenience sample of 350 female heads of households ages 30 to 50 were contacted in person. The sample was selected from the five boroughs of New York City. They were asked to sign an agreement letter and fill the pre-experimental questionnaire. A total of 320 questionnaires were returned representing 90% response rate. After editing all returned questionnaires, eleven were

terminated because of incompleteness or bias. A total of 309 subjects completed part two of the study, representing 88% of the total number of subjects contacted.

5. Method:

A shopping simulation game was employed using two separate samples and two different stimuli. For the first sample ($n_1=80$), an informational board was used as a stimulus, whereas for the second sample ($n_2=206$) a simulated shopping situation was used (scenario) as a stimulus. In both samples, a $2 \times 2 \times 2$ factorial design was used combining the following three variables: (a) two types of consumers, (b) two products, and (c) two decision times.

Based on time pressure scale scores, each subject was identified either as harried or relaxed. Then the four treatments (two products/two decision times) were randomly assigned to subjects, a design which results in eight cells.

In addition to direct measurement of the demographic variables, two measurements were developed, using paper-and-pencil, for time pressure and attitude towards shopping. In addition, self-report measures and/or observation by a second party were used to measure shopping behavior, shopping efficiency, price consciousness, convenience orientation, and patterns of information processing.

6. Data Analysis:

To test hypotheses H1a, H1b, H1c, H1e, H1f, H1i, H2c, H5f, and H6a Contingency Tables are used in which the independent variable (Harried vs. Relaxed consumers) is cross classified with different dependent variables.

To test hypotheses H1d, H1g, H1h, H2a, H2b, H3a, H3b, H4a through H5e, and H7a through H7e, analysis of variance (ANOVA) is used.

In order to test the model that relates time pressure, attitude towards shopping, shopping behavior, and shopping efficiency, LISREL VI is used.

7. Research Findings:

In general, most of the hypothesized relationships between feeling pressure and demographic, attitudinal, perceptual, and behavioral variables were supported.

The first major hypothesis suggests that harried consumers are demographically different from relaxed consumers. Significant differences are found between harried and relaxed consumers regarding birth-order, marital status, having children, and having pre-school aged children. Whereas, no significant differences are found between harried and relaxed consumers regarding work status, occupation, family income, and social class. In addition, it was hypothesized that education is positively related to

time pressure. This hypothesis is moderately supported.

The second major hypothesis that suggests a positive relationship between feeling pressured and both work involvement and mothering and home involvement is strongly supported.

The third major hypothesis that states differences in attitudes towards shopping between harried and relaxed consumers is supported in general and in the context of the experiment for the two products.

The fourth major hypothesis that suggests differences between harried and relaxed consumers regarding shopping orientation is rejected. No significant differences are found between them regarding the importance of store location and price as evaluative criteria.

The fifth major hypothesis that proposes differences between harried and relaxed consumers regarding shopping behavior is partly supported. Significant differences are found between harried and relaxed consumers regarding; number of brands, number of attributes, number of informational cues, number of stores, and decision time. Whereas, no significant differences are found between them regarding store patronage.

The sixth major hypothesis that predicts differences between harried and relaxed consumers regarding information processing is partly supported.

The last major hypothesis concerning the differences

between harried and relaxed consumers regarding shopping efficiency, is also supported. Significant differences are found between harried and relaxed consumers regarding confidence in their choices, satisfaction with their choices, approaching ideal choice, and approaching the best choice. No significant differences are found between them regarding the perception of the self as a good shopper.

Regarding the model that causally relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency, it is supported using data generated from the first sample. Whereas, data generated from the second sample did not strongly support the proposed model. After the deletion of the indicators that caused interpretation confoundings, and testing different alternative models, the causal model is supported using both data sets.

Contributions, Implications, Limitations and Conclusions

The significance of this study rests on its potential to be the first investigation of time pressure as part of the consumer personality.

The treatment of time in consumer behavior and marketing literatures has been sporadic and has lacked coordination. In a few empirical studies, time pressure was treated as an objective situational variable. Undoubtedly, studying time pressure from the economic perspective provides some

understanding of consumer behavior, but it seems to completely ignore the fact that individuals are different in their temporal orientation.

In this study, time pressure is treated as a personality trait. In other words, as a psychological concept that includes the incorporation of predisposition related to time in the psychological makeup of the individual as personality traits. Therefore, this study contributes to our knowledge regarding the role of personality factors in influencing consumer behavior. In addition, this study attempts to avoid the pitfalls of other personality studies. This was done by testing specific hypotheses obtained from a theoretical base and by developing an instrument that is designated specifically for this inquiry.

Hawes (1979) points out that "it seems to be accepted that time in some way exerts a pressure upon various stages of the decision process, purchase process, and use process. The exact nature of this pressure has not been defined, however. Attempts at operationalizing this time pressure variable have not been adequate or consistent. As a result, the operationalizations have shown only minimal relationship to the selected dependent variable (p. 446)." In order to remedy this situation, Hawes suggests that "appropriate conceptualization of time pressure as a multifaceted, subjective phenomenon that varies across different groups of people in different ways at different times, would seem to

be the first step (p. 446)."

In this study, a new conceptualization and operationalization of time pressure is presented. Therefore, this study is viewed as an opportunity to fill a wide gap in the consumer behavior and marketing literatures.

For the field of marketing and consumer behavior to advance, multiple perspectives are needed so that the strength of one may compensate for the weakness of the other. Multiple orientation for the conduct of marketing and consumer behavior researches has been emphasized by many.

Triangulation (multiple orientation) has been used in the development of the multitrait-multimethod matrix (Campbell and Fiske, 1959), the use of strong inference in theory testing (Platt, 1964), lab versus field research (Runkel and McGrath, 1972), orientation toward research (Brinberg and McGrath, 1985; Freeman and Rossi, 1984), the generalizability of findings across various populations of interest (Cook and Campbell, 1979), and method-driven versus substance-driven research (Charnes et al., 1985).

Because all perspectives are limited, triangulation reduces the effects of the constraints imposed by a single perspective and provides a means to contrast the strengths and weaknesses associated with any one approach.

In this research, the principle of triangulation was applied by using two separate samples. In each sample,

different method, different stimulus, and different manipulations were used. In addition, for most of the variables, multiple indicators were used. This allows the researcher making many comparison and assessing the impact of different perspectives on the research findings.

In this study, feeling pressured was used to identify two types of consumers: Harried vs. Relaxed. In addition, time pressure was used in the experiment as one of the manipulation checks. Also time perception was measured after the experiment in terms of feeling pressured or relaxed during the experiment. These multiple perspectives and operationalizations enabled the researcher to shed some light on the nature of the time pressure concept.

Time pressure as a concept can be operationalized as an objective situational variable (Wright and Weitz, 1974), as the perception of the situation (Lutz and Kakkar, 1975), and as a predisposition (Wessman, 1973; Calabresi and Cohen, 1968; Settle and Alreck, 1978). In this research all were used and all proved to be important in explaining the behavior. Therefore, all have to be considered in any study that includes time pressure as a concept.

The different manipulations of time pressure as a situational variable allowed the researcher assessing when time pressure as a predisposition can/cannot be used to predict behavior. The findings of this research support the claims that traits are most likely to be useful in those

settings where situational pressures are weak, whereas they are least likely to be useful in those settings where situational pressures are strong (Mischel, 1977; Monson, Hesley, and Chernick, 1982).

Perhaps the most obvious weakness in the available evidence of what influences shopping behavior is the lack of any specification of how these variables might be linked together. Nicosia and Rosenberg (1972) point out that researchers need to translate known and/or postulated causal relationships into structures with more defined theoretical and empirical implication, if the study of buyer behavior is to make substantial advances towards the development of a theory.

In this study, an attempt was made to achieve that by testing a more broader model that causally relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency. Monroe and Gultinan (1975) point out that "such substantive models advance the efficiency of research by (a) clarifying the structural relationships underlying the phenomena of interest, (b) uncovering meaningful alternative research hypotheses, (c) improving the understanding of the empirical results, and (d) facilitating the selection of appropriate data analytic model. These results are achievable by a modeling process that seeks to define and then evaluate alternative causal networks (p. 20)." In this study different alternative

models were presented and tested.

Most of the empirical studies about shopping behavior have emphasized the impact of objective characteristics of the individual (e.g., marital status, stage in the family life cycle, employment status, etc.). Subjective characteristics of the individual (e.g., temporal orientation) have received less attention (Hendrix, 1979). Clearly, how consumers shop is determined by factors other than demographic and economic variables. Hendrix (1983) points out that these factors may be called antecedents and include values, attitudes, preferences, roles, temporal orientation, skills and abilities, environmental factors, and others. In this study, two subjective variables (time pressure and attitude towards shopping) were used as antecedents to predict shopping behavior and shopping behavior in four different situations (two products/two decision times). Therefore, this study fills an important gap.

Berry (1979) points out that "since the late 1950s much has been said and written about the evolving 'Leisure Society' in the U.S. Yet, people appear genuinely pressed for time, they seem hurried and overbusy...The fact is, many Americans believe that they do not have enough time to do all the things they would like to do. They perceive not an abundance of time but a poverty of time, and this perception is influencing their behavior as consumers (p. 58)."

In this study, a time pressure scale was used to

identify two types of consumers: Harried vs. Relaxed. Significant differences are found between these two groups regarding many demographic, attitudinal, perceptual, and behavioral variables. No doubt that the knowledge of these differences can help both academics and practitioners preparing for a growing segment of the market.

Wesley (1981) points out that the understanding of how the time dimension affects consumer behavior can lead to improved strategies for marketers. Marketing managers are basically involved in decisions of two types: market segmentation and marketing-mix formulations. As the understanding of the influence of time pressure on shopping behavior increases, the ability to incorporate this dimension into modeling of market response models will increase. For example, the information obtained through this study could provide immediate benefit to the marketing practitioners by suggesting the use of the typology--harried vs. relaxed consumers--as a basis for market segmentation. Also the same typology can be used as a basis for what Rogers (1983) refers to as audience segmentation. By that he means channels or messages that are used with each audience segment.

The study, nevertheless, has some limitations. First, the development of the time pressure scale is based on the assumption that it is a two-facet concept, and the initial items that were selected for the scale were only those

pertaining to these two facets: perceived role-overload and sense of time urgency.

Second, the two separate samples that were used to select the items and to perform reliability and validity tests were small ($n_1=120$, $n_2=118$). Different results may be obtained by using larger sample size.

Third, a small sample size was used ($n=80$) when the information board was used as a stimulus. This resulted in smaller cell sizes (each equals 10).

Fourth, despite the efforts to reduce the impact of repeated measurements (3 weeks apart between the pre-experimental and post-experimental questionnaire), this impact cannot be eliminated completely.

Fifth, a complete comparison of the results obtained from the two samples, used to test the study hypotheses, was impossible because different operationalizations were used.

Sixth, in this study two indices correlate higher across constructs than within constructs which caused interpretational confounding. Better fit was obtained after the deletion of these two indices. Therefore, better measurements are needed.

Finally, LISREL was used to test the causal model that relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency. This methodology is not always without problems. The major problems in applying covariance structure analysis relate to the fact

that the primary statistic for deciding whether or not a model fits the data is the likelihood-ratio X^2 with its associated probability level. This statistic is, unfortunately, not very useful for this particular purpose. There are a number of reasons for this, the most important are (a) the reversal of the role of research hypotheses, (b) the negative relationship between goodness-of-fit and the strength of variable relationships, (c) the requirement of large samples, (d) the problems of trivial fit, indeterminacy, and improper solutions, and (e) the assumptions of multinormality and no missing data (Dillon and Goldstein, 1984).

Directions For Future Research

To date, there are few empirical studies that have investigated the impact of time pressure on buying behavior. In these few investigations time pressure was treated as an objective situational variable. This economic perspective of time is only one of several worthy of attention.

Relatively few works directly address how consumer behavior is affected by individuals' subjective experience of time. Research in this area is promising since many theoretical relationships about time perception and time orientation and how they affect consumer behavior await empirical testing.

This study deals primarily with the differences between

harried and relaxed consumers regarding demographic, attitudinal, perceptual, and behavioral aspects. The time pressure scale that was developed specifically for this study was based on the assumption that it is a two-facet concept. Also a small sample was used to select the scale-items and to assess its reliability and validity. A more elaborated scale may be needed.

In this study, only two products were used to test the proposed hypotheses. More empirical work is needed to replicate this study in order to insure the generalizability of the theory presented in this dissertation among different products and different situations. This study is only one step toward building a theory that relates time pressure and attitude towards shopping to shopping behavior and shopping efficiency.

Another direction for future research is to select different consumer segments to test the study hypotheses. In this research the study sample consists only of females ages 30 to 50. Different age groups can be studied.

Strober and Weinberg (1980) stated that all income levels and life-cycle stages, working wives appear to face greater time pressure than do nonworking wives. However, studies that have investigated differences in buying behavior between them have yielded inconsistent results. In most of these investigations time pressure was operationalized in terms of hours spent at work. Therefore, more

consistent results may be obtained if time pressure, as a subjective phenomenon, is considered as a major variable that is felt differently by these two groups.

Wessman (1973) stated that characteristic ways of experiencing and utilizing time vary greatly among individuals among dimensions that can be assessed and measured, and that these differences are meaningfully related to personality characteristics. Only two personality traits (impatience and anxiety) were included in the time pressure scale. More research is needed to explore the relationships between other personality traits and time pressure.

Jacoby, Szybillo, and Berning (1976) point out that the concept of loyalty is difficult to conceptualize as anything other than something having temporal duration. Engel, Blackwell, and Kollat (1978) emphasized time as a dimension of brand loyalty. Since time is a necessary condition for loyalty, it is expected to be influenced by the individual temporal orientation. Research in this area is promising.

In their model of cross-cultural buyer behavior, Sheth and Shethi (1977) emphasize the importance of time in the adoption process within cross-cultural context. The authors state that "the more value a culture places on time as a scarce resource, the more rapid the diffusion of innovation. This is especially true for innovations that are based on technological breakthroughs (p. 382)." Again, individuals' differences in temporal orientation may affect the adoption

process. This is another fertile area for research.

APPENDIX I
THE FIRST PRETEST

"The Initial Selection of Scale-Items"

PART I

The following are some statements that describe people's attitudes, feelings, and opinions. Please read each statement carefully and circle the number that best describes you. Consider each statement individually, without looking ahead or thinking back to others. Each statement measures a different opinion, though it may not appear so. Work quickly down the page, taking a few seconds to decide on each statement. Your first impressions are what count. Remember, people differ a great deal in their opinions, and there are no right or wrong answers, but your honest opinions are very important.

	<u>Strongly agree</u>			<u>Strongly disagree</u>		
1. It bothers me to think how fast time goes.	1	2	3	4	5	
2. I often feel that time spent sleeping is wasted time.*	1	2	3	4	5	
3. I try to save minutes during the day by rushing.*	1	2	3	4	5	
4. I can spend hours working at a pastime, like a puzzle or a workshop project, and lose track of time.	1	2	3	4	5	
5. There are times when I cannot meet everyone's expectations.*	1	2	3	4	5	
6. Many times I have to cancel commitments.*	1	2	3	4	5	
7. When I am on vacation, I like the luxury of forgetting about time.*	1	2	3	4	5	
8. I try to find time for more things than I can do.*	1	2	3	4	5	
9. Looking back at my life I don't know where all the years went.	1	2	3	4	5	
10. I find it difficult to keep track of time when I can't keep my usual routine.	1	2	3	4	5	
11. I avoid people who make demands on my time.	1	2	3	4	5	

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
12. I find waiting in line, even for a short time, very annoying.*	1	2	3	4	5
13. I get almost panicky when I don't have enough time.*	1	2	3	4	5
14. It upsets me when I have to postpone things I planned.*	1	2	3	4	5
15. It is often hard to keep track of whether something happened a week ago or a few weeks ago.	1	2	3	4	5
16. When I am waiting, time seems to just drag on and on.	1	2	3	4	5
17. I feel overworked, weighed down by more tasks than I can possibly finish.*	1	2	3	4	5
18. I try to do several things at the same time.*	1	2	3	4	5
19. I feel that I have insufficient time to accomplish everything that I must do.*	1	2	3	4	5
20. I experience pressure to speed up, and have to do things faster than I am able.*	1	2	3	4	5
21. I often feel like killing time.	1	2	3	4	5
22. I would be lost without a watch.	1	2	3	4	5
23. If the only way I can get to an appointment is by rushing, I'd rather be late.*	1	2	3	4	5
24. I feel that to wait in line at a supermarket, movie, theater, or a bank is not at all that bad.*	1	2	3	4	5
25. I feel that a minute seems too small an amount of time to be of any use.	1	2	3	4	5
26. I feel like I'm racing time and losing.*	1	2	3	4	5
27. I think how nice it would be to stop time.	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
28. I become impatient with delays and interruptions.*	1	2	3	4	5
29. I find myself speeding up the car to get through yellow lights.*	1	2	3	4	5
30. I seem to have more commitments to fulfill than many of my friends.*	1	2	3	4	5
31. I find I have to do things hastily in order to get everything done.*	1	2	3	4	5
32. I believe that to be a happy and healthy person one has to learn not to be concerned about the future.	1	2	3	4	5
33. I find that I generally have sufficient time to do the things I want.*	1	2	3	4	5
34. I work steadily at my own pace.	1	2	3	4	5
35. I give my time generously to others.*	1	2	3	4	5
36. I run out of time with important things still to be done.*	1	2	3	4	5
37. I can't ever seem to get caught up.*	1	2	3	4	5
38. I put aside my work and relax when I feel like it.*	1	2	3	4	5
39. I feel like is generally orderly and predictable.	1	2	3	4	5
40. I keep myself free and ready to to wherever the future may lead.	1	2	3	4	5
41. When waiting in a long line at the bank, I usually become irritated.*	1	2	3	4	5
42. I have the habit of looking at my watch or clock.	1	2	3	4	5
43. I feel it is hard to find time for hobbies or time for myself.*	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
44. I have a tendency to talk quickly.*	1	2	3	4	5
45. I have a tendency to hasten conversations.*	1	2	3	4	5
46. I have a tendency to get involved in multiple projects.	1	2	3	4	5
47. I feel guilty if I am relaxing.*	1	2	3	4	5
48. If I unexpectedly received a day off, I would not know what to do with the time.	1	2	3	4	5
49. It often seems to be that there is not enough to do.*	1	2	3	4	5
50. I seem to be more active than most of my friends.*	1	2	3	4	5
51. My friends think I move too slowly.	1	2	3	4	5
52. I seem to be less active than my friends.	1	2	3	4	5
53. I just can't find the energy in me to do all the things expected of me.*	1	2	3	4	5
54. I would rather work steadily on one project than try to do two or three things at the same time.*	1	2	3	4	5
55. When I take a project I like to work on it a little at a time.*	1	2	3	4	5
56. I find myself having to prepare priority lists to get done all the things I have to do.*	1	2	3	4	5
57. When given a new task to do, the first thing I do is figure out how long it will take.	1	2	3	4	5
58. I am almost never bored.*	1	2	3	4	5
59. I seem to have to overextend myself in order to be able to finish everything I have to do.*	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
60. I don't like to stand in line at a restaurant even though it is one of my favorite eating places.*	1	2	3	4	5
61. I feel there are just not enough hours in the day.*	1	2	3	4	5
62. If I received an unexpected day off, I'd have a million things to do that day.*	1	2	3	4	5
63. On the average, time passes very slowly for me.	1	2	3	4	5
64. I always have a number of things I have not had time to do.*	1	2	3	4	5
65. Shopping and buying are not very important activities in my life.*	1	2	3	4	5
66. I like to shop in new stores and shopping centers as soon as I hear about them.*	1	2	3	4	5
67. I like to spend time browsing through stores without buying anything in particular.*	1	2	3	4	5
68. I do not enjoy shopping.*	1	2	3	4	5
69. The quicker I get my shopping done, the better.*	1	2	3	4	5
70. I have better ways to spend my time than in shopping.	1	2	3	4	5
71. I like to continue shopping after making a purchase.*	1	2	3	4	5
72. Shopping with friends is fun.*	1	2	3	4	5
73. Shopping is a mandatory (have to do it) activity for me.*	1	2	3	4	5
74. If I have one day off, the first thing that would come to my mind is shopping.*	1	2	3	4	5
75. When I am bored, I go shopping.*	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
76. I derive my pleasure from the act of shopping rather than the products themselves.*	1	2	3	4	5
77. I usually spend a lot of time shopping for a particular product.	1	2	3	4	5

* Items selected for the second pretest.

Items 1 through 64 belong to time pressure scale.
Items 65 through 77 belong to attitude towards shopping
scale.

PART II

In this section we are more concerned with your attitudes and opinions about specific products. Please follow the instructions provided for each question.

Characteristics

1. In the space provided to the right, please list all the product characteristics that you would consider important for your shoes.

Characteristics

2. Next, in the space provided to the right, please list all the product characteristics that you would consider important for your dinnerware.

APPENDIX II
THE SECOND PRETEST

"Assessing the Reliability and Validity
of time pressure and attitude towards shopping scales"

PART I

The following are some statements that describe people's attitudes, feelings, and opinions. Please read each statement carefully and circle the number that best describes you. Consider each statement individually, without looking ahead or thinking back to others. Each statement measures a different opinion, though it may not appear so. Work quickly down the page, taking a few seconds to decide on each statement. Your first impressions are what count. Remember, people differ a great deal in their opinions, and there are no right or wrong answers, but your honest opinions are very important.

	<u>Strongly agree</u>		<u>Strongly disagree</u>		
1. I try to find time for more things than I can do.	1	2	3	4	5
2. I feel that I have insufficient time to accomplish everything that I must do.*	1	2	3	4	5
3. I try to do several things at the same time.*	1	2	3	4	5
4. I experience pressure to speed up, and have to do things faster than I am able.*	1	2	3	4	5
5. I feel overworked, weighted down by more tasks than I can possible finish.*	1	2	3	4	5
6. I run out of time with important things still to be done.*	1	2	3	4	5
7. I find that I generally have sufficient time to do the things I want.	1	2	3	4	5
8. I give my time generously to others.	1	2	3	4	5
9. I feel it is hard to find time for hobbies or time for myself.*	1	2	3	4	5
10. It often seems to me that there is not enough to do.	1	2	3	4	5
11. I feel there are just not enough hours in the day.*	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
12. If I received an unexpected day off, I'd have a million things to do that day.*	1	2	3	4	5
13. I always have a number of things I have not had time to do.*	1	2	3	4	5
14. I can't ever seem to get caught up.*	1	2	3	4	5
15. There are times when I cannot meet everyone's expectations.*	1	2	3	4	5
16. Many times I have to cancel commitments.*	1	2	3	4	5
17. I seem to have to overextend myself in order to be able to finish everything I have to do.*	1	2	3	4	5
18. I seem to have more commitments to fulfill than many of my friends.*	1	2	3	4	5
19. I find myself having to prepare priority lists to get done all the things I have to do.*	1	2	3	4	5
20. I feel I have to do things hastily in order to get everything done.	1	2	3	4	5
21. I just can't find the energy in me to do all the things expected of me.*	1	2	3	4	5
22. I often feel time spent sleeping is wasted time.*	1	2	3	4	5
23. I try to save minutes during the day by rushing.*	1	2	3	4	5
24. I find waiting in line, even for a short time, very annoying.*	1	2	3	4	5
25. When I am on vacation, I like the luxury of forgetting about time.	1	2	3	4	5
26. If the only way I can get to an appointment is by rushing, I'd rather be late.	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
27. I get almost panicky when I don't have enough time.*	1	2	3	4	5
28. It upsets me when I have to postpone things I planned.*	1	2	3	4	5
29. I feel like I'm racing time and losing.	1	2	3	4	5
30. I put aside my work and relax when I feel like it.*	1	2	3	4	5
31. I become impatient with delays and interruptions.*	1	2	3	4	5
32. I find myself speeding up the car to get through yellow lights.*	1	2	3	4	5
33. I don't like to stand in line at a restaurant even though it is one of my favorite eating places.*	1	2	3	4	5
34. I have a tendency to talk quickly.*	1	2	3	4	5
35. I have a tendency to hasten conversations.*	1	2	3	4	5
36. I feel guilty if I am relaxing.*	1	2	3	4	5
37. I would rather work steadily on one project than to do two or three things at the same time.	1	2	3	4	5
38. I feel that to wait in line at a supermarket, movie, theater, or a bank is not at all that bad.*	1	2	3	4	5
39. I seem to be more active than most of my friends.*	1	2	3	4	5
40. When I take on a project, I like to work on it a little at a time.	1	2	3	4	5
41. When waiting in a long line at the bank, I usually become irritated.*	1	2	3	4	5
42. I am almost never bored.*	1	2	3	4	5
43. Shopping and buying are not very important actions in my life.	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
44. I like to shop in new stores and shopping centers as soon as I hear about them.*	1	2	3	4	5
45. I like to spend time browsing through stores without buying anything in particular.*	1	2	3	4	5
46. I do not enjoy shopping.*	1	2	3	4	5
47. The quicker I get my shopping done, the better.*	1	2	3	4	5
48. I like to continue shopping after making a purchase.*	1	2	3	4	5
49. Shopping with friends is fun.	1	2	3	4	5
50. Shopping is a mandatory (have to do it) activity for me.	1	2	3	4	5
51. If I have one day off, the first thing that would come to my mind is shopping.*	1	2	3	4	5
52. When I am bored, I go shopping.*	1	2	3	4	5
53. I derive my pleasure from the act of shopping rather than the products themselves.*	1	2	3	4	5

* Items selected for time pressure and attitude towards shopping scales (satisfy reliability and validity tests)

- Items 1 through 42 belong to time pressure scale and items 43 through 53 belong to attitude towards shopping scale.

- The interviewer was asked to identify his/her relationship to the respondent. Also his/her perception of the respondent as harried or relaxed person.

- After filling this pretest questionnaire, respondents were contacted by phone and were asked to identify their self-perception as harried or relaxed.

PART II

In this section we are more concerned with your attitudes, experiences, and opinions about specific products. Please follow the instructions provided for each question.

	<u>Characteristics</u>	<u>Weights</u>
1. In the space provided to the right, please list all the <u>product and store characteristics</u> that you would consider important for your <u>shoes</u> . Then divide 100 points among these characteristics according to the importance or weight you attach to each. It is very important that the total sum of these points should be 100, and no more or less.	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	Total	100

	<u>Characteristics</u>	<u>Weights</u>
2. In the space provided to the right, please list all the <u>product and store characteristics</u> that you would consider important for your <u>dinnerware</u> . Then divide 100 points among these characteristics according to the importance or weight you attach to each. It is very important that the total sum of these points should be 100, and no more or less.	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	Total	100

3. Do you have dinnerware? Yes () No ()
4. Did you ever buy dinnerware? Yes () No ()
5. Did you ever look for dinnerware? Yes () No ()
6. How often do you buy a new pair of shoes?
- | | |
|-----------------------|---------------------------|
| Once a month () | Once every two months () |
| Four times a year () | Three times a year () |
| Twice a year () | Once a year () |
7. On the average, how many pairs of shoes do you usually buy in one shopping trip? ()

PART III

As you might imagine, people differ in how important they think it is for certain products to have specific characteristics. Thinking about a new pair of shoes, please consider each characteristic listed below, and then circle the number that best describes how important that characteristic is to your ideal shoes.

	<u>Extremely Unimportant</u>			<u>Extremely Important</u>	
	1	2	3	4	5
- Size					
- Color					
- Return policy of the store					
- Quality reputation of the store					
- Durability (how long it will last)					
- Where it is made					
- Availability of help in the store					
- Brand Name					
- Appearance/Attractiveness (how it looks on your feet)					
- Heel Height					
- Store Location (convenience)					
- Store Display					
- Where it is sold					
- Store assortment					
- Style/Design					
- Comfort					
- Price					
- Weight					
- Material					
- Versatility (use in different occasions)					

And now think about new dinnerware, consider each characteristic listed below, and then circle the number that best describes how important that characteristic is to your ideal dinnerware.

	<u>Extremely Unimportant</u>			<u>Extremely Important</u>	
	1	2	3	4	5
- Brand Name					
- Store Location (convenience)	1	2	3	4	5
- Material	1	2	3	4	5
- Durability (how long it will last)	1	2	3	4	5
- Number of pieces	1	2	3	4	5
- How easy it will be cleaned	1	2	3	4	5
- Weight	1	2	3	4	5
- Appearance/Attractiveness	1	2	3	4	5
- Style/Design	1	2	3	4	5
- Where it is made	1	2	3	4	5
- Color	1	2	3	4	5
- Delivery	1	2	3	4	5
- Extra Pieces	1	2	3	4	5
- Price	1	2	3	4	5
- Quality reputation of the store	1	2	3	4	5
- Versatility (different uses)	1	2	3	4	5
- Availability of help in the store	1	2	3	4	5
- Store Assortment	1	2	3	4	5
- Store Display	1	2	3	4	5
- Guarantee/Warranty	1	2	3	4	5
- Where it is sold	1	2	3	4	5
- How many persons can be served	1	2	3	4	5

APPENDIX III
AGREEMENT LETTER

Dear Respondent: Will you do us a favor?

The person handing this letter to you is a student at Baruch College of the City University of New York. This is a request for your participation in a study conducted by Baruch College faculty members. The students are administering the questionnaire as part of their classwork assignment.

The student will collect all information anonymously in an envelope you will seal to ensure confidentiality. All your responses will remain strictly confidential and will be used for academic research purposes only.

In accordance with the procedure for conducting survey research followed by Baruch College, you are kindly requested to read carefully the statement below and sign it.

PLEASE READ CAREFULLY AND SIGN BELOW

I hereby give my consent to participate in a consumer study dealing with activities and feelings about certain product categories.

I understand that the information I will receive during the course of the survey as well as the questions I shall answer are solely for the purpose of the study.

(Signature)

Please Print:

Your Name: Mrs., Miss,
Ms.

First

Last

Address: _____

City

State

Zip

Phone Number: _____

Area Code

Number

Your participation in this study is a valuable service to this important research project and is greatly appreciated. You will find it an interesting and enjoyable experience.

Thank you for your cooperation.

Sincerely yours,

Aida N. Rizkalla
Department of Marketing

APPENDIX IV
PRE-EXPERIMENTAL QUESTIONNAIRE

Dear Participant:

As you were informed earlier, the attached questionnaire is being administered as part of a study conducted by Baruch College faculty members.

The questionnaire is easy to complete. It is divided into a few parts. It is very important that you answer all questions.

The student will collect all information anonymously. All your responses will remain strictly confidential and will be used for academic research purposes only. Your participation in this interview is a valuable service to this research project and is greatly appreciated.

Thank you for your cooperation.

Sincerely yours,

Aida N. Rizkalla
Department of Marketing

PART I

The following are some statements that describe people's attitudes, feelings, and opinions. Please read each statement carefully and circle the number that best describes you. Consider each statement individually, without looking ahead or thinking back to others. Each statement measures a different opinion, though it may not appear so. Work quickly down the page, taking a few seconds to decide on each statement. Your first impressions are what count. Remember, people differ a great deal in their opinions, and there are no right or wrong answers, but your honest opinions are very important.

	<u>Strongly agree</u>			<u>Strongly disagree</u>		
1. I feel that I have insufficient time to accomplish everything that I must do.	1	2	3	4	5	
2. I try to do several things at the same time.	1	2	3	4	5	
3. I experience pressure to speed up, and have to do things faster than I am able.	1	2	3	4	5	
4. I feel overworked, weighted down by more tasks than I can possibly finish.	1	2	3	4	5	
5. I run out of time with important things still to be done.	1	2	3	4	5	
6. I feel there are just not enough hours in the day.	1	2	3	4	5	
7. If I received an unexpected day off, I'd have a million things to do that day.	1	2	3	4	5	
8. I always have a number of things I don't have time to do.	1	2	3	4	5	
9. I can't ever seem to get caught up.	1	2	3	4	5	
10. There are times when I cannot meet everyone's expectations.	1	2	3	4	5	
11. Many times I have to cancel commitments.	1	2	3	4	5	

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
12. I seem to have more commitments to fulfill than many of my friends.	1	2	3	4	5
13. I seem to have to overextend myself in order to be able to finish everything I have to do.	1	2	3	4	5
14. I find myself having to prepare priority lists to get done all the things I have to do.	1	2	3	4	5
15. I feel it is hard to find time for hobbies or time for myself.	1	2	3	4	5
16. I just can't find the energy in me to do all the things expected of me.	1	2	3	4	5
17. I often feel that time spent sleeping is wasted time.	1	2	3	4	5
18. I try to save minutes during the day by rushing.	1	2	3	4	5
19. I find waiting in line, even for a short time, very annoying.	1	2	3	4	5
20. I get almost panicky when I don't have enough time.	1	2	3	4	5
21. It upsets me when I have to postpone things I planned.	1	2	3	4	5
22. I am almost never bored.	1	2	3	4	5
23. I become impatient with delays and interruptions.	1	2	3	4	5
24. I put aside my work and relax when I feel like it.	1	2	3	4	5
25. I find myself speeding up the car to get through yellow lights.	1	2	3	4	5
26. I don't like to stand in line at a restaurant even though it is one of my favorite eating places.	1	2	3	4	5
27. I have a tendency to talk quickly.	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
28. I have a tendency to hasten conversations.	1	2	3	4	5
29. I feel guilty if I'm relaxing.	1	2	3	4	5
30. I feel that to wait in line at a supermarket, movie, theater, or a bank is not at all that bad.	1	2	3	4	5
31. I seem to be more active than most of my friends.	1	2	3	4	5
32. When waiting in a long line at the bank, I usually become irritated.	1	2	3	4	5
33. I like to shop in new stores and shopping centers as soon as I hear about them.	1	2	3	4	5
34. I like to spend time browsing through stores without buying anything in particular.	1	2	3	4	5
35. I do not enjoy shopping.	1	2	3	4	5
36. The quicker I get my shopping done, the better.	1	2	3	4	5
37. I like to continue shopping after making a purchase.	1	2	3	4	5
38. If I have one day off, the first thing that would come to my mind is shopping.	1	2	3	4	5
39. When I am bored, I go shopping.	1	2	3	4	5
40. I derive my pleasure from the act of shopping rather than the products themselves.	1	2	3	4	5
41. I usually watch advertisements for sales.	1	2	3	4	5
42. I find myself looking for stores that sell things at low prices.	1	2	3	4	5
43. I usually shop for specials.	1	2	3	4	5
44. I frequently use coupons when shopping.	1	2	3	4	5

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
45. Price is not a consideration when shopping.	1	2	3	4	5
46. I consider myself a good shopper.	1	2	3	4	5
47. I believe that price and quality go hand in hand.	1	2	3	4	5
48. I'd like to shop at nearby stores.	1	2	3	4	5

PART II

The following is a group of statements describing different attitudes toward the role of work in women's lives. Please take your time and read through each statement carefully. When you have finished, please select only one statement that matches most closely your own attitude about the role you would like work to have in your life. Do not be concerned about whether or not your actual life situation conforms to the statement you select. I am concerned for the present not with your actual situation, but with what you believe would be (or would have been) the best situation for you.

Given my values and the kind of person I am, the IDEAL work involvement for me would be:

- _____ A full-time, permanent commitment to meaningful, responsible work that would provide me with the opportunity to full development as a person.
- _____ A responsible, full-time commitment where the work is important to me because it would enable me to stand on my own feet financially and/or fully share in the process of supporting my family.
- _____ To enjoy the opportunities for meaningful and personally rewarding work, but to give up the work during periods in my life when my time-attention are required elsewhere.
- _____ Some work experience as an interesting activity for me...a way to get out, meet other people, bring in some extra money, but only during periods in my life when my other commitments and involvements are relatively undemanding.
- _____ To work only on a limited, temporary basis, if the family were financially "strapped" for some reason, and we needed the extra money to help make ends meet or to save up for something important.
- _____ No formal work commitments at all. My sources of personal satisfaction lie elsewhere and I feel my husband should bear sole responsibility for financial support, in terms of outside income, for our family.

The following is a group of statements describing different attitudes towards the role of mothering and homemaking in women's lives. Please take your time and read through each statement carefully. When you have finished, please select only one statement that matches most closely your own attitude about the role you would like homemaking and mothering to have in your own life. Do not be concerned about whether or not your actual life situation conforms to the statement you select. I am concerned for the present not with your actual situation, but with what you believe would be (or would have been) best for you.

Given my values and the kind of person I am, the IDEAL homemaking and mothering involvement for me would be:

- _____ To dedicate my life completely to my home and family, with homemaking as my ultimate source of satisfaction in life.
- _____ To center my life around my home and family for as long as they need me, with homemaking as my primary source of satisfaction, but possibly developing other interests as my family needed me less.
- _____ To stay pretty much at home with my children while they need me, but pursuing some other interests or activities as well, with home and family of primary importance to me but also needing other sources of satisfaction.
- _____ To fulfill the central role, as wife and mother, in my family's functioning, but maintain other full-time involvement(s) as well--needing important outside sources of satisfaction in addition to my basic fulfillment from homemaking.
- _____ To share involvement in homemaking and child care equally with my spouse and maintain other full-time commitment(s) as well--with home and family fulfilling only one part of my personal fulfillment and with other sources of satisfaction equally significant for me.
- _____ To limit the scope of my family involvement or even considered not having a family at all--because other goals and activities seem much more rewarding and meaningful.

PART III

In this section we are more concerned with your attitudes, and opinions about specific products and shopping situations. Please follow the instructions provided for each question.

	<u>Characteristics</u>	<u>Weights</u>
1. In the space provided to the right, please list all the <u>product and store characteristics</u> that you would consider important for your <u>ideal shoes</u> . Then divide 100 points among these characteristics according to the importance or weight you attach to each. It is very important that the total sum of these points should be 100, and no more or less.		
	Total	100

	<u>Characteristics</u>	<u>Weights</u>
2. In the space provided to the right, please list all the <u>product and store characteristics</u> that you would consider important for your <u>ideal dinnerware</u> . Then divide 100 points among these characteristics according to the importance or weight you attach to each. It is very important that the total sum of these points should be 100, and no more or less.		
	Total	100

And now, I would like to get some information about you and your family. This information will be used for statistical analysis only, and will be kept strictly confidential.

1. Your age:

- 30 - 34 years ()
- 35 - 39 years ()
- 40 - 44 years ()
- 45 - 50 years ()

2. The Level of Education Completed:

- Graduated from Grammar School ()
- Attended High School ()
- Graduated from High School ()
- Attended College ()
- Graduated from College ()
- Attended Post-Graduate ()
- Completed Master or Doctorate ()

3. Do you have a job?

- Not at all ()
- Part-time ()
- Full-time ()

4. If you are working, would you consider your job:

- Just a job ()
- A career ()

5. What is your occupation?

- Homemaker ()
- Professional ()
- Managerial ()
- Salesperson ()
- Service Household Worker ()
- Other ()

6. What is your birth order?

- The first born child ()
- The middle child ()
- The last child ()

7. How many siblings (brothers/sisters) do you have? ()

8. What is your marital status?
- | | |
|-----------|-----|
| Single | () |
| Married | () |
| Separated | () |
| Divorced | () |
| Widowed | () |
9. Number in household including yourself: ()
10. Do you have children?
- | | |
|-----|-----|
| Yes | () |
| No | () |
11. Ages of children: _____, _____, _____, _____, _____, _____
12. Number of children living at home: ()
13. If you were asked to use one of the following terms to describe your social class, which one would you choose?
- | | |
|--------------|-----|
| Lower class | () |
| Lower middle | () |
| Middle class | () |
| Upper middle | () |
| Upper class | () |
14. What is our annual household income? (Including all full-time jobs for all household members before tax)
- | | |
|-----------------------------|-----|
| Under \$10,000 | () |
| \$10,000 - \$19,999 | () |
| \$20,000 - \$29,999 | () |
| \$30,000 - \$39,999 | () |
| \$40,000 - \$49,000 | () |
| \$50,000 - \$59,999 | () |
| \$60,000 - \$75,000 or over | () |
15. With which group do you identify yourself:
- | | |
|----------|-----|
| Black | () |
| White | () |
| Hispanic | () |
| Oriental | () |
| Other | () |

APPENDIX V
MEASURE OF SPECIFIC ATTITUDE
TOWARDS SHOPPING

"For a pair of shoes and dinnerware"

The following are some statements that describe people's attitudes toward shopping for a specific product. Shopping for a new pair of shoes (dinnerware), please circle the number that best describes your attitude.

	<u>Strongly agree</u>			<u>Strongly disagree</u>	
1. I would not enjoy shopping for a new pair of shoes (dinnerware).	1	2	3	4	5
2. The quicker I would get my shopping for a new pair of shoes (dinnerware) done the better.	1	2	3	4	5
3. When I am bored, I go browsing through shoe (dinnerware) stores without buying anything in particular.	1	2	3	4	5
4. I would enjoy looking at different styles of shoes (dinnerware).	1	2	3	4	5
5. I believe it is worth it to spend time on shopping for a new pair of shoes (dinnerware).	1	2	3	4	5
6. If I have one day off, the first thing that would come to my mind is shopping for shoes (dinnerware).	1	2	3	4	5
7. If I am shopping for shoes (dinnerware), I would derive my pleasure from the act of shopping rather than the products themselves.	1	2	3	4	5
8. I would like to shop in new stores that sell shoes (dinnerware), as soon as I hear about them.	1	2	3	4	5

APPENDIX VI
THE FOUR EXPERIMENTAL
SITUATIONS "SCENARIOS"

1. Shoes/tomorrow
2. Shoes/one month
3. Dinnerware/tomorrow
4. Dinnerware/one month

Dear Participant:

Will you do us one more favor?

We greatly appreciated the time and effort that you exerted on the first questionnaire. It is really important that you help us just one more time.

The attached questionnaire is similar to the one you have filled out a couple of weeks ago, but is much shorter.

Once again, thank you for your support on this final phase of our study.

Sincerely yours,

Aida N. Rizkalla

SITUATION (1) & (2)

Now we are going to ask you to assume a familiar role, that of a consumer. The following is a scenario that describes a specific purchase situation. Please read this scenario carefully and answer the following questions. It is very important that you assume the role of a prospective buyer and describe your likely behavior if you were to face a similar situation.

You just bought a new suit. Your husband told you today that you are invited to a surprise party that he and his coworkers are holding to celebrate their boss' promotion. The party will take place tomorrow (one month from today). You realize that the new suit is the best thing to wear, but you don't have the right shoes to go with it.

1. Would you buy a new pair of shoes? Yes () No ()
2. Which one of the following types
types of stores would you be most
likely to visit in order to look
for the new shoes?.....
Department Store ()
Discount Store ()
Specialty Store ()
3. In total, how many stores are you
likely to visit before making your
choice?..... ()
4. From which of the following stores
are you most likely to make your
purchase?.....
Discount Store ()
Specialty Store ()
Department Store ()
5. How many pairs of shoes would
you be likely to try on before
making your choice?..... ()

	<u>Characteristics</u>	<u>Weights</u>
6. In the space provided to the right, please list all the product and store's characteristics or factors that you would be likely to consider in buying this new pair of shoes. Then divide 100 points among these characteristics according to the importance or weight you attach to each. It is important that the total sum of these points should be 100, and no more or less.	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	Total	100

SITUATION (3) & (4)

Now we are going to ask you to assume a familiar role, that of a consumer. The following is a scenario that describes a specific purchase situation. Please read this scenario carefully and answer the following questions. It is very important that you assume the role of a prospective buyer and describe your likely behavior if you were to face a similar situation.

Today, your husband told you that he has invited his boss and his wife to a dinner party for tomorrow night (one month from today). He told you that he wants to surprise his boss with a nice celebration for the promotion he has just received. Preparing the food isn't a problem, since there is someone who will help you. However, your dinnerware is not suitable for the occasion, since it has some broken pieces. You are thinking of buying new dinnerware which you were planning to buy anyway.

1. Would you buy a new dinnerware? Yes () No ()
2. Which one of the following types of stores would you be most likely to visit in order to look for the new dinnerware?..... Department Store ()
Discount Store ()
Specialty Store ()
3. In total, how many stores are you likely to visit before making your choice?..... ()
4. From which of the following stores are you most likely to make your purchase?..... Discount Store ()
Specialty Store ()
Department Store ()
5. How many sets of dinnerware would you be likely to consider before making your choice?..... ()

	<u>Characteristics</u>	<u>Weights</u>
6. In the space provided to the right, please list all the product and store's characteristics or factors that you would be likely to consider in buying this new pair of shoes. Then divide 100 points among these characteristics according to the importance or weight you attach to each. It is important that the total sum of these points should be 100, and no more or less.	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
		Total

APPENDIX VII
INSTRUCTIONS FOR USING THE
INFORMATION BOARD

- 1 - A Pair of Shoes
- 2 - Dinnerware

(1) A pair of shoes

Dear Participant:

Will you do us one more favor?

We greatly appreciated the time and effort that you exerted on the first questionnaire. It is really important that you help us one more time.

In this part of the study, your task is a little bit different. You are presented with 10 different hypothetical pairs of shoes from which you have to select one brand that you would prefer for yourself on the basis of the information you will acquire. Please, read the following instructions and follow them carefully.

1. The interviewer will hand you an information board (matrix) that represents a combination of the 10 brands of shoes and their characteristics.
2. These 10 brands of shoes are labeled A through J and appear as an alphabetical row across the top of the matrix.
3. There are 20 information dimensions that represent the characteristics of these 10 brands and the stores where they are sold. These information dimensions appear on a column down the left hand side of the matrix.
4. The values of these information dimensions are written on index cards and placed in a file with the interviewer.
5. In order to know specific information about a specific brand, you have to give the interviewer the number that represents that information on the matrix coupled with the information dimension (e.g., number 40/- style). The interviewer will give you an index card that carries the same number. On the index card you will find the information you need.
6. You can ask about information from anywhere in the matrix, in any order you like.
7. You can acquire as much or as little information from the interviewer.
8. You can acquire only one piece of information at a time.
9. You can keep all the information acquired with you until you make your decision.

10. Note that the order of the brands does not imply any specific meaning.
11. Most of the information values are represented qualitatively as verbal descriptions by two levels only (e.g., low/high, like/dislike,.....etc.)
12. You will be allowed to work on your pace and can take as much or as little time to make your choice (you have to select one of these 10 brands within two minutes).
13. Please, don't hesitate to ask the interviewer any questions you want. Once you start your task, no further questions are allowed.
14. Finally, try to be as honest and as accurate as you can be.

Again, thank you so much.

(2) Dinnerware

Dear Participant:

Will you do us one more favor?

We greatly appreciated the time and effort that you exerted on the first questionnaire. It is really important that you help us one more time.

In this part of the study, your task is a little bit different. You are presented with 10 different hypothetical sets of dinnerware from which you have to select one brand that you would prefer for yourself on the basis of the information you will acquire. Please, read the following instructions and follow them carefully.

1. The interviewer will hand you an information board (matrix) that represents a combination of the 10 brands of dinnerware and their characteristics.
2. These 10 brands of dinnerware are labeled A through J and appear as an alphabetical row across the top of the matrix.
3. There are 22 information dimensions that represent the characteristics of these 10 brands and the stores where they are sold. These information dimensions appear on a column down the left hand side of the matrix.
4. The values of these information dimensions are written on index cards and placed in a file with the interviewer.
5. In order to know specific information about a specific brand, you have to give the interviewer the number that represents that information on the matrix coupled with the information dimension (e.g., number 40/-style). The interviewer will give you an index card that carries the same number. On the index card you will find the information you need.
6. You can ask about information from anywhere in the matrix, in any order you like.
7. You can acquire as much or as little information from the interviewer.
8. You can acquire only one piece of information at a time.
9. You can keep all the information acquired with you until you make your decision.

10. Note that the order of the brands does not imply any specific meaning.
11. Most of the information values are represented qualitatively as verbal descriptions by two levels only (e.g., low/high, like/dislike,.....etc.)
12. You will be allowed to work on your pace and can take as much or as little time to make your choice (you have to select one of these 10 brands within two minutes).
13. Please, don't hesitate to ask the interviewer any questions you want. Once you start your task, no further questions are allowed.
14. Finally, try to be as honest and as accurate as you can be.

Again, thank you so much.

Dear Interviewer:

Please, in the space provided below, list all the numbers that are acquired by the participant in order. Then write the chosen brand and decision time.

1. _____	2. _____	3. _____	4. _____	5. _____
6. _____	7. _____	8. _____	9. _____	10. _____
11. _____	12. _____	13. _____	14. _____	15. _____
16. _____	17. _____	18. _____	19. _____	20. _____
21. _____	22. _____	23. _____	24. _____	25. _____
26. _____	27. _____	28. _____	29. _____	30. _____
31. _____	32. _____	33. _____	34. _____	35. _____
36. _____	37. _____	38. _____	39. _____	40. _____
41. _____	42. _____	43. _____	44. _____	45. _____
46. _____	47. _____	48. _____	49. _____	50. _____
51. _____	52. _____	53. _____	54. _____	55. _____
56. _____	57. _____	58. _____	59. _____	60. _____
61. _____	62. _____	63. _____	64. _____	65. _____
66. _____	67. _____	68. _____	69. _____	70. _____
71. _____	72. _____	73. _____	74. _____	75. _____
76. _____	77. _____	78. _____	79. _____	80. _____
81. _____	82. _____	83. _____	84. _____	85. _____
86. _____	87. _____	88. _____	89. _____	90. _____
91. _____	92. _____	93. _____	94. _____	95. _____
96. _____	97. _____	98. _____	99. _____	100. _____
101. _____	102. _____	103. _____	104. _____	105. _____

The chosen brand ()

Minutes Seconds 1/100th of a second

Decision Time () () ()

APPENDIX VII
POST-EXPERIMENTAL QUESTIONNAIRE

Now after you have made your choice, please read the following items and circle the numbers that best describe your feelings while making your decision.

1. How satisfied are you with your decision?

Very Dissatisfied	Dissatisfied	Fair	Satisfied	Very Satisfied
1	2	3	4	5

2. How certain are you that you made the best decision?

Very Certain	Uncertain	Fair	Certain	Very Certain
1	2	3	4	5

3. How confused did you feel while performing this task?

Not at all Confused	Not Confused	Fair	Confused	Very Confused
1	2	3	4	5

4. How pressured did you feel while making your choice?

Very Relaxed	Relaxed	Fair	Pressured	Very Pressured
1	2	3	4	5

5. How sincere were you when you made your choice?

Very Sincere	Sincere	Fair	Unsincere	Very Sincere
1	2	3	4	5

6. Please, try to guess the exact purpose of the experiment and write it down.

BIBLIOGRAPHY

- Acton, J. P. Demand For Health Care Among The Urban Poor, With Special Emphasis On The Role Of Time. New York: Rand Institute, April, 1973a.
- Alexis, M., G. H. Haines, and L. Simon. "Consumer Information Processing: The Case Of Women's Clothing," Proceedings, Fall Conference. Chicago: American Marketing Association, (1968), 197-205
- Ames, L. B. "The Development Of The Sense Of Time In The Young Child," Journal of Genetic Psychology, Vol. 68, (1946), 97-125.
- Anderson, B. "Working vs. Non-Working Women: A Comparison Of Shopping Behavior," Proceedings of the AMA Fall Conference. Houston, 1972.
- Anderson, J. C. and D. W. Gerbing. "Some Methods For Respecifying Measurement Models To Obtain Undimensional Construct Measurement," Journal of Marketing Research, Vol. 19, (November 1982), 453-460.
- Anderson, J. E. "The Use Of Time And Energy," In James, E. B. Handbook Of Aging And The Individual. Chicago: University of Chicago, 1959, 769-796.
- Anderson, R. E. "Consumer Dissatisfaction: The Effect Of Disconfirmed Expectancy On Perceived Product Performance," Journal of Marketing Research, Vol. 10, (February, 1973), 38-44.
- Anderson, W. T. "Identifying The Convenience-Oriented Consumer," Journal of Marketing Research, Vol. 8, (May 1971), 179-183.
- Arndt, J. and S. Gronmo. "The Time Dimension Of Shopping Behavior: Some Empirical Findings," Proceedings of the Association for Consumer Research Conference, (1977) 230-235.
- Bagozzi, R. P. Causal Models In Marketing. New York: Wiley Co., 1980.
- _____. "A Field Investigation Of Causal Relations Among Cognition, Affect, Intentions, And Behavior," Journal of Marketing Research, Vol. 19, (1982), 562-584.

- _____. "Evaluating Structural Equation Models With Unobservable Variables And Measurement Error: A Comment," Journal of Marketing Research, Vol. 18, (August 1981), 375-381.
- Bacon, A. W. "Leisure And The Alienated Worker: A Critical Reassessment of Three Radical Theories Of Work and Leisure," Journal of Leisure Research, Vol. 7, (1975), 179-190.
- Barndt, R. and D. Johnson. "Time Orientation In Delinquents," Journal of Abnormal & Social Psychology, Vol. 51, (1955) 343-5.
- Bartos, R. "The Moving Target: The Impact Of Women's Employment On Consumer Behavior," Journal of Marketing, Vol. 41 No. 3, (1975), 31-37.
- _____. "What Every Marketer Should Know About Women," Harvard Business Review, Vol. 56, (1978), 73-85.
- Beach, L. R. and T. R. Mitchell. "A Contingency Model For The Selection Of Decision Strategies," Academy Of Management Review, Vol 3, (July 1978), 439-449.
- Becker, B. W. and P. E. Connor. "The Influence Of Personal Values On Attitude And Store Choice Behavior." An Assessment Of Marketing Thought and Practice, 1982 Educators' Conference Proceedings, Series No. 48. Chicago: American Marketing Association, 21-24.
- Becker, G. S. "A Theory Of The Allocation Of Time." The Economic Journal, Vol. 75, (September 1965), 493-517.
- Belk, R. W. "An Exploratory Assessment Of Situational Effects In Buyer Behavior." Journal of Marketing Research, Vol XI, (May 1974), 156-163.
- _____. "Situational Variables And Consumer Behavior," Journal of Consumer Research, Vol. 2, (December 1975), 157-164.
- _____. "The Objective Situation As A Determinant Of Consumer Behavior," in Advances In Consumer Research, Vol. 2, ed. Mary Jane Schlinger. Ann Arbor, MI: Association For Consumer Research, 1975b, 455-463.
- Bell, G. P. "Self-Confidence And Persuasion In Car Buying." Journal of Marketing Research, Vol. 4, (February 1967), 46-52.

- Bellenger, D. N., D. H. Robertson, and E. C. Hirschman. "Age And Education As Key Correlates Of Store Selection For Female Shoppers," Journal of Retailing, Vol. 52, (Winter 1976), 71-78.
- _____ and P. K. Korgankar. "Profiling The Recreational Shopper," Journal of Retailing, Vol. 56, (Fall 1980), 77-92.
- Bennett, P. D. and R. D. Mandell. "Prepurchase Information Seeking Behavior Of New Car Purchasers--The Learning Hypothesis," Journal of Marketing Research, Vol. 6, (1969), 430-433.
- Bentler, P. M. and D. G. Bonett. "Significance Tests And Goodness Of Fit In The Analysis Of Covariance Structures," Psychological Bulletin, Vol. 88, No. 3, (1980), 588-606.
- Berk, R. A. and S. R. Berk. "A Simultaneous Equation Model For The Division of Household Labor," Sociological Methods and Research, Vol. 6, No. 4, (1978), 431-468.
- Berkowitz, E. N., J. R. Walton, and O. C. Walker. "In-Home Shoppers: The Market For Innovative Distribution Systems," Journal of Retailing, Vol. 55, No. 2, (1979), 15-33.
- Berlyne, D. E. "Conflict And Choice Time," British Journal of Psychology, Vol. 48 (May 1957), Part II, 106-118.
- _____. "Conflict And Reaction Time: Reply To Kiesler," Psychological Reports, Vol. 19, (October 1966), 413-414.
- Berry, L. L. "The Time-Buying Consumer," Journal of Retailing, Vol. 55, No. 4, (1979), 58-69.
- Bettman, J. R. "The Structure Of Consumer Choice Process," Journal of Consumer Research, Vol. 8, (1971), 465-471.
- _____. "Toward A Statistic For Consumer Decision Nets," Journal of Consumer Research, Vol. I, (1974), 51-62.
- _____. "Issues In Designing Consumer Information Environments," Journal of Consumer Research, Vol. 2, (1975), 169-177.
- _____. An Information Processing Theory Of Consumer Choice. Reading, MA: Addison-Wesley, 1979.

- _____. "Data Collection And Analysis Approaches For Studying Consumer Information Processing," in Advances in Consumer Research, Vol. 4, ed. William D. Perreault, Jr. Chicago: Association for Consumer Research, 1977, 342-8.
- _____ and J. Jacoby. "Patterns Of Processing In Consumer Information Acquisition," in Beverlee B. Anderson ed., Advances In Consumer Research, Vol. 3. Chicago: Association For Consumer Research, 1976, 315-320.
- _____ and P. Kakkar. "Effects Of Information Presentation Format On Consumer Information Acquisition Strategies," Journal of Consumer Research, Vol. 3, (March 1977), 233-240.
- _____ and C. W. Park. "Effects Of Prior Knowledge And Experience And Phase Of The Choice Process On Consumer Decision Processes: A Protocol Analysis," Journal of Consumer Research, Vol. 7, (December 1980a), 234-248.
- _____ and _____. "Implications Of A Constructive View Of Choice For Analysis Of Protocol Data: A Coding Scheme For Elements Of Choice Processes," in Advances In Consumer Research, Vol. 7, ed. Jerry C. Olson. Ann Arbor, MI: Association For Consumer Research, 1980b, 148-153.
- _____ and M. A. Zins. "Constructive Processes In Consumer Choice," Journal of Consumer Research, Vol. 3 (September 1977), 75-85.
- _____ and _____. "Information Format And Choice Task Effects In Decision Making," Journal of Consumer Research, Vol. 6, (September 1979), 141-153.
- Bortner, R. and Hultsch. "Personal Time Perspective In Adulthood," Developmental Psychology, Vol. 2 (1972) 98-103.
- Brinberg, D. and J. E. McGrath. "A Network Of Validity Concepts Within The Research Process," in D. Brinberg and L. Kidder ed., New Directions For Methodology Of Social And Behavioral Science: Forms of Validity In Research, No. 12. San Francisco, CA: Jossey-Bass Inc. 1982.
- Bruce, H. A., R. C. Kakler, and L. T. Ronald. "A Shopping Simulation Game Approach To The Study Of Bargaining Behavior," Proceedings of American Marketing Association, (1975), 439-444.

- Bucklin, L. P. "Retail Strategy And The Classification Of Consumer Goods," Journal of Marketing, Vol. 28, (1963), 50-55.
- Burt, R. S. "Interpretational Confounding Of Unobserved Variables In Structural Equation Models," Sociological Methods and Research, Vol. 5, (1976), 3-52.
- Calabresi, R. and J. Cohen. "Personality And Time Attitudes," Journal of Abnormal & Social Psychology, Vol. 73, (1968), 431-439.
- Campbell, D. T. and J. C. Stanley. Experimental And Quasi-Experimental Designs For Research. Chicago: Rand-McNally, 1966.
- _____ and D. W. Fiske. "Convergent And Discriminant Validation By The Multitrait-Multimethod Matrix," Psychological Bulletin, Vol. 30, (1959), 81-105.
- Capon, N. and M. Burke. "Information Seeking Behavior In Consumer Durable Purchase," in A. G. Barnett and D. M. Bellenger eds., Contemporary Marketing Thought. Chicago: American Marketing Association, 1977, 110-115.
- Cardozo, R. "An Experimental Study Of Consumer Effort, Expectations, And Satisfaction," Journal of Marketing Research, Vol. 2, (August 1965), 244-249.
- Carman, J. M. "Correlates Of Brand Loyalty: Some Positive Results," Journal of Marketing Research, Vol. 7, (February 1970), 67-76.
- Charnes, A., W. W. Cooper, D. B. Lerner, and F. Y. Phillips. "Management Science and Marketing Management," Journal of Marketing, Vol. 49, (1985), 93-105.
- Chestnut, R. W. "The Expenditure Of Time In The Acquisition Of Package Information," unpublished Master's Thesis, Purdue University, 1975.
- _____ and J. Jacoby. "Consumer Information Processing: Emerging Theory And Findings," in Consumer And Industrial Buying Behavior, eds. A. G. Woodsize, J. Sheth and P. D. Bennett. New York: American, 1977.
- Claxton, J. D., J. N. Fry, and B. Portis. "A Taxonomy Of Prepurchase Information Gathering Patterns," Journal of Consumer Research, Vol. 1, (December 1974), 35-41.

- Cook, T. D. and D. T. Campbell. Design And Analysis Of Quasi-Experiments For Field Settings. Chicago: Rand-McNally, 1979.
- Copeland, M. T. "Relation Of Consumers' Buying Habits To Marketing Methods," Harvard Business Review, Vol. 1 (April 1923), 282-289.
- Cottle, T. J. Perceiving Time: A Psychological Investigation With Men and Women. New York: John Wiley & Sons, 1976.
- Covey, L. S., "Time Urgency And Subjective Well-Being," unpublished Ph.D. Dissertation, Department of Psychology, CUNY, 1983.
- Cunningham, D. A., H. T. Montoye, H. L. Metzner, and J. E. Keller. "Active Leisure Activities As Related To Occupation," Journal of Leisure Research, Vol. 2, (1970), 104-111.
- Davids, A., C. Kidder, and M. Reich. "Time Orientation In Male And Female Juvenile Delinquents," Journal of Abnormal Social Psychology, Vol. 64, (1962), 239-240.
- De Grazia, S. Of Time, Work and Leisure. New York: Twentieth Century Fund, 1962.
- Diamond, E. "The Role Of Anger And Hostility In Essential Hypertension And Coronary Heart Disease," Psychological Bulletin, Vol. 92, No. 2, (1982), 410-33.
- Dillon, R. W. and M. Goldstein. Multivariate Analysis: Methods And Application. John Wiley & Sons: New York, 1984.
- _____ and A. Kumar. "Attitude Organization And The Attitude Behavior Relation: A Critique Of Bagozzi And Burnkrant's Reanalysis Of Fishbein And Ajzen," Journal of Personality and Social Psychology, Vol. 40, No. 1, (1985) 33-46.
- _____, T. Madden, and N. H. Firtle. Marketing Research In A Marketing Environment. Times Mirror/Mosby Company, 1987.
- Donohew, L. and L. Tipton. "A Conceptual Model Of Information Seeking, Avoiding And Processing," in Peter Clarke, ed., New Models For Communication Research. CA: Sage, 1973, 243-268.

- Doob, L. Patterning Of Time. New Haven: Yale University Press, 1971.
- Douglas, A. S., "Cue Choice As A Function Of Time Pressure And Perceived Risk," Advances In Consumer Research, Vol. 8, (1981) 470-475.
- Douglas, S. P. "Cross-National Comparisons And Consumer Stereotypes: A Case Study Of Working And Non-Working Wives In The U. S. And France," Journal of Consumer Research, Vol. 3, No. 1, (1976), 12-10.
- Engel, J. F., D. T. Kollat, and R. D. Blackwell. Consumer Behavior. 2nd ed. New York: Holt, Rinehart and Winston, 1973.
- Farely, J. U. and L. W. Ring. "A Simultaneous-Equation Regression Test Of The Howard-Sheth Model," in John U. Farely, John A. Howards, and L. Winston Ring, eds., Consumer Behavior: Theory and Application. Boston: Allyn and Bacon, 1974, 205-226.
- Feldman, L. P. and J. Hornik. "The Use Of Time: An Integrated Conceptual Model," Journal of Consumer Research, Vol. 7, (March 1981), 407-419.
- Fishbein, M. and I. Ajzen. Belief, Attitude, Intension And Behavior: An Introduction Theory And Research. Reading, MA: Addison-Wesley, 1975.
- Fisher, S. and R. L. Fisher. "Unconscious Conception Of Parental Figures As A Factor Influencing Perception Of Time," Journal of Personality, (1953), 1496-1505.
- Foote, N. N. "Methods For Study Of Meaning In Use Of Time," in R. W. Kleemier, ed., Aging And Leisure: A Research Perspective Into The Use Of Time. New York: Oxford University Press, 1966, 155-176.
- _____. "The Time Dimension And Consumer Behavior," in J. W. Newman, ed., On Knowing The Consumer. New York: John Wiley & Sons, 1966, 38-46.
- Fornell, C. "Issues In The Application Of Covariance Structure Analysis: A Comment," Journal of Consumer Research, Vol. 9, (March 1983), 443-447.
- _____. and D. F. Larcker. "Evaluating Structural Equation Models With Unobservable Variables And Measurement Error," Journal of Marketing Research, Vol. 18, (1981a), 39-50.

- _____ and _____. "Structural Equation Models With Unobservable Variables And Measurement Error: Algebra And Statistics," Journal of Marketing Research, Vol. 18, (1981b), 382-388.
- Fraise, P. The Psychology Of Time. New York: Harper and Row, 1973.
- Frank, L. "Time Perspectives," Journal of Social Philosophy, Vol. 4, (1939), 293-312.
- Fraser, E. ed. The Voices Of Time. New York: Brazillier, 1966.
- Fraser, J. T. Of Time, Passion And Knowledge. New York: Brazillier, 1975.
- _____. "The Interdisciplinary Study Of Time," Annals Of The New York Academy Of Science, Vol. 138, (February 1967), 222-247.
- Freidman, M. and R. H. Rosenman. Type A Behavior And Your Heart. New York: Alfred A. Knopf, 1974.
- Garretson, R. C. and F. F. Mauser. "The Future Challenges Of Marketing," Harvard Business Review, Vol. 41, (November-December 1963), 168-178, 186-188.
- Gastorf, W. "Time Urgency Of The Type A Behavior Pattern," Journal of Consulting & Clinical Psychology, (1980) 299-301.
- Gergen, K. and K. W. Back. "Aging, Time Perspective And Preferred Solutions Of International Problems," Journal of Conflict Resolution, (1965) 177-86.
- Getsinger, S. H. "Sociopathy, Self-Actualization, And Time," Journal of Personality Assessment, Vol. 40, No. 4, (1976), 398-401.
- Glass, D. C., M. L. Snyder, and J. F. Hollis. "Time Urgency And The Type A Coronary-Prone Behavior Pattern," Journal of Applied Social Psychology, Vol. 4, No. 2, (1974) 125-40.
- Goldman, A. and J. K. Johansson. "Determinants Of Search For Lower Prices: An Empirical Assessment Of The Economics Of Information Theory," Journal of Marketing Research, Vol. 5, (December 1978), 176-186.

- Gorman, B. S. and A. E. Wessman. "Images, Values, And Concepts Of Time In Psychological Research," in B. S. Gorman and A. E. Wessman, eds., The Personal Experience Of Time. New York: Plenum Press, 1977b.
- Graham, R. J. "The Role Of Perception Of Time In Consumer Research," Journal of Consumer Research, Vol. 4, (1981), 335-342.
- Green, D. and R. H. Knapp. "Time Judgment, Aesthetic Preference, And Need For Achievement," Journal of Abnormal & Social Psychology, Vol. 58, (1959), 140-2.
- Gronau, R. "The Effect Of Children On The Housewife's Value Of Time," Journal of Political Economy, Vol. 81, (March/April 1973a), Part II, SI68-SI99.
- Gurvitch, G. The Spectrum of Social Time. Dordnecht, Holland: D. Reidel Publishers, 1964.
- Hall, D. T. and F. E. Gordon. "The Career Choices Of Married Women: Effects On Conflict, Role Behavior, And Satisfaction," Journal of Applied Psychology, Vol. 58, (1973), 42-48.
- Hall, E. R. The Hidden Dimension, Garden City, New York: Doubleday, 1966.
- Hall, F. and D. Hall. "Dual Careers--How Do Couples And Companies Cope With The Problems," Organizational Dynamics, Vol. 6, (1978), 57-77.
- Hall, F. T. and M. P. Schroeder. "Effects Of Family And Housing Characteristics On The Time Spent On Household Tasks," Journal of Home Economics, Vol. 62, (January 1970), 23-29.
- Hansen, F. "Consumer Choice Behavior: An Experimental Approach," Journal of Marketing Research, Vol. 6, (November 1969), 436-443.
- _____. Consumer Choice Behavior. New York: Free Press, 1972b.
- _____. "Psychological Theories Of Consumer Choice," Journal of Consumer Research, Vol. 3, (September 1976), 117-142.

- Hawes, D. K., S. Gronomo, and J. Arndt. "Shopping Time And Leisure Time: Some Preliminary Cross-Cultural Comparisons Of Time Budget Expenditures," in H. K. Hunt, ed., in Advances In Consumer Research, Vol. 5. Ann Arbor: Association For Consumer Research, 1978, 151-159.
- _____. "Time And The Theories Of Consumer Behavior," The University of Wyoming; Institute For Policy Research, Research Paper No. 270, (January 1979a).
- _____. "Time And Behavior," in O. C. Ferrell, S. W. Brown, and C. W. Lamb, eds., Conceptual And Theoretical Development In Marketing. Chicago: American Marketing Association, 1977b.
- _____. "The Role Of Time In Model Of Consumer Behavior," Research Paper No. 270, Institute For Policy Research, College of Commerce and Business Administration, University of Wyoming, (October 1978).
- Hawkins, C. K. and J. T. Lanzetta. "Uncertainty, Importance, And Arousal As Determinants Of Predecisional Information Search," Psychological Reports, Vol. 17, (December 1965), 791-800.
- Hawkins, D. I. and G. McCain. "An Investigation Of Returns To Different Shopping Strategies," Journal of Consumer Affairs, Vol. 13, No. 1, (Summer 1979), 64-74.
- Heirich, M. "The Use of Time In The Study Of Social Change," American Sociological Review, Vol. 29, (June 1964), 386-397.
- Hendrix, P. E. "The Role Of Positive Reinforcement In The Consumer's Allocation Of Time," unpublished manuscript, Florida State University, 1979.
- _____. "Antecedents And Consequences Of Time Use: Proposed Measures And Preliminary Evidence," Advances in Consumer Research, Vol. 11, (1975), 35-40.
- _____. "The Allocation Of Time By Consumers," unpublished doctoral dissertation, The University of Michigan, 1978.
- _____, T. C. Killear, and J. R. Taylor. "The Allocation Of Time By Consumers," in Advances in Consumer Research, Vol. VI, ed. William L. Wilkie. Miami: Association for Consumer Research, 1979.

- Henry, W. A. "The Effect Of Information Processing Ability On Processing Accuracy," Journal of Consumer Research, Vol. 7, (June 1980), 42-48.
- Heslin, R. and S. Streufert. "Task Familiarity And Reliance On The Environment In Decision Making," Psychological Report, Vol. 18, (October 1968), 629-637.
- Hindenlang, M. "Time Perception Of Self-Reported Delinquents," British Journal of Criminology, Vol. 13, (1973), 178-83.
- Hirschman, E. C. and M. K. Mills. "Women's Occupational Status, Innovations, Opinion Leadership and Innovative Communication," Proceedings, Southern Marketing Association, (1979), 270-273.
- Holbrook, M. B. "A Synthesis Of The Empirical Studies," in John U. Farley, John A. Howard, and L. Winston Ring, ed., Consumer Behavior: Theory And Application. Boston: Allyn and Bacon, 1974, 229-252.
- _____ and D. R. Lehmann. "Allocating Discretionary Time: Complementarity Among Activities," Journal of Consumer Research, Vol. 7, (1981), 395-406.
- Holman, R. H. and R. D. Wilson. "The Availability Of Discretionary Time. Influences On Interactive Patterns Of Consumer Behavior," in Advances in Consumer Research, Vol. 7, Jerry C. Olson, ed. Ann Arbor, Mich.: Association for Consumer Research, 1980, 431-436.
- _____ and _____. "Temporal Equilibrium As A Basis For Shopping Behavior," Journal of Retailing, Vol. 58, (Spring 1982) 58-80.
- Holton, R. W. "The Distinction Between Convenience, Shopping, And Specialty Goods," Journal of Marketing, Vol. 23, (1958), 53-56.
- Hornik, J. "Applications Of Facet Theory To Marketing Communication And Behavior," in Advances In Consumer Research, Vol. 1, ed. Scott Ward. Urbana, IL: Association for Consumer Research, 1974, 434-437.
- _____. "Situational Effects On The Consumption Of Time," Journal of Marketing, Vol. 46, (Fall 1982), 44-55.

- _____. "Subjective vs. Objective Time Measures: A Note On The Perception Of Time In Consumer Behavior," Journal of Consumer Research, Vol. 11, (June 1976), 615-618.
- Horton, K. L. "Personality As A Moderator Variable In The Purchase Decision," unpublished Dissertation, Indiana University, 1973b.
- _____. "Some Relationships Between Personality And Decision Making," Journal of Marketing Research, Vol. 16, (May 1979), 233-246.
- Howard, D. R. "Multivariate Relationships Between Leisure Activities And Personality," Research Quarterly, Vol. 47, (1974), 226-237.
- Howard, J. A. and J. N. Sheth. The Theory Of Buyer Behavior. New York: John Wiley, 1969.
- Howard, R. A. "Stochastic Process Models Of Consumer Behavior," Journal of Advertising Research, Vol. 3, (September 1963), 35-42.
- Hughes, G. and Michael L. Ray, Eds. Buyer/Consumer Information Processing. Chapel Hill: University of North Carolina Press, 1974.
- Hughes, D. "Consumer Dissatisfaction Related To Price Paid," in Consumer Satisfaction, Dissatisfaction and Complaining Behavior, R. L. Day, ed., Bloomington, Indiana: Indiana University School of Business, 1977.
- Hull, C. H. and N. H. Nie, eds., SPSS Update 7-9. New York: McGraw-Hill, 1981.
- Hunt, J. and L. Hunt. "Dilemmas And Contradictions Of Status: The Case Of The Dual Career Family," Social Problems, Vol. 24, (1977), 507-516.
- Jacoby, J. "Consumer Reaction To Information Displays: Packaging And Advertising," in S. F. Divita, ed., Advertising And The Public Interest: Selected Papers From The Conference On Advertising And The Public Interest Held Washington, D.C., May 1973. Chicago: American Marketing Association, 1974, 101-118.
- _____ and D. B. Kryner. "Brand Loyalty vs. Repeat Purchasing Behavior," Journal of Marketing Research, Vol. 10, (February 1973), 1-9.

- _____, R. W. Chestnut, and W. A. Fisher. "A Behavioral Process Approach To Information Acquisition In Nondurable Purchasing," Journal of Marketing Research, Vol. 15 (November 1978), 532-544.
- _____, J. C. Olson, and R. A. Haddock. "Price, Brand Name, And Product Composition Characteristics As Determinants Of Perceived Quality," Journal of Applied Psychology, Vol. 55, (1971) 570-579.
- _____, J. L. Olson, and L. B. Kaplan. "Operationalizing An Attitude Model Of Multi-Brand Loyalty," unpublished Proprietary Report Prepared For The Pillsbury Company, 1970.
- _____, G. J. Szybillo, and C. K. Berning. "Time And Consumer Behavior: An Interdisciplinary Overview," Journal of Consumer Research, Vol. 2, (March 1976), 320-339.
- _____ and _____, and J. Basato-Schach. "Information Acquisition Behavior In Brand Choice Situations," Journal of Consumer Research, Vol. 3, (March 1977), 209-216.
- _____, D. E. Speller, and C. K. Berning. "Brand Choice Behavior As A Function Of Information Load: Replication And Extension," Journal of Consumer Research, Vol. I, (June 1974), 33-42.
- Janis, I., and R. Mann. Decision Making: A Psychological Analysis of Conflict, Choice and Decision. New York: Free Press, 1977.
- Jenkins, C. D. "Psychologic And Social Precursors Of Coronary Disease," New England Journal of Medicine, Vol. 284, (1971), 244-255, 307-317.
- _____. "Recent Evidence Supporting Psychologic And Social Risk Factors For Coronary Disease," New England Journal of Medicine, Vol. 294, (1976), 987-94, 1033-8.
- _____ and S. J. Zyzanski, and R. H. Rosenman. "Progress Toward Validation Of A Computer-Scored Test For The Type A Coronary-Prone Behavior Pattern," Psychosomatic Medicine, Vol. 33, (1971), 193-201.
- Johnson, D. "Trait Anxiety, State Anxiety, And The Estimation Of Elapsed Time," Journal of Consulting & Clinical Psychology, Vol. 32, (1968), 654-658.

- Jones, M. R. "Time, Our Lost Dimension: Toward A New Theory Of Perception, Attention, And Memory," Psychological Review, Vol. 83, No. 5, (September 1976), 323-355.
- Joreskog, K. G. and D. Sorbom. LISREL IV Analysis Of Linear Structural Relationships By The Method Of Maximum Likelihood. Chicago, IL: International Educational Services, 1978.
- _____ and _____. "Recent Developments In Structural Equation Modeling," Journal of Marketing Research, Vol. 19, (1982), 225-239.
- _____ and _____. LISREL VI: User's Guide. 3rd Edition, January, 1984.
- Joug, S. G., J. W. Gentry, and J. Mohler. "Explaining Differences In Consumption By Working And Non-Working Wives," in Elizabeth Hirschman and Morris Holbrook, eds., Advances in Consumer Research, Vol. 12, (1984), 582-585.
- Juster, F. T. "The Investment Of Time By U.S. Household: An Initial View," paper presented to the American Psychological Association, 1978.
- Kastenbaum, R. J. "The Dimensions Of Future Time Perspective: An Experimental Analysis," Journal of General Psychology, Vol. 65, (1961), 203-208.
- _____. "On The Meaning Of Time In Later Life," Journal of General Psychology, Vol. 109, (1966), 9-25.
- Katona, G. and E. Mueller. "A Study Of Purchase Decisions," in Consumer Behavior: The Dynamics Of Consumer Reaction ed., Lincoln H. Clark. New York: New York University Press, (1955), 30-87.
- Kelley, E. J. "The Importance Of Convenience In Consumer Purchasing," Journal of Marketing, Vol. 23, (1958), 32-38.
- Kelly, J. R. "Work and Leisure: A Simplified Paradigm," Journal of Leisure Research, Vol. 4, (1972), 50-62.
- _____. "Three Measures Of Leisure Activity: A Note On The Continued Incommensurability Of Oranges, Apples And Artichokes," Journal of Leisure Research, Vol. 5, (1973), 56-65.

- _____. "Life Styles And Leisure Choices," Family Coordinator, (April 1975), 185-190.
- _____. "Situational And Social Factors In Leisure Decisions," Pacific Sociological Review, Vol. 21, 1978, 313-3330.
- _____ and J. M. McGrath. "Effects Of Time Limits And Task Type On Task Performance And Interaction Of Four-Person Groups," Journal of Personality and Social Psychology, Vol. 44, No. 2, (1985), 395-407.
- Kiesler, C. A. "Conflict And Number Of Choice Alternatives," Psychological Reports, Vol. 18, (April 1966a), 603-610.
- Kleimenhagen, A. K. "Shopping, Specialty or Convenience Goods?" Journal of Retailing, Vol. 42, (Winter 1966-1967), 32-39.
- Knapp, R. and J. T. Garbutt. "Time Imagery And The Achievement Motive," Journal of Personality, Vol. 26, (1958), 426-30.
- Kotler, P. Marketing Management: Analysis, Planning, And Control. 2nd ed., Englewood Cliffs, N.J.: Prentice-Hall, 1972.
- Krantz, D. S., D. C. Glass, and M. L. Snyder. "Helplessness, Stress Level And Coronary-Prone Behavior Pattern," Journal of Experimental & Social Psychology, Vol. 10, (1974), 284-300.
- Lampert, J. "A Typology of Working Women," Management Review, (October 1982), 19-21.
- Langer, J. and W. Wapner. "The Effect Of Danger Upon The Experience Of Time," American Journal Of Psychology, Vol. 74, (1961), 94-97.
- Lanzetta, J. T. "Information Acquisition In Decision Making," in O. J. Harvey, ed., Motivation And Social Interaction: Cognitive Determinants. New York: Ronald Press, 1963, 239-265.
- _____ and V. T. Kanareff. "Information Cost, Amount Of Payoff And Level Of Aspiration As Determinants Of Information Seeking In Decision Making," Behavioral Science, Vol. 7, (October 1962), 459-473.

- Lee, L. C. and F. Robert. "Use Of Time As A Determinant Of Family Market Behavior," Journal of Business Research, Vol. 5, (1977), 75-91.
- Le Shan, L. H. "Time Orientation And Social Class," Journal of Abnormal & Social Psychology, Vol. 47, (1962), 589-592.
- Lehmann, D. R. and W. L. Moore. "An Investigation Of Self Reported Search Stage Versus Point Of Purchase Information Search," in Advances in Consumer Research, Jerry Olson, ed. (1980a), 733-736.
- _____ and _____. "Validity Of Information Display Boards: An Assessment Using Longitudinal Data," Journal of Marketing Research, Vol. 17, (November 1980), 450-459.
- _____, _____, and T. Elrod. "The Development Of Distinct Choice Process Segments Over Time: A Stochastic Modeling Approach," Journal of Marketing, Vol. 46. (Spring 1982), 48-59.
- Leibowitz, A. S. "Women's Allocation Of Time To Market And Nonmarket Activities: Differences By Education," Dissertation Abstracts, Vol. 33, (1972), 2577-2578.
- Leonard, G. "Keeping Fit: America Tries To Shape Up," Newsweek, (May 23, 1977), 78.
- Linder, S. B. The Harried Leisure Class, New York: Columbia University Press, 1970.
- Luchins, A. S. "Mechanization In Problem Solving," Psychological Monographs, (1942).
- Luscher, K. K. "Time: A Much Neglected Dimension In Social Theory And Research," Sociological Analysis And Theory, Vol. 4, (October 1974), 101-116.
- Lussier, D. A. and R. W. Olshavsky. "An Information Processing Approach To Individual Brand Choice Behavior," paper presented at the ORSA/TIMS Joint National Meeting, San Juan, Puerto Rico, October 1974.
- Lutz, R. J. and P. Kakkar. "The Psychological Situation As A Determinant Of Consumer Behavior," in Advance in Consumer Behavior, Vol. 2, (1974), 439-453.

- _____ and _____. "Task Complexity And Contingent Processing In Brands Choice," Journal of Consumer Research, Vol. 6, (September 1979), 154-165.
- Mabry, B. D. "An Analysis Of Work And Other Choice Constraints On Choices Activities," Western Economic Journal, Vol. 8, (September 1970), 213-225.
- Malhotra, N. K., A. K. Jain, and S. W. Lagakow. "The Information Load Controversy: An Alternative Viewpoint," Journal of Marketing, Vol. 46, (1982) 27-37.
- Marks, R. B. "Operationalizing The Concept Of Store Image," Journal of Retailing, Vol. 4, No. 2, (Fall 1976), 37-46.
- Markson, E. W. "Readjustment To Time In Old Age: A Life Cycle Approach," Psychiatry, Vol. 36, (February 1973), 37-48.
- Martineau, P. "The Personality Of The Retail Store," Harvard Business Review, Vol. 36, (January-February 1958), 47-55.
- Mason, K. "Changes In U.S. Women's Sex-Role Attitudes 1964-1975," American Sociological Review, Vol. 41, (1976), 573-596.
- Massy, W. F., R. Frank, and T. M. Lodahi. Purchasing Behavior And Personal Attributes. Philadelphia: University of Pennsylvania Press, 1968.
- _____, D. B. Motgomery and D. G. Morrison. Stochastic Models Of Buying Behavior. Cambridge, MA: M.I.T. Press, 1970.
- Mattson, B. E. "Situational Influences On Store Choice," Journal of Retailing, Vol. 58, No. 3, (Fall 1982), 46-58.
- Matthews, K. A. "Psychological Perspectives On The Type A Behavior Pattern," Psychological Bulletin, Vol. 91, (1982), 293-323.
- _____, D. C. Glass, R. H. Rosenman, and R. W. Bortner. "Competitive Drive, Pattern A, and Coronary heart Disease: A Further Analysis Of Some Data From The Western Collaborative Group Study," Journal of Chronic Diseases, Vol. 30, (1977), 489-498.

- McCall, S. H. "Meet The 'Workwife'," Journal of Marketing, Vol. 4, No. 3, (1977), 55-65.
- McGrath, J. E. and J. Rotchford. "Time And Behavior In Organizations," in L. Cummings and B. Shaw eds. Research In Organizational Behavior, Vol. 5, (L. 1983), 57-101.
- Melber, S. J. and W. G. Zikmund. "A Mutivariate Analysis Of Prepurchase Deliberation And External Search Behavior," in Advances In Consumer Research, Vol. 2, ed., Mary Jane Schlinger. Chicago: Association for Consumer Research, 1975, 187-196.
- Merton, Robert K. "Patterns Of Influence: Local And Cosmopolitan Influentials," in Social Theory And Social Structure. Glencoe, IL: The Free Press, 1957b, 387-420.
- Mincer, J. "Market Prices, Opportunity Costs, And Income Effects," in Measurements In Economics: Studies In Mathematical Economics And Econometrics In Memory Of Yehuda Grunfield. Stanford: Stanford University, 1963, 67-8-82.
- Minchel, W. "Toward A Cognitive Social Learning Reconceptualization Of Personality," Psychological Review, Vol. 80, (July 1973), 252-285.
- Mitchell, A. A. "An Information Processing View Of Consumer Behavior," in Subhash C. Jain, ed., Research Frontiers In Marketing: Dialogues And Directions. Chicago: American Marketing Association, 1978 Educators' Proceedings, Series No. 43, 1978, 188-197.
- Moore, W. E. Man, Time And Society. New York: John Wiley & Sons, 1963.
- Morgan, J. N. "The Supply Of Effort, The Measurement Of Well-Being, And The Dynamics Of Improvement," American Economic Review, Vol. 58, (May 1968), 31-39.
- Morrison, B. J. and M. J. Dsinoff. "Advertisement Complexity And Looking Time," Journal of Marketing Research, Vol. 9, (November 1972), 396-400.
- Myers, J. G. "Determinants Of Private Brand Attitude," Journal of Marketing Research, Vol. 4, (February 1967), 73-81.

Myrdal, A. and V. Klein. Women's Two Roles: Home And Work. London: Routledge & K. Paul, 2nd Edition Rev., 1968, 10-24.

Nelson, P. "Information And Consumer Behavior," Journal of Political Economy, (March-April 1970), 311-29.

Newman, J. W. "Consumer External Search: Amount And Determinants," in Consumer and Industrial Buying Behavior, Arch G. Woodside, Jagdish N. Sheth, and Peter D. Bennett, eds., New York: Elsevier North-Holland, 1977, 79-94.

_____ and B. Lockeman. "Measuring Prepurchase Information Seeking," Journal of Consumer Research, Vol. 2, (1975), 216-222.

_____ and R. Staelin. "Information Sources Of Durable Goods," Journal of Advertising Research, Vol. 13, (April 1973), 19-29.

_____ and _____. "Multivariate Analysis Of Differences In Buyer Decision Time," Journal of Marketing Research, Vol. 8, (May 1971), 192-198.

_____ and _____. "Prepurchase Information Seeking For New Cars And Major Household Appliances," Journal of Marketing Research, Vol. 9, (August 1972), 249-257.

Nichols, D. E., E. Smolensky, and T. N. Tideman. "Discrimination By Waiting Time In Merit Goods," American Economic Review, Vol. 61, (June 1971), 312-322.

Nickols, S. Y. and E. J. Metzen. "Housework Time Of Husband And Wife," Home Economics Research Journal, Vol. 7, No. 2, (1978), 85-97.

_____ and K. D. Fox. "Buying Time And Saving Time: Strategies For Managing Household Production," Journal of Consumer Research, Vol. 10, (September 1983), 197-208.

Nicosia, F. M. Consumer Decision Processes: Marketing And Advertising Implications. Englewood Cliffs, N.J.: Prentice-Hall, 1966.

Nowotny, H. "Time Structuring And Time Measurement: On The Interaction Between Timekeepers And Social Time," in J. T. Fraser and H. Lawrence, eds., The Study Of Time II. New York: Springer, 1975, 325-342.

- Nunnally, J. C. Psychometric Theory. New York: McGraw-Hill, 1967.
- Olson, J. C. and J. Jacoby. "Cue Utilization In The Quality Perception Process," in M. Venkatesan, ed., Proceedings Of The Third Annual Conference Of The Association For Consumer Research, 1972, 167-179.
- Orme, J. E. "Time Estimation And The Nosology Of Schizophrenia," British Journal of Psychiatry, Vol. 112, (1966), 37-39.
- Park, C. W. "A Seven-Point Scale And A Decision-Maker's Simplifying Choice Strategy: An Operationalized Satisfying-Plus Model," Organizational Behavior And Human Performance, Vol. 21, (April 1978), 252-271.
- _____ and J. Lutz. "Decision Plans And Consumer Choice Dynamics," Journal of Marketing Research, Vol. 19, (February 1982), 108-115.
- _____ and V. P. Lessig. "Familiarity And Its Impact On Consumer Decision Biases And Heuristics," Journal of Consumer Research, Vol. 8, (September 1981), 223-230.
- Payne, J. W. "Task Complexity And Contingent Processing In Decision Making: An Information Search And Protocol Analysis," Organizational Behavior and Human Performance, Vol. 16, (August 1976), 366-387.
- _____. "Contingent Decision Behavior," Psychological Bulletin, Vol. 92, (September 1982), 382-402.
- _____. "Heuristic Search Processes In Decision Making," in Beverlee B. Anderson, ed., Advance In Consumer Research, Vol. 3. Chicago: Association for Consumer Research, 1976a, 321-327.
- _____ and E. K. E. Ragsdale. "Verbal Protocols And Direction Observation Of Supermarketing Shopping Behavior: Some Findings And A Discussion Of Methods," in Advances in Consumer Research, Vol. 5, J. Keith Hunt, ed., (1978), 571-577.
- Platt, J. R. "Strong Inference," Science, Vol. 146, (1964).
- Rapoport, R. and R. Rapoport. "Further Considerations On The Dual Career Family," Human Relations, Vol. 24, (1971), 519-533.

- Reid, M. "Consumer Response To The Relative Price Of Store Versus Delivered Milk," Journal of Political Economy, Vol. 71, (1963), 180-186.
- Reilly, M. D. "Working Wives And Convenience Consumption," Journal of Consumer Research, Vol. 10, (March 1982), 404-418.
- Roberts, M. L. and H. W. Lawrence. "New Life-Style Determinants Of Women's Food Shopping Behavior," Journal of Marketing, (Summer 1979), 28-39.
- Robinson, J. P. How Americans Use Time. New York: Praeger, 1977a.
- _____. "Changes In Americans' Use Of Time: 1965-1975, A Progress Report," Communication Research Center, Cleveland State University, August 1977b.
- _____ and P. Converse. "Social Changes As Reflected In The Use Of Time," in The Human Meaning Of Social Change, eds. A. Campbell and P. Converse. New York: Russell Sage Foundation, 1972.
- Roselius, T. "Consumer Rankings Of Risk Reduction Methods," Journal of Marketing, Vol. 35, (January 1971), 56-61.
- Rosen, D. L. and D. H. Granbois. "Determinants Of Role Structure In Family Financial Management," Journal of Consumer Research, Vol. 10, (September 1983), 253-256.
- Runkel, P. J. and J. E. McGrath. Research On Human Behavior: A Systematic Guide To Method. New York: Holt, Rinehart & Winston, 1972.
- Russ, F. A. "Consumer Evaluation Of Alternative Product Models," unpublished doctoral dissertation, Carnegie-Mellon University, 1971.
- Russo, E. J. "More Information Is Better: A Reevaluation of Jacoby, Speller and Kohn," Journal of Consumer Research, Vol. 1, (1974), 68-72.
- _____. "The Value Of Unit Price Information," Journal of Marketing Research, Vol. 14, (1977), 193-201.
- _____. "Eye Fixations Can Save The World: A Critical Evaluation And A Comparison Between Eye Fixations And Other Information Processing Methodologies," in Advances in Consumer Research, Vol. 5, J. Keith Hunt, ed., (1978), 561-570.

- _____ and L. D. Rosen. "An Eye Fixation Analysis Of Multialternative Choice," Memory And Cognition, Vol. 3, (May 1975), 267-276.
- _____ and B. A. Doshier. "Dimensional Evaluation: A Heuristic For Binary Choice," unpublished working paper, Department of Psychology, University of California, San Diego, 1975.
- _____, G. Krieser, and S. Miyashita. "An Effective Display Of Unit Price Information," Journal of Marketing, Vol. 39, (April 1975), 11-19.
- _____ and L. D. Rosen. "An Eye Fixation Analysis Of Multi-Alternative Choice," Memory And Cognition, Vol. 3, (May 1975), 267-76.
- Sales, S. M. "Some Effects Of Role Overload And Role Underload," Organizational Behavior and Human Performance, Vol. 5, (1970), 542-608.
- Sandell, R. G. "Effects Of Attitudinal And Situational Factors On Reported Choice Behavior," Journal of Marketing Research, Vol. 5 (November 1968), 405-408.
- Scammon, D. L. "'Information Load" and Consumers," Journal of Consumer Research, Vol. 4, (1977), 148-155.
- Schaninger, C. M. and D. Sciglimpaglia. "The Identification Of Specific Information Acquisition Patterns In Information Display Board Tasks, And Their Relation To Demographics," in Advances In Consumer Research, Vol. 7, ed. J. C. Olson. Ann Arbor, MI: Association For Consumer Research, 1980, 513-518.
- Schaninger, C. M. and C. T. Allen. "Wife's Occupational Status As A Consumer Behavior Construct," in Advances In Consumer Behavior, Vol. 8, (September 1981), 189-196.
- Schroder, H. M. and P. Suedfeld. Personality Theory And Information Processing. New York: The Ronald Press, 1971.
- Schary, P. B. "Consumption And The Problem Of Time," Journal of Marketing, Vol. 35, (April 1971), 50-55.
- Schiffman, L. G. and L. L. Kanuk. Consumer Behavior. Third Ed. Englewood Cliffs, NJ: Prentice-Hall, 1987.

- Settle, R. B., P. L. Alreck, and J. W. Glasheen. "Individual Time Orientation And Consumer Life Style," in Advances In Consumer Behavior, Vol. 5, ed. K. H. Hunt. Ann Arbor, MI: Association For Consumer Research, 1978, 315-319.
- _____ and P. L. Alreck. "Time Orientation And Consumer Attitudes," in B. A. Greenberg and Danny N. Bellenger, eds., Contemporary Marketing Thought. 1977 AMA Educators Proceedings, Series No. 41. Chicago: American Marketing Association, 1977, 520.
- Sharir, S. "Brand Loyalty And The Household's Cost Of Time," Journal of Business, Vol. 47, No. 1, (January 1974), 53-55.
- Sheth, J. N. "A Theory of Family Buying Decisions," in Jagdish N. Sheth, ed., Models Of Buyer Behavior: Conceptual, Quantitative, and Empirical. New York: Harper and Row, 1974, 17-33.
- _____ and S. P.. "A Theory Of Cross-Cultural Buyer Behavior," in Arch G. Wodside, Jagdish N. Sheth, and Peter D. Bennett, eds., Consumer And Industrial Buying Behavior. New York: Elsevier North-Holland, 1977, 369-380.
- Siebert, J. B. and J. T. Lanzetta. "Conflict And Conceptual Structure As Determinants Of Decision-Making Behavior," Journal of Personality, Vol. 32, (December 1964), 622-641.
- Siebert, S. D. "Towards A Theory Of Role Accumulation," American Sociological Review, Vol. 39, (1974), 567-578.
- Smart, R. G. "Future Time Perspective In Alcoholics And Social Drinkers", Journal of Abnormal Psychology, Vol. 73, (1968), 81-83.
- Spreitzer, E., E. Elden, and D. Larson. "Age, Education, And Occupation As Correlates Of The Meaning Of Leisure," Psychological Reports, Vol. 35, (1974), 1105-1106.
- Staelin, R. and J. W. Payne. "Studies Of The Information Seeking Behavior Of Consumers," in Cognition And Social Behavior, eds. J. Carroll and J. W. Payne. New York: Lawrence Erlbaum, 1976, 185-202.

- Stafford, F. and G. Duncan. "The Use Of Time And Technology by Households In The United States," Working Paper, Department of Economics, University of Michigan, 1977.
- Stephan, G. E. and L. M. Tedrow. "A Theory Of Time-Minimization: The Relationship Between Urban Area And Population," Pacific Sociological Review, Vol. 20, (January 1977), 105-112.
- Sproles, G. B., L. V. Geistfeld, and Z. Badenhop. "Informational Inputs As Influences On Efficient Consumer Decision Making," Journal of Consumer Affairs, Vol. 12, No. 1 (Summer 1978), 88-103.
- _____, _____, and _____. "Types And Amounts Of Information Used By Efficient Consumers," Journal of Consumer Affairs, Vol. 14, (Summer 1980), 37-48.
- Stigler, G. J. "The Economics Of Information," Journal of Political Economy, Vol. 59, (June 1961), 213-225.
- Strober, M. H. and C. B. Weinberg. "Strategies Used By Working And Nonworking Wives To Reduce Time Pressures," Journal of Consumer Research, Vol. 6, (1980), 338-348.
- Stroud, J. M. "The Fine Structure Of Psychological Time," in Henry Quastler, ed., Information Theory In Psychology: Problems And Methods. Glencoe, IL: The Free Press, 1955, 174-207.
- Summers, J. O. "Less Information Is Better?," Journal of Marketing Research, Vol. 11, (1974), 467-468.
- Swan, J. E. "Experimental Analysis Of Prediction Information Seeking," Journal of Marketing Research, Vol. 6, (May 1969), 192-197.
- Thayer, S. and W. Schiff. "Eye-Contact, Facial Expression And The Experience Of Time," Journal of Social Psychology, Vol. 92, (1975), 117-124.
- Thompson, J. R. "Characteristics And Behavior Of Out-Shopping Consumers," Journal of Retailing, Vol. 47, (Spring 1972), 70-80.
- Trommsdorf, G. and H. Lamm. "An Analysis Of Future Orientation And Some Of Its Social Determinants," in J. T. Fraser and N. Lawrence, eds., The Study Of Time II. New York: Springer-Verlag, 1975, 343-361.

- Thorelli, H. B., H. Becker, and J. Engeldow. The Information Seekers. Cambridge, MA: Ballinger, 1975.
- Tversky, A. "Intransitivity Of Preferences," Psychological Review, Vol. 79, No. 4, 1969, 281-299.
- Wallace, M. "Future Time Perspective In Schizophrenia," Journal of Abnormal & Social Psychology, Vol. 52, (1956), 240-45.
- _____ and Rubin. "Temporal Experience," Psychological Bulletin, Vol. 57, No. 3, (1960), 214-236.
- Walters, C. G. Consumer Behavior and Practice. Homewood, IL: Richard D. Irwin, 1974, 526.
- Wells, W. D. and L. Lo Sciuto. "Direct Observation Of Purchasing Behavior," Journal of Marketing Research, Vol. 3, (August 1966), 227-233.
- Wessman, A. E. and B. S. Gorman. "The Emergence Of Human Awareness And Concepts Of Time," in B. S. Gorman and A. E. Wessman eds., The Personal Experience Of Time. New York: Plenum Press, 1977.
- _____. "Personality And The Subjective Experience Of Time," Journal of Personality Assessment, Vol. 37, (1973), 103-114.
- Westbrook, R. A. "A Rating Scale For Measuring Satisfaction," Journal of Marketing, Vol. 43, (1980), 69-71.
- _____ and C. Fornell. "Patterns Of Information Source Usage Among Durable Goods Buyers," Journal of Marketing Research, Vol. 16 (August 1979), 303-312.
- Whippler, R. "Leisure Behavior: A Multivariate Approach," Sociologia Neer Landica, Vol. 6, (1970), 51-65.
- Wilkie, W. L. and E. A. Pessemier. "Issues In Marketing's Use Of Multiattribute Attitude Models," Journal of Marketing Research, Vol. 10, (November 1973), 428-41.
- _____. "Analysis Of Effects Of Information Load," Journal of Marketing Research, Vol. 11, (1974), 462-466.

- Wilson, R. D. and R. H. Holman. "Economic Theories Of Time In Consumer Behavior: A Philosophy Of Science Perspective On Their Evolution," in Theoretical Developments in Marketing, Charles W. Lamb and Patrick M. Dunne, eds. Chicago: American Marketing Association, 1980, 265-268.
- Woodruff, R. B. "Measurement Of Consumer's Prior Brand Information," Journal of Marketing Research, Vol. 9, (August 1972), 258-63.
- Woodrow, H. "Time Perception," in S. S. Stevens ed., Handbook Of Experimental Psychology. New York: John Wiley, 1951, 1224-1235.
- Wright, P. L. "The Harassed Decision Maker: Time Pressures, Distractions, And The Use Of Evidence," Journal of Applied Psychology, Vol. 59, (October 1974c), 555-561.
- _____. "Decision Process: Theory And Research," Advances in Consumer Research, Vol. 6, (1978), 218-221.
- _____. "Consumer Choice Strategies: Simplyfying vs. Optimizing," Journal of Marketing Research, Vol. II, (February 1975), 60-67.
- _____ and B. Weitz. "Time Horizon Effects On Product Evaluation Strategies," Journal of Marketing Research, Vol. 14, (November 1977), 429-443.
- Zaltman, Z. and M. Wellendorf. Consumer Behavior: Basic Findings And Management Implications. New York: John Wiley, 1973, 416-468.
- Yuki, G. A., M. P. Malone, B. Hayslip, and T. A. Pamin. "The Effects Of Time Pressure And Issue Settlement Order On Integrative Bargaining," Sociometry, Vol. 39, (1976), 279-281.