CONSUMER INVOLVEMENT IN ETHNIC RESTAURANTS:
A MEASURE OF SATISFACTION/DISSATISFACTION

BY

SAID M. LADKI

Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
In partial fulfillment of the requirements for the degree of
Doctor of Philosophy

in

Hotel, Restaurant and Institutional Management

APPROVED:

Mahmood A. Khan
Dr. Mahmoud A. Khan, Chair

Muzaffer Uysal
Dr. Muzaffer Uysal

Beverly Hummel-Azzaro
Dr. Beverly Hummel-Azzaro

Suzanne K. Murrmann
Dr. Suzanne K. Murrmann

M. Zafar A. Nomani
Dr. M. Zafar A. Nomani

John J. Paterson
Dr. John J. Paterson

December, 1993
Blacksburg, Virginia
CONSUMER INVOLVEMENT IN ETHNIC RESTAURANTS: 
A MEASURE OF SATISFACTION/DISSATISFACTION

BY

SAID M. LADKI

Dr. Mahmood A. Khan, Chair

Hotel, Restaurant and Institutional Management

(ABSTRACT)

The purpose of this study was to evaluate whether
consumer orientation (active/passive) and psychological
involvement (attitude, opinion, belief, and behavioral
intention) affect satisfaction when dining in an ethnic
restaurant. The sample represented 232 consumers who dined
in participating Washington D.C. metropolitan area ethnic
restaurants. Information was obtained by asking consumers
to answer a four part, 86 item questionnaire. Correlation
analysis revealed that opinion ($r = 0.17, p < 0.04$), belief
($r = 0.28, p < 0.01$), and behavioral intentions ($r = 0.19,$
$p < 0.02$) of the active consumer significantly affect
satisfaction. Whereas, for the passive consumer no
significant effect was found. Results of the stepwise
regression analysis revealed that consumer psychological
involvement and restaurant attributes affect satisfaction
with service ($R^2 = 0.57, p<0.05$), satisfaction with lunch
($R^2 = 0.8, p<0.05$), satisfaction with dinner ($R^2 = 0.33,$
p<0.05), and satisfaction with the overall dining experience 
\(R^2 = 0.39, \ p<0.01\). Further, it was found that consumers' 
future visitations, within the next few weeks, were affected 
by consumer's psychological involvement \(R^2 = 0.53, \ p<0.01\). 
Restaurant attributes (speed of service; employee courtesy; 
and food quality and prices) affected overall satisfaction 
in dining \(R^2 = 0.4, \ p<0.01\), but it weakly affected future 
visitations \(R^2 = 0.04, \ p<0.04\, \text{negative Mallows'}
Coefficient). The findings of this study contribute not 
only to consumer self-concept theory and satisfaction theory 
but also have practical implications to the ethnic 
restaurant industry.
ACKNOWLEDGMENTS

This doctoral dissertation is the culmination of almost four years of coursework and research. Numerous people helped, encouraged, and guided me along the way. It would be impossible to list their names here, but rest assured I will not forget them. My sincere thanks to all of them.

The advisor of this project was Dr. Mahmood A. Khan who gave of his time and experiences throughout the project. Dr. Khan stimulated my interest in a number of research areas and has been a role model for my professional development. I would like to express my gratitude and appreciation to him and also add, that if I had to do this all over again I would most willingly want him as my advisor.

My expression of gratitude is also extended to Dr. Suzanne K. Murramann and Dr. Muzaffer Uysal for their encouragement, advise and contributions while serving on my advisory committee.

A special word of appreciation is extended to West Virginia University faculty, Dr. Beverly Hummel-Azzaro, Dr. M. Zafar A. Nomani and Dr. John Paterson for their guidance, support and constructive criticism in designing and conducting this study. To them, and all the others in these two institutions who contributed to this project I express my thanks and gratitude.

IV
Completion of this project would not have been possible without the love and encouragement of my wife Cecelia Townsend-Ladki who always supported me by saying "You can do it, after all there will be a light at the end of the tunnel."

A very special note of appreciation goes to my mother Dalal Hasbini-Ladki, my sister Nada Ladki, and my brother Mohamad Ladki for providing affection and moral support throughout my academic endeavor.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>INTRODUCTION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statement of the problem</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Objectives of the study</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Research procedures</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Organization of the study</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Contributions of the study</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Definition of terms</td>
<td>12</td>
</tr>
<tr>
<td>Chapter II</td>
<td>REVIEW OF LITERATURE</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>SECTION I.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Historical overview of ethnic minorities in the United States</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Entry into ethnic restaurant entrepreneurship</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>SECTION II.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumer orientation</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Consumer psychological involvement in ethnic restaurants</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Definition of involvement</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>A review of hospitality and foodservice literature to determine consumer involvement in ethnic restaurants</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Levels of consumer involvement</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Restaurant attributes</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>SECTION III.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>An overview of previous research on consumer satisfaction</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Satisfaction as confirmation of expectations</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Concepts and measurement methods of consumer satisfaction</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>41</td>
</tr>
<tr>
<td>Chapter III</td>
<td>METHODOLOGY</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Research Framework</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Framework Operationalization</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Null Hypotheses</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Research Design</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Sample Design</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Procedures</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Instrument</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Instrument Validity/Reliability</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Data Analysis</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>65</td>
</tr>
</tbody>
</table>
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1.</td>
<td>Reliability Coefficient of the Measure of Consumer Orientation</td>
<td>60</td>
</tr>
<tr>
<td>Table 2.</td>
<td>Reliability Coefficient of the Measure of Consumer Attitude, Opinion, Belief, and Behavioral Intention</td>
<td>61</td>
</tr>
<tr>
<td>Table 3.</td>
<td>Reliability Coefficient of the Measure of Restaurants’ Attributes Toward Satisfaction and Satisfaction with Dining</td>
<td>62</td>
</tr>
<tr>
<td>Table 4.</td>
<td>Overall Response Rate</td>
<td>67</td>
</tr>
<tr>
<td>Table 5.</td>
<td>Respondent Profile</td>
<td>69</td>
</tr>
<tr>
<td>Table 6.</td>
<td>Instrument Reliability Coefficient</td>
<td>72</td>
</tr>
<tr>
<td>Table 7.</td>
<td>Stepwise Regression Analysis Between Satisfaction and Consumer Psychological Involvement</td>
<td>77</td>
</tr>
<tr>
<td>Table 8.</td>
<td>Satisfaction with Restaurant Decor/Appearance and Consumer Psychological Involvement Items for the Active Group</td>
<td>79</td>
</tr>
<tr>
<td>Table 9.</td>
<td>Satisfaction with Food Taste and Consumer Psychological Involvement Items for the Active Group</td>
<td>80</td>
</tr>
<tr>
<td>Table 10.</td>
<td>Satisfaction with the Availability of Nutritional Information and Consumer Psychological Involvement Items for the Active Group</td>
<td>81</td>
</tr>
<tr>
<td>Table 11.</td>
<td>Satisfaction with Portion Size and Consumer Psychological Involvement Items for the Active Group</td>
<td>82</td>
</tr>
<tr>
<td>Table 12.</td>
<td>Satisfaction with Speed of Service and Consumer Psychological Involvement Items for the Active Group</td>
<td>83</td>
</tr>
<tr>
<td>Table 13.</td>
<td>Satisfaction with Employee Appearance and Consumer Psychological Involvement Items for the Active Group</td>
<td>84</td>
</tr>
</tbody>
</table>
Table 14. Satisfaction with Overall Dining Experience and Consumer Psychological Involvement Items for the Active Group..................85

Table 15. Satisfaction with Restaurant Decor/Appearance and Consumer Psychological Involvement Items for the Passive Group.................................86

Table 16. Satisfaction with Serving Food At Proper Temperature and Consumer Psychological Involvement Items for the Passive Group...........87

Table 17. Satisfaction with Availability of Nutritional Information and Consumer Psychological Involvement Items for the Passive Group.........88

Table 18. Satisfaction with Restaurant Cleanliness and Consumer Psychological Involvement Items for the Passive Group.........................89

Table 19. Satisfaction with Management Responsiveness and Consumer Psychological Involvement Items for the Passive Group..................90

Table 20. Satisfaction with Restaurant Hours of Operation and Consumer Psychological Involvement Items for the Passive Group.............................91

Table 21. Satisfaction with Availability of Popular Foods and Consumer Psychological Involvement Items for all Subjects...............92

Table 22. Satisfaction with Decor and Facility Appearance Impact on Consumer Psychological Involvement Items for all Subjects...........93

Table 23. Satisfaction with Food Taste and Consumer Psychological Involvement Items for all Subjects......................................................95

Table 24. Satisfaction with Food Eye Appeal and Consumer Psychological Involvement Items for all Subjects...............................96

Table 25. Satisfaction with Serving of Cold Menu Items Cold and Consumer Psychological Involvement Items for all Subjects.................97
Table 26. Satisfaction with Serving of Hot Menu Items
Hot and Consumer Psychological Involvement
Items for all Subjects............................98

Table 27. Satisfaction with Availability of Nutritional
Information and Consumer Psychological
Involvement Items for all Subjects.............99

Table 28. Satisfaction with Portion Size and the
Psychological Involvement Items for all
Subjects..............................................100

Table 29. Satisfaction with Restaurant Cleanliness
and Consumer Psychological Involvement Items
for all Subjects.................................101

Table 30. Satisfaction with Employee Courtesy and
Consumer Psychological Involvement Items
for all Subjects.................................102

Table 31. Satisfaction with Hours of Operation of an
Ethnic Restaurant and Consumer Psychological
Involvement Items for all Subjects............103

Table 32. Satisfaction with Overall Service and
Consumer Psychological Involvement Items
for all Subjects.................................104

Table 33. Satisfaction with Overall Dinner and
Consumer Psychological Involvement Items
for all Subjects.................................105

Table 34. Satisfaction with Overall Dining
Experience and Consumer Psychological
Involvement Items for all Subjects............106

Table 35. Satisfaction with Overall Rating of Service
Affected by Restaurant Attribute and
Satisfaction with Dining Items...............108

Table 36. Satisfaction with Overall Rating of Lunch
and Consumer Psychological Involvement
and Restaurant Attribute Items..............112

Table 37. Satisfaction with Overall Rating of Dinner
and Consumer Psychological Involvement and
Restaurant Attribute Items....................116
Table 38. Satisfaction with Overall Rating of Dining Experience and Restaurant Attribute and Satisfaction with Dining Items.............120

Table 39. Behavioral Intention of Dining in an Ethnic Restaurant Within the Next Few Weeks Related to Consumer Psychological Involvement Items..124

Table 40. Behavioral Intention Dining in an Ethnic Restaurant Within the Next Few Months Related to Consumer Psychological Involvement and Restaurant Attribute Items...................127
LIST OF FIGURES

Figure 1  Consumer Involvement Satisfaction Framework..........................45

Figure 2  Correlation Analysis Between Satisfaction....75 and Consumer Psychological Involvement......

Figure 3  Effect of Psychological Involvement, Restaurant Attributes, and Satisfaction Item 11-24 on Overall Satisfaction with Service.......................................110

Figure 3.1 Combined Effect of Psychological Involvement, Restaurant Attributes, and Satisfaction Item 11-24 on Overall Satisfaction with Service......................111

Figure 4  Effect of Psychological Involvement, Restaurant Attributes, and Satisfaction Item 11-24 on Overall Satisfaction with Overall Satisfaction with Lunch.................114

Figure 4.1 Combined Effect of Psychological Involvement, Restaurant Attributes, and Satisfaction Item 11-24 on Overall Satisfaction with Lunch......................115

Figure 5  Effect of Psychological Involvement, Restaurant Attributes, and Satisfaction Item 11-24 on Overall Satisfaction with Dinner........................................118

Figure 5.1 Combined Effect of Psychological Involvement, Restaurant Attributes, and Satisfaction Item 11-24 on Overall Satisfaction with Dinner...............119

Figure 6  Effect of Psychological Involvement, Restaurant Attributes, and Satisfaction Item 11-24 on Overall Satisfaction with Dining Experience..................................121

Figure 6.1 Combined Effect of Psychological Involvement, Restaurant Attributes, and Satisfaction Item 11-24 on Overall Satisfaction with Dining Experience........122
Figure 7  Effect of Consumer Psychological Involvement, Overall Dining Experience, and Restaurant Attributes on Consumer Future Visitation (Few Weeks) ...............125

Figure 8  Effect of Consumer Psychological Involvement, Overall Dining Experience, and Restaurant Attributes on Consumer Future Visitation (Few Months) ...............129
<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td>Instrument</td>
<td>167</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>INSTRUMENT CODING</td>
<td>177</td>
</tr>
<tr>
<td>Appendix 3</td>
<td>Correlation Analysis Between Satisfaction and Consumer Psychological Involvement</td>
<td>178</td>
</tr>
<tr>
<td>Appendix 3.1</td>
<td>Pearson Correlations Between Satisfaction and Consumer Psychological Involvement for the Active Group</td>
<td>179</td>
</tr>
<tr>
<td>Appendix 3.2</td>
<td>Pearson Correlations Between Satisfaction and Consumer Psychological Involvement for the Passive Group</td>
<td>180</td>
</tr>
<tr>
<td>Appendix 4</td>
<td>Statistical Model: Stepwise Regression Analysis Between Satisfaction and Consumer Psychological Involvement For the Active/Passive Consumer</td>
<td>181</td>
</tr>
<tr>
<td>Appendix 5</td>
<td>Statistical Model: Stepwise Regression Analysis of Service Rating as Affected by Consumer Psychological Involvement and Restaurant Attributes</td>
<td>182</td>
</tr>
<tr>
<td>Appendix 6</td>
<td>Statistical Model: Stepwise Regression Analysis of Lunch Rating as Affected by Consumer Psychological Involvement and Restaurant Attributes</td>
<td>183</td>
</tr>
<tr>
<td>Appendix 7</td>
<td>Statistical Model: Stepwise Regression Analysis of Dinner Rating as Affected by Consumer Psychological Involvement and Restaurant Attributes</td>
<td>184</td>
</tr>
<tr>
<td>Appendix 8</td>
<td>Statistical Model: Stepwise Regression Analysis of Overall Dining Experience Ratings Affected by Consumer Psychological Involvement and Restaurant Attributes</td>
<td>185</td>
</tr>
</tbody>
</table>
Appendix 9  Statistical Model: Effect of Consumer Psychological Involvement, Overall Dining Experience, and Restaurant Attributes on Consumer Future Visitations (Few Weeks/Few Months)....................186
CHAPTER I
INTRODUCTION

STATEMENT OF THE PROBLEM

In the United States (U.S.), ethnic restaurants appear to have existed since the arrival of early European settlers. Specifically, European ethnic restaurants had an earlier start and a greater impact on the American society at large, and on the restaurant industry and consumer food buying behavior in particular. European ethnic restaurants include ethnic cuisine from diverse countries such as Italy, France, Spain, Germany, Switzerland, England, and Greece. As the popularity of ethnic foods along with migration of population to the U.S. continues, new ethnic cuisines have been introduced to serve the diverse U.S. population. In the period between the 1950s and 1970s, Mexican, Cuban, Jamaican, and Polynesian ethnic restaurants gained popularity. As the turn of the century approaches, contemporary ethnic restaurants that include cuisines from countries such as China, Japan, Korea, Thailand, India, and the Middle-East appear to have gained immense recognition, consumers acceptance, and growth.

The hastened acceptance of ethnic foods, and the growth of such concepts have been noted in popular/trade literature, as indicated by the following quotations: "U.S. appetite for Mexican foods grows, cooking up hotter sales"
(Moffett, 1992): "Jamaican 'jerk' cooking turns up the heat; the spicy Caribbean cuisine, which gives new meaning to the word 'marinade', is catching on as the next ethnic food trend" (Scherer 1993); "Shoppers in middle America are trying 'exotic' Italian foods, and that's amore" (Deveny, 1992). "Ethnic foods offer many advantages for a delicatessen" (Anonymous, 1992). "New Italian restaurants are opening every week in Chicago" (Cheney, 1992).

Consumer involvement in product selection is the foundation of a marketing concept, which is presented as the pursuit of organizational goals through the satisfaction of consumer needs and wants. That is, to make effective strategic decisions in the area of restaurant and foodservice marketing, one must understand consumer involvement in the product (restaurant or food), and consumer satisfaction or dissatisfaction with the product. Bloch (1981) defined involvement as a state reflecting the amount of interest, arousal or emotional attachment to the product in a particular individual. This type of involvement represents a constant interest in, and attachment to a product class which is independent of purchase or other situational factors.

Consumer involvement in the product has been extensively researched and shown to influence behavior (Houston & Rothschild, 1977). Empirical findings that test
the relationship between levels of involvement and consumer response include findings concerning 1) involvement and recall, 2) involvement and attitude changes, and 3) involvement and behavior (Houston & Rothschild, 1977). Studies that examined the relationship between involvement and recall found a positive relationship between involvement and recall. More specifically, these studies suggested that as the level of involvement increases so does recall (Gardner, Mitchell & Russo, 1978). Involvement and attitude change also appear to be positively correlated. Sehri, Kelly, Rodgers, Sarup, and Tittler (1973) reported that consumers who have high individual involvement are less likely to be persuaded to change their attitudes than consumers who have low involvement. Findings of the studies that investigated the relationship between involvement and behavior suggested that consumers with high psychological involvement utilize more extensive purchase evaluation than consumers with low involvement (Iastovicka, 1978).

In selecting a restaurant, consumers invest time and economic resources on the acquisition of an intangible experience. As a consequence, consumers may have stronger feelings associated with the product character (image of a restaurant). Further, Engel and Blackwell (1982) stated that the higher the cost of the product, the more consumers would be involved in the selection of the product. Hence,
when choosing a restaurant, consumers are likely to be more
involved in the selection process.

Existing inquiries into consumer satisfaction/dissatisfaction (CS/D) in foodservice were designed to
explain the relationships between marketing activities
(marketing mix - product mix) and consumer evaluation of an
experience (dining out, food product, or service).
Researchers have embarked on these investigations in an
attempt to unify a number of behavioral observations in a
systematic framework with a strong theoretical base.
The CS/D literature as related to foodservice includes the
following topics:

1) is there a relationship between consumers expectations
   and desired performance (Swan, Trawick, & Carroll,
   1980)?,

2) is there a relationship between perceived
disconfirmation and inferred disconfirmation and its
   applicability on CS/D (Swan & Trawick, 1981)?,

3) is there a reliability problem in the measurement of
disconfirmation of expectations (Parkash & Lounsbury,
   1983),

4) is there a correlation between consumer expectations
   and the frequency of visiting a restaurant? (Nolan &
   Swan, 1985),
5) Is there a comparison between the disconfirmation model and the experience based norms model (Miller, 1987). The National Restaurant Association (NRA) (1983), has also conducted its own studies into CS/D in relation to attitudes and behaviors in foodservice settings. Results from the NRA survey were presented in three reports:

1) Consumer Expectations with Regard To Dining At Family Restaurants.

2) Consumer Expectations With Regard To Dining At Atmosphere Restaurants.

3) Consumer Expectations With Regard To Dining At Fast Food Restaurants.

These studies have produced the following findings.

1) Overall, restaurant guests have the highest expectations regarding the cleanliness of a dining facility (NRA, 1983).

2) Family restaurant patrons displayed high expectations regarding restaurant cleanliness. Such patrons expressed greater concern toward food taste, temperature, and plate presentation. Also, such patrons were less concerned about the facility's interior design or noise level (NRA, 1983).

3) Atmosphere restaurant patrons have the highest expectations concerning the overall cleanliness of the restaurant and the taste of the food. Patrons of such institutions expressed their concerns about seating comfort and interior design (NRA, 1983).
4) Fast food restaurants patrons were most concerned with cleanliness, and service delivery. Such patrons had low expectations regarding the interior design of a facility or surrounding atmosphere (NRA, 1983).

A review of the foodservice related literature suggests that no involvement study has been published for the foodservice industry. Similarly, no study has been reported to determine the relationship between consumers' involvement and satisfaction/dissatisfaction in ethnic restaurants. The involvement literature reported in this study was adopted from the fields of psychology, and marketing (consumer behavior) literature.

According to the Bureau of Labor Statistics (1990) surveys, American consumers are spending 42% of their food expenditures away from home. Dining out is no longer a novelty. On a weekly average, an American consumer eats five to seven times away from home. Such consumer spending behavior has created an intense competition for consumer dollars among restaurant operators. To gain consumers’ loyalty and increase the frequency of consumers’ visitations, restaurant operators have adopted promotional and marketing strategies that offer daily specials, happy hours, buy one entree get the second free, and children under certain age eat for free.
Yet, the underlying concept of consumers' involvement and satisfaction/dissatisfaction with a food product or a restaurant facility have not been fully understood or researched. Berkman and Gilson (1986) stated that in many consumer purchase decision models, a consumer's repeat purchase and brand loyalty are closely associated with his/her satisfaction or dissatisfaction with the initial purchase. In this regard, it is extremely critical for a restaurant operator to identify the factors that influence consumers involvement in a restaurant selection: thus, increasing satisfaction/dissatisfaction. Oliver (1981) stated that consumer satisfaction is generally conceptualized as the outcome of a consumer's subjective comparison of expected and perceived product attribute levels. Hence, if a foodservice facility (restaurant) owner/operator wants to ensure its customers' loyalty, it is important for that owner/operator to recognize whether or not its customers were satisfied with their dining experience. Therefore, the purpose of this study is to determine if consumer orientation (active, passive) psychological involvement (attitude, opinion, belief, and behavioral intention) and restaurant attributes affect satisfaction when dining in an ethnic restaurant.
OBJECTIVES OF THE STUDY

In this study, involvement has been operationalized as consumer orientation, attitude, opinion, belief, and behavioral intention. The objective of this study is to determine if:

1) There is a relationship between consumer orientation and satisfaction with a dining experience.
2) There is a relationship between attitude and satisfaction with a dining experience.
3) There is a relationship between consumer opinion and satisfaction with a dining experience.
4) There is a relationship between consumer beliefs and satisfaction with a dining experience.
5) There is a relationship between consumer behavioral intention and satisfaction with a dining experience.
6) There is a relationship between restaurant attributes and consumer satisfaction with a dining experience.
7) There is a relationship between consumer demographics and consumer satisfaction with a dining experience.
RESEARCH PROCEDURES

The data for this study were collected in Washington, DC. metropolitan area. The sample represented 232 ethnic restaurant consumers' who agreed to participate in the study. Data were collected by responses to a questionnaire designed to measure consumer involvement as a determinant of satisfaction/dissatisfaction in the selection of ethnic restaurant. Only privately owned ethnic restaurants in the Washington D.C. area participated in the study. The study was conducted during summer of 1993.

The research design employs one dependent variable and seven independent variables. The dependent variable in this study is consumer satisfaction/dissatisfaction with ethnic restaurants/food. The independent variables are:

1) consumer orientation (active, passive)
2) consumer psychological involvement (attitude) toward ethnic restaurants,
3) consumer psychological involvement (opinion) about ethnic restaurants,
4) consumer psychological involvement (belief) about ethnic restaurants,
5) consumer psychological involvement (behavioral intention) toward patronizing ethnic restaurants,
6) the attributes of ethnic restaurants, and,
7) consumer demographics.
ORGANIZATION OF THE STUDY

This dissertation is organized into five chapters. The first chapter contains the study's problem statement; objectives; hypotheses, procedures; organization and contributions of the study. The second chapter is composed of three sections which provide (a) an overview of the role of ethnic minorities and ethnic entrepreneurship in the United States; (b) an examination of the construct of involvement, and a discussion of consumer involvement in the selection of ethnic restaurant, and (c) a review of the consumer satisfaction/dissatisfaction literature. The third chapter addresses the research framework; hypotheses; design; sample selection; procedures; instrumentation; data collection and analyses. The fourth chapter reports the study's findings, and results of hypothesis testing. The fifth chapter discusses the analyzed data, and inform how objectives have been achieved. The sixth chapter contains conclusion and a recommendation for future research.
CONTRIBUTIONS OF THE STUDY

This dissertation offers practical and theoretical contributions to the foodservice industry. This investigation of consumer involvement/satisfaction processes proposed a framework that integrated a number of consumer behavior concepts into a predictive paradigm. The identification of consumers' orientation (active-passive) along with his/her psychological involvement (attitude, opinion, belief, and behavioral intention) and restaurant attributes served as a way for predicting consumers' satisfaction. The effect of consumer psychological involvement and restaurant attribute on consumer satisfaction with service, lunch, dinner, and overall dining experience was presented. Similarly, factors that affected consumers' future visitations and satisfaction with overall dining experience were presented as well.
DEFINITION OF TERMS

Consumer Orientation:
The behavior of an individual while purchasing, using, or evaluating product and services (Schiffman & Kanuck, 1978). This study operationalized consumer orientation as active and passive.

Ethnic:
Of or pertaining to a social group within a cultural and social system that claims or is accorded special status on the basis of complex, often variable traits including religious, linguistics, or physical characteristics (The American Heritage Dictionary, 1979).

Ethnic Restaurants:
For the purpose of this study, ethnic restaurants are privately owned ethnic operations that are not part of national chains.

Involvement:
A state reflecting the amount of interest, arousal, or emotional attachment evoked by the product in a particular individual (Bloch, 1981). This study operationalized involvement as attitude, opinion, belief, and behavioral intention.
Satisfaction (Satisfaction/Dissatisfaction):

The degree to which consumers either confirm/disconfirm their purchase expectations for purchased reaction. A negatively disconfirmed expectation (falls short of what is expected), a positively confirmed expectation (exceed) expectations regarding a purchase reaction and resulting in some level of post purchase affect (Cardozo, 1965).

Attributes:

Attributes are the perceived features of a restaurant. These features are the aspects of a restaurant which a consumer can easily assess.
CHAPTER II

REVIEW OF LITERATURE

INTRODUCTION

This chapter consists of three sections. The first section discusses the roles of ethnic entrepreneurs in the restaurant industry; and (1) provides a historical overview of ethnic minorities in the United States; and (2) discusses ethnic entrepreneurs' entry into the foodservice industry (ethnic restaurants).

The second section discusses the independent variables consumer orientation, consumer psychological involvement, and restaurant attributes. The consumer psychological involvement section (1) provides a definition for involvement; (2) discusses consumer involvement in ethnic restaurants; and (3) reports the levels of consumer involvement.

The third section furnishes a review of consumer satisfaction/dissatisfaction literature; and (1) provides a summary of major research related to consumer expectations and satisfaction; and, (2) introduces concepts and measurement methods of consumers satisfaction/dissatisfaction (CS/D) in the broad context of customers purchasing behavior.
SECTION I.

Historical Overview of Ethnic Minorities in the United States

In the late nineteenth and early twentieth century ethnic minorities (Eastern European, Italian, Asian, Africans, and Mexican) in the United States suffered discrimination and social injustice. Because most of early ethnic immigrants were contract laborers, the negative attitudes toward such individuals were patterned after the treatment received by the European laborers under indentured servitude in the eighteenth century (Archdeacon, 1983). The lingering effects brought about the semi-slavery experience and subjected those immigrants to the most undesirable treatment (Mears, 1978; Cheng & Bonacich, 1984).

Throughout American history, fear of foreigners (Xenophobia) was unprecedented. Blacks were enslaved in the southern plantations, Hispanics were militarily conquered and economically dispossessed, and immigrants from southern and eastern Europe were considered inferior (Fairchild, 1925; Solomon, 1956; Divine, 1972; and Hutchinson, 1981).

Since ethnic immigrants were minorities of color, and were among the latest groups to come to this continent, they met a series of legal barriers that relegated them to the bottom of the status system in the host society (Hundley, 1976; Mears, 1978; Knoll, 1982). The immigrants' depressed
social status was reflected in the Naturalization Act of 1790, which stated that only free whites could be naturalized (Cheng & Bonacich, 1984). As a result, ethnic immigrants were categorized as aliens ineligible for citizenship. Although the 1866 Civil Rights Act established the principle of citizenship by birth and conferred citizenship to those who were born in America, the Naturalization Act of 1870 extended naturalization rights only to alien whites and to aliens "of African nationality and persons of African descent" (Wong, 1977). Asian immigrants were excluded because they were not either black or white and the act did not include them.

To tighten control of Asian and other ethnic immigrants, a 1917 act was instituted to restrict immigration from Arabia, India, Siam, Indo-China, Afghanistan, Russian Turkestan, and New Guinea. In order to implement a more stringent ethnic exclusion, people from this barred zone were to be excluded, except "government officials, preachers, missionaries, attorneys, doctors, teachers, merchants and tourists as well as their legal wives and children under age sixteen" (Divine, 1972).
At the end of the second World War, entry barriers against all Asian immigrants were revised to reflect the fact that most Asian countries had been U.S. allies during the war. In 1952, the Walter-McCarran Act removed the racial barrier to naturalization which had been applied for almost two centuries. However, the new law established another Asia Pacific triangle. Quotas for applicants from this triangle area were to be allocated on the basis of a person's race or ancestry instead of birthplace. It was not until 1965, when president Lyndon Johnson signed the Immigration Reform Act, that the most dramatic change in American immigration policy since the enactment of the 1882 Chinese Exclusion Act occurred (Hutchinson, 1981). The 1965 Immigration Act eliminated the quota system established in the 1920s and provided for the annual admission of 170,000 immigrants from the Eastern Hemisphere and 120,000 immigrants from the Western Hemisphere. Each country was given a quota of 20,000 regardless of its size or racial composition.

In addition to those identified as immigrants, non-immigrants from Asia also have poured into America in large numbers. These non-immigrants include tourists, business people, students, exchange researchers, and political appointees. Before 1965, Asian immigrants constituted only 7.7% of the annual entrants into the United States.
In 1985, these figures rose to 46.4% overtaking Hispanics to become the largest category of annual arrivals. By 1987, Japan ranked highest in numbers of non-immigrants.

**Entry Into Ethnic Restaurant Entrepreneurship**

Since 1860, ethnic stores selling herbal medicine and food were developed in coastal areas of the country (immigrant port of entry). Nineteenth century ethnic immigrants were not immediately sent to labor camps. Those immigrants had a choice among: a) living in working camps, b) living in downtown areas and providing services to the population, c) living in the frontier cities and providing services to railroad engineers, farmers, and ranchers (Lee, 1947). To prosper economically, most of the ethnic immigrants chose the second and third alternative. Over the years the growth of ethnic enterprises throughout major U.S. cities led to the development of ethnic communities such as "China Town" and "Little Italy".

The immigrants who chose to locate in working camps, mining towns, or railroad stops established their own business and provided services to their customers. Such immigrant stores were the center around which life for that specific ethnic group revolved. After various trades proliferated in response to the worker's needs, the stores developed into little communities. The store was the place where workers' letters were usually delivered, where
newspaper were received, and where the interpreters were to be found to conduct negotiations and solve differences with the dominant group (whites).

In short, these places became the centers for the ethnic communities. Workers came to buy products and seek news from their homeland. A seating area for social gathering was provided by store owners to help workers socialize and spend their money. In time, realizing the advantage of increasing services to these workers, store owners hired cooks and provided restaurants in a side area of their stores.

At first, restaurants were open only on weekends and holidays. Steadily, some shop owners opened their restaurants on weekdays to serve miners and camp workers their breakfast and dinner. Some even prepared workers lunch pails. Consequently, it was known that ethnic restaurants existed in the U.S. as early as the pioneering days. In the twentieth century, ethnic restaurants catered to their ethnic groups and to American customers as well. The former liked the familiar food which was a part of their diet since childhood. The latter liked the food because it was reasonably priced, tasty, eye appealing, and prepared in an unusual ways.
Today, ethnic restaurant businesses are the backbone of ethnic attractions in major U.S. cities (Nee & Nee, 1972). Recognizing the increasing numbers of ethnic arrivals to the U.S., ethnic restaurants have a plentiful supply of ethnic labor. A survey in New York City's Chinatown in 1990 found that 53% of adult men and 36% of all working residents were actually employed in restaurants (Endo, Su, and Wagner, 1980). The 1980 census reported that 14.1 percent of the Chinese immigrants were engaged in foodservice occupations (U.S. Bureau of the Census, 1980).

The occupational skills possessed by ethnic restaurant operators are highly transferable. Usually, similar items appear on the menus of a specific ethnic restaurant group across the country. Yet, each restaurant features its own modifications of taste, aroma, and cooking methods using same ingredients. As a result, experienced ethnic foodservice professionals easily transferred between employers and learned to introduce each dish to their customers. In a relatively short time cooks could also adjust their cooking style to meet the taste expectations of their consumers.
SECTION II.

CONSUMER ORIENTATION

According to WestBrook and Fornell (1979), individuals vary widely as to the importance they place on shopping. The authors identified four types of shoppers for durable goods. Such shoppers ranged from the objective shopper who expends a great deal of effort in obtaining the best possible value for the money to the non-objective shopper who expends very little effort on purchasing and relies primarily on personal advice to make decisions. Results of Westbrook and Fornell's findings suggest that given a homogenous product, systematic differences in individual purchase efforts exist.

CONSUMER PSYCHOLOGICAL INVOLVEMENT IN ETHNIC RESTAURANTS

Although the research related to various aspects of the consumer involvement in foods (eating) behavior has been reported, consumers' involvement in ethnic restaurant and their satisfaction/dissatisfaction with an ethnic cuisine has generally been under-researched and under-reported. Furguson and Woods (1987) reported that marketing research has become a critical ingredient for success in a highly competitive foodservice environment. Rather, the main thrust of consumer studies in foodservice has centered on market survey type research, analyzing and understanding consumers' demographics; eating preferences; spending
behaviors; purchasing preferences; food selections; and service and institutional attributes.

Since most marketing research in foodservice is concerned with product positioning, demographics, and market segmentation, Ralston (1992) suggests that foodservice research literature lacks an empirical base, thus, failing to blend the expertise of management with the insight of formal research. The shortage of empirical research in foodservice has created a perception that foodservice researchers are generators of a data base rather than a knowledge base (Ralston, 1992). Lewis and Chamber (1989) suggested that foodservice researchers should consider analyzing consumer buying behavior within each market segment. However, this type of information falls short of understanding consumers’ degree of involvement in restaurant selection, and consumer satisfaction/dissatisfaction with food.

Existing marketing studies in foodservice mainly involve the analysis of attributes (size of facility, location, serving size, service quality) with little attention to analyzing consumer involvement and how it may influence the consumer decision making process concerning the selection of a restaurant. That is, existing foodservice studies do not consider the effect of cognitive matching process between the attributes of a restaurant and
the consumer satisfaction/dissatisfaction with a foodservice facility.

Houston and Rothschild (1977) suggest that involvement influences almost every aspect of the consumer decision making process. Specifically, evidence suggests that involvement influences recall of persuasive communications, attitude change, and behavior. The surge of ethnic foodservice establishments (restaurants) in the U.S. has provided consumers with a greater opportunity to shop for the ultimate dining experience. An understanding of the decision making process employed by consumers regarding the selection of an ethnic restaurant (involvement) is important to the success of a restaurant concept.

Definition of Involvement

Mitchell (1979) defined involvement as a state that indicates the amount of arousal, interest or drive evoked by a particular stimulus or situation. Mitchell believes that involvement has an intensity dimension and a direction dimension. Intensity concerns the evoking stimulus object and/or situation, while the direction component concerns situations and stimulus objects at different levels of generality. Consequently, involvement can be discussed in relation to a particular category, brand, and the purchase of a product for a particular reason.
In an effort to summarize the existing research on involvement, Petty and Cacioppo (1980) distinguished between two types of involvement. The first type concerns the extent to which the attitudinal response adopted is of personal importance to the individual "ego involvement" (Sherif & Cantril, 1947). In the second type of involvement, the response that will maximize the immediate situational rewards is most important rather than the attitudinal issue "personal involvement" (Aspler & Sears, 1968).

Many terms are used to described the concept of involvement: self-relevance, consequential, arousal, and commitment. Ostrom and Brock (1968) operationalized these terms in a cognitive structure context, by recognizing that involvement might employ two structural properties of cognition: centrality, and relatedness. Centrality was defined as the extent to which a value is integral to a person’s self definition. Relatedness refers to the amount of "similarity or association" between an attitude object and value (one element is dependent on another to the degree that a change in one can causes a change in the other). Therefore, involvement can be viewed as an underlying construct which is based on a close association between an attitude object and a central value.
A Review of Hospitality Foodservice Literature to Determine Consumer Involvement in Ethnic Restaurants.

Houston and Rothschild (1977) suggested that involvement affects practically every aspect of the consumer decision process. Gardner, Mitchell and Russo (1978) supported this assertion by stating that involvement seems to have a positive effect on recall. In general, persons highly involved with a stimulus are less likely to be persuaded to change their attitudes with respect to that stimulus than are persons less involved with the stimulus (Petty & Cacioppo, 1980). Involvement is also hypothesized to have an influence on behavior through its influence on attitudes (Harrell, 1979). Jacoby (1971) found a positive relationship between brand loyalty and involvement, and Lastovicka (1978) showed that high involvement evoked more extensive purchase processes than low involvement. Although the involvement literature is extensive, involvement as it pertains to the hospitality and restaurant foodservice industry is scarce. This section will review the literature as it pertains to the service industry.

Due to the unavailability of literature related to consumers’ involvement when selecting a restaurant or foodservice facility, this review focuses on consumers’ involvement with service industries in general. The literature concerning consumer evaluation of services
suggests that consumers tend to have a higher degree of involvement with services than with goods (Swan & Trawick, 1979).

Empirical research on consumer’s perceptions of services reveals that the very nature of services and their unique characteristics are the major reasons behind the tendency of consumers to be highly involved with services. Davis (1980) in his study concerning predictors of search propensities in the service sector, revealed that consumer-specific characteristics were not related to search propensities. Rather, the findings suggest that services are such unique products that the nature of service itself is a more important determinant of search propensity. Davis found that the service characteristics that positively relate to search propensities include price level and delivery.

In a more recent study where involvement was specifically investigated, Soliman (1986) found that consumers are more involved with pure services than with pure goods. However, his investigation also revealed that consumers are less likely to be involved with goods/service combinations than with pure goods, yet no difference was discovered in the involvement means of pure services and good/service combinations.
Levels of Consumer Involvement

The involvement definition common to marketing relates affective and conative development over time (Park & Young, 1984). Attitude can develop before, during, or after an experience take place. The high involvement theory suggests that attitudes exist toward a general product and that attitudinal development toward specific brand choices occurs prior to behavior (purchase). The low involvement theory assumes that there is little attitudinal development specific to brand choices prior to behavior (purchase), although there is a positive attitude toward the general product class (Krugman, 1965). Involvement occurs in two different ways: Situational involvement, and individual involvement.

Situational Involvement

Based on existing literature, situational involvement effects on consumer behavior appear to be substantial. Rothschild (1975) stated that the greatest behavioral shifts occur in the cases where there is low situational involvement and high advertising level. Supporting this hypothesis, Lewis and Chambers (1989) recognized that consumers may spend differently when they are in a pleasant temperament versus an unpleasant temperament.
Belk's (1975) recognition of situational variables has enhanced the ability to explain and understand consumer behavior. Belk defined a situation as comprising a point in time and space. Thus, a situation represents a momentary encounter with those elements of the total environment which are available to the individual at a particular time. The five characteristics which are consistent with Belk's definition of situational involvement are listed below:

1. Physical Surroundings: These features include geographical and institutional location, decor, sounds, aromas, lighting, weather, etc., surrounding the stimulus object.

2. Social Surroundings: Other person present, their characteristics, their apparent roles, and interpersonal interactions.

3. Temporal Perspective: A dimension of situations which may be specified in units ranging from time of day to season of year. Time may also be measured relative to some past or future event for the situational participant, allowing for conceptions such as time since last purchase, time until/since some event, or time constraints imposed by prior or standing commitments.

4. Task Definition: A feature of the situation that includes an intent or requirement to select, shop for, or obtain information about a general or specific purchase. In addition, task may reflect different buyer and user roles anticipated by the individual.
5. Antecedent States: These are momentary moods (such as acute anxiety, pleasantness, and excitement) or momentary conditions (such as cash on hand, fatigue, and illness) rather than chronic individual traits. These conditions are further stipulated to be immediately antecedent to the current situation in order to distinguish states which the individual brings to the situation from states of the individual which result from the situation.

INDIVIDUAL INVOLVEMENT

As stated earlier, Westbrook and Fornell (1979) identified four types of consumers that ranged from the objective shopper (a consumer who spends a great deal of effort in obtaining the best possible value for the money) to the non-objective shopper who spends little effort in acquiring information about a product and relies primarily on personal advice to make a purchase decision.

Based on the existing involvement literature, it is assumed that situational and individual involvement are not adequate predictors of consumer involvement. Therefore, in order to effectively predict consumer involvement, a new psychological dimension has been added to the existing two dimensions. The addition of a new dimension (psychological involvement) may contribute to a greater understanding of consumer involvement while reliably predicting CS/D. The psychological dimension, along with its theory and rationale are introduced in Chapter (III).
RESTAURANT ATTRIBUTES

Restaurant attributes are the distinctive features that identify the characteristics of a restaurant. Attributes include characteristics such as: restaurant theme, decor, location, menu prices, quality of food, quality of service, and personnel competency. These characteristics also serve as indicators of consumer satisfaction in a specific foodservice facility. For example, the National Restaurant Association (1982) conducted an extensive study to determine the impact of restaurant attributes on consumer satisfaction when dining in various foodservice establishments (fast food restaurants, family dining restaurants, and atmosphere restaurants). Findings of these studies are presented below:

Fast Food Restaurants

At fast food restaurants' consumers are most concerned with cleanliness and quick food delivery. Fast food consumers expect the food to be tasty and to be served at the appropriate temperature. Such consumers also want to be greeted with a smile and eat in comfortable surroundings. Personnel attentiveness, decor and menu variety were some of the attributes that affect consumers satisfaction with fast food restaurants.

Family Dining Restaurants

Family restaurant consumers have high expectations concerning the cleanliness of the restaurant they visit. Also, they want the food to be tasty, cooked according to their demand and served at the appropriate temperature. Similarly, these consumers have lower expectations for things as quite atmosphere and decor.
Atmosphere Restaurants

Consumers' of the atmosphere restaurants have the highest expectations concerning the overall cleanliness of the restaurant and the taste of food. Such patrons expect quality service, competent personnel, and high quality food. Such consumers are more interested in atmosphere and decor than are those at other types of eating places.

SECTION III.

An Overview of Previous Research on Consumer Satisfaction

Reviews of satisfaction literature document the drastic increase in Consumer satisfaction/dissatisfaction (CS/D) research during the last 20 years (Swan & Combs, 1976; Day, 1977; Hunt, 1977; LaTour & Peat, 1979; Oliver, 1980; Day, 1980). Today, there is a rich mixture of conceptual/theoretical discussions and empirical studies testing the antecedents and consequences of CS/D. Oliver (1977, 1979, 1980) and LaTour and Peat (1979) have played leading roles in tying CS/D theory to social science research. Additionally, several models of CS/D have been proposed (Day, 1977, 1980; Latour & Peat, 1979; Oliver, 1980). However, most of these models have concentrated on testing individual relationships between variables in the CS/D process.

Consumer satisfaction with a product refers to the favorability of the individual's subjective evaluation of the various outcomes and experiences associated with using or consuming the product (Hunt, 1977). According to
consumer theorists (Howard & Sheth, 1969; Engel, Kollat, and Blackwell, 1973) consumer behavior is based on a cognitive process in which consumers compare their prior expectations of product outcomes to those actually obtained from the product. The extent to which expectations are realized is assumed to be directly related to the level of satisfaction experienced. If actual product outcomes meet or exceed those expected, satisfaction results. However, if product outcomes are judged below expectations, dissatisfaction occurs.

Satisfaction, is not solely a cognitive phenomenon. Rather, it also comprises an element of affect of feeling. Consumers feel subjectively good in connection with satisfaction, and bad in connection with dissatisfaction. Hunt (1977) argued that the presence of affect derives from the evaluation of product outcomes and experiences. An unresolved issue, is whether the affective element precedes, or is concurrent with, judgements of satisfaction and dissatisfaction. In addition to affect, the construct of satisfaction also involves an element of conation, in that high levels of conations are associated with intentions to repeat the purchase choice if faced again by a similar buying situation, and low levels of conations are associated with intentions to purchase differently. In fact both affective and conative elements of satisfaction are present
in proportion to the extent to which consumers' expectations are fulfilled.

Out of this body of theoretical and empirical research a widely accepted confirmation/disconfirmation paradigm whereby CS/D is viewed as resulting from a type of comparison process was introduced. Prior to a purchase, the consumer forms expectations of the product. These expectations are predictions of the nature and level of performance the buying consumer acquires. After buying/consuming the product, the consumer compares actual performance with expected performance. Confirmation results when the two performances match. A mismatch will cause a positive confirmation where perceived performance exceeds expectations, or a negative disconfirmation where perceived performance falls below expectations. In turn, confirmation/disconfirmation leads to an emotional reaction called satisfaction/ dissatisfaction (Westbrook & Cote, 1980).

**Satisfaction as Confirmation of Expectations**

Most of the studies utilizing the confirmation of expectations approach to consumer satisfaction have assumed that an evaluative reaction develops after a consumption experience. Such evaluative reaction may result in either positive feelings about the experience (satisfaction) or negative feelings about the experience (dissatisfaction).
The intensity of these feelings is related to the magnitude of the difference between the perceived performance of the product and the level of expectations with which the consumer entered the consumption process. The unique aftermath which is predicted when difference between expectations and performance occur depends on the magnitude of the difference and on the particular psychological theory to which the researcher subscribes.

In recent years, a considerable amount of research has been conducted on the psychological processes associated with the assessment of the consequences of consumers decisions. Marketing researchers and consumer psychologists have applied some of these theories to product evaluation and the assessment of satisfaction in the consumer decision-making context. Three psychological theories 1) cognitive dissonance, 2) contrast, and 3) assimilation contrast have received a considerable amount of attention. Anderson (1973) reported that these theories provide alternative predictions of how the consumer behaves when his/her perceptions of the performance of the product are at variance with his/her purchase expectations of the product.

**Cognitive Dissonance**

According to Festinger (1964), dissonance looks at elements and their relationships. The essential claim is that dissonance is a state occurring whenever a person holds
two cognitions (ideas, beliefs) which are inconsistent. The theory assumes that dissonance is unpleasant, so people try to reduce dissonance. Cardozo (1965) suggested that while as a theory it lacks sufficient specificity and breadth to be completely satisfactory, it does explain observed consumer behavior.

The cognitive dissonance theory hypothesizes that the difference between performance and expectations will be reduced (assimilated) by the consumer, who adjusts his/her perception of the product to be more consistent with his/her expectations. Marketing implications of this theory assumes that advertising should establish high expectations of the product, since the consumer will rationalize his/her decision by upgrading his/her evaluation of the product toward his/her expectations instead of being dissatisfied. The empirical evidence is mixed and the assimilation hypothesis is quite controversial among marketing researchers (Olshavsky & Miller, 1972; Anderson, 1973).

**Contrast Theory**

The contrast theory suggests that when the consumer perceives a discrepancy between his/her expectations and performance, he/she tends to magnify the differences. Thus, if the product performs better than expected the reaction will be favorable, but if performance falls short of
expectations, the reaction will be highly unfavorable (Anderson 1973).

**Assimilation-Contrast Theory**

This theory predicts that for moderate levels of disconfirmation (satisfaction) of expectancy in either direction, the assimilation effect will occur. When the difference is beyond some acceptance level contrast takes over and magnifies the difference. Anderson’s (1973) study supported the assimilation-contrast theory.

Other researchers (Olson & Dover, 1976; Swan & Trawick, 1979), have introduced three types of expectations: predictive, normative, and comparative.

Predictive expectations are consumer beliefs about how a particular product is likely to perform. Sources of these beliefs have been ascribed to past experience, advertising, and word-of-mouth. Normative expectations are beliefs about what ought to be. These derive from all of life experience as well as more immediately relevant product exposure. Comparative expectations are beliefs about a particular product as compared to other similar products (Latour & Peat, 1979). Clearly all three types of confirmation of expectations rest on some attitude about or experience with the product prior to purchase. Based on these theories, the evaluation of products and services and the resulting levels of satisfaction or dissatisfaction are influenced by complex
and poorly understood psychological processes. The extent to which marketing activities influence expectations appears to vary widely across individuals. It seems quite likely that sensitivity to the disparity between expectations and perceived performance also vary widely over individuals. Thus, the discussion now will focus on the development of concepts and measurement methods for consumer satisfaction.

**Concepts and Measurement Methods for Consumer Satisfaction**

Miller (1976) introduced a classification scheme using four different kinds of comparisons: expected, deserved, ideal, and minimum tolerable performance. Morrison (1976) offered a similar idea when he discussed the normative deficit standard for comparison. Morrison believed that there are two cultural norms which people use to evaluate a product’s performance, and satisfaction results from the degree to which perceived performance matches the norm.

Latour and Peat (1979) offered an insightful perspective on the baseline for brand comparisons. The authors applied Thibaut and Kelly’s (1959) comparison level theory to the confirmation/disconfirmation process. Satisfaction was conceptualized as a function of positive and/or negative disconfirmation of perceived attribute levels obtained from a brand and the corresponding comparison levels of those attributes. LaTour and Peat (1979) explained that the comparison level is developed from
prior experience with the salient attributes of a product. Thus, the comparison level can be influenced by perceived capabilities of brands other than the one purchased and used. This idea suggests that the bases of comparison used by consumers may be more than just expectations.

Swan and Mercer (1981) introduced the social equity theory to explain the previous discussion. Consumers evaluate the benefit received from a brand in relation to its cost (price/effort) and then compares this ratio with the corresponding cost/benefit ratio realized by some other relevant person (a family member or a friend). The basis for comparison becomes the degree of equity which consumers perceive between what they achieved and what the other person achieved.

Oliver (1980) developed the first marketing model on the basis of Helson's Adaptation Level Theory and the results of his own empirical work. Oliver hypothesized that a person forms expectations about a product from summed evaluations of individual beliefs about attributes. In Oliver's terms:

an evaluation of the surprise is inherent in a product acquisition and/or consumption experience. In essence, it is the primary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience (1980).
Oliver's model, depends on the existence of three factors in the purchase situation:

1) a distinct difference between expected and perceived performance in order to produce either satisfaction or dissatisfaction

2) stability of the relationship between beliefs and the purchase attitude

3) that the question of interest is the effect of disconfirmation on future purchase decisions.

The second marketing model was developed by Cadotte, Woodruff, and Jenkins (1982). These researchers have proposed a model which specifically incorporates performance norms and experience into the antecedents of satisfaction. The norm can be understood in several different comparison standards: brand based, product average based, or best brand/favorite brand based. The number and range of items in the norm set are individually determined. The number and use of norms in confirmation/disconfirmation may vary with involvement, risk and investment associated with purchase. The general pattern is expressed as a median/mean norm in a bell shaped distribution across brands in a summary judgement rather than attribute form. The presentation of the model is accompanied by a set of hypothesis and measurement specifications. The hypotheses indicate the contingent dimensions of this proposed formulation which
takes into account a number of other assumption behavior
corcepts, and thereby strengthens the applicability of
research. It also recognizes research findings indicating
that product types (service, durable, etc.) may have a
strong impact on information processing which suggests
limits on the utility and reliability of a more general
model like Oliver’s.

Day’s (1980) proposed a third model. Day’s model is
more inclusive than the two previously developed models.
This model had three categories of antecedent norms and
expectancies: performance, social benefits, and total cost.
The emphasis on social and economic benefits is a natural
consequence of the intent of the model, thus providing a
method for explaining and predicting post satisfaction
behaviors.

Feather (1982) evaluated previous and contemporary
consumer research literature. Feather’s findings revealed
that research into consumer satisfaction from an expectancy
view rests heavily on theories in social psychology. In
Feather’s words:

As this area has developed in marketing, the
theories used as the foundation have changed, but
all the variants of the expectancy model of
cognitive behavior where the distinctive behavior
of this class of models is their attempt to relate
action to the perceived attractiveness of expected
consequence (Feather, 1982).
Overall, the practical features of all three models are numerous. All of the introduced models represent an advanced development in consumer research.

**SUMMARY**

The history of ethnic restaurant entrepreneurship in the United States dates back as early as the 1800s. Since ethnic restaurants began to cater to large numbers of American customers, food products have been substantially modified to meet the taste of the American public. Since labor and staffing in ethnic restaurants are highly transferrable, it has become common knowledge among ethnic minorities that an ethnic restaurant can provide a source of employment.

The motivation of ethnic entrepreneurs to develop restaurant businesses results from their inability to find jobs outside the ethnic economy. Ethnic entrepreneurs believed that running a small restaurant could fulfill their wish of self-employment, minimize reliance on the wider American society, and save considerable living expenses. Many acquired their business right as tenants of a storefront because they considered proprietorship financially risky. The success of their businesses had much to do with where the restaurant was located. Many ethnic entrepreneurs obtained their start-up funds through
partnerships, which were based on kinship or friendship networks.

It appears that involvement was related to every aspect of consumer decision making and to date the involvement construct has not been investigated in relation to the selection of a foodservice facility (restaurant). The two dimensions of involvement were relevant in the context of restaurant selection. Those dimensions include an individual dimension and situational dimension. The relationship of these dimensions was important to the classification of consumer involvement as low or high. The addition of a new dimension (psychological involvement) may contribute to a greater understanding of consumer involvement while reliably predicting CS/D.

In conclusion, there was more than one distinct approach to the conceptualization and measurement of consumer satisfaction in the consumer behavior literature. One approach related the individual's overall level of satisfaction/dissatisfaction to the extent to which the individual feels that his prior expectations of product performance have been confirmed or disconfirmed in the consumption process. Another approach related the level of satisfaction or dissatisfaction to the psychological distance between the product in a multi-dimensional space in which each dimension represented a product attribute. If a
person expressed the consumer’s expectations and perceptions of product performance in terms of the levels of the same set of attributes, then the comparison of expectations and perceived performance can be described in terms of the distance between the two points in a multidimensional product space. However, the assumptions which were usually made by the users of the two models were sufficiently different, and it was useful to distinguish between them.
CHAPTER III

METHODOLOGY

INTRODUCTION

This study investigated whether consumer orientation, psychological involvement, and restaurant attributes as they affect satisfaction when dining in ethnic restaurants. The relationship between consumer orientation, consumer psychological involvement (attitude, opinion, belief, and behavioral intention) and restaurant attributes in relation to satisfaction/dissatisfaction was also investigated. In this chapter the research framework and hypothesis are explained, and the study's design, sample, procedures, instrument, and data analysis are presented.

RESEARCH FRAMEWORK

This study proposed and tested a consumer involvement framework related to the foodservice industry. The consumer involvement framework presented in Figure 1. was formulated through logical interpretation of the literature. In the literature search, major emphasis was on discovering ideas and processes which were highlighted by the framework. The following are specific questions which this dissertation sought to answer:
1. What is the relationship between consumer orientation (active/passive) and satisfaction? That is, does consumer orientation affect satisfaction?

2. What is the relationship between consumer psychological involvement (attitude, opinion, belief, and behavioral intention) and satisfaction? That is, does a consumer with positive psychological involvement have higher satisfaction than a consumer with negative or neutral psychological involvement.

3. Do restaurant attributes affect satisfaction? That is, do the attributes of a restaurant affect the active consumer differently than they affect the passive consumer.

4. Does consumer demographics affect satisfaction? That is, do consumer demographics affect the active consumer differently than they affect the passive consumer.

**FRAMEWORK OPERATIONALIZATION**

From this framework, consumer involvement should be related to satisfaction/dissatisfaction when dining in ethnic restaurants. To explain the framework, a four step rationalization is provided.
1) **Consumer Orientation**

WestBrook and Fornell (1979) identified four types of consumers that ranged from the objective shopper (A consumer who spends a great deal of effort in obtaining the best possible value for the money) to the non-objective shopper who spends little effort in acquiring information about a product and relies primarily on personal advice to make a purchase decision. In the proposed framework two consumer orientations have been identified:

a) **Active Shopper:** A consumer who spends resources in the acquisition of information related to the product prior to purchase.

b) **Passive Shopper:** A consumer who expends little effort in acquiring information about a product prior to purchase. This consumer relies heavily on word-of-mouth when making a purchase decision.

2) **Consumer Psychological Involvement**

Based on existing literature, psychological involvement effect on consumer behavior appears to fall into the following categories:
Involvement and Attitude

Sereno (1968), Bowen & Chaffee (1974), Petty and Cacioppo (1980), and Parameswaran and Spinelli (1984) reported that involvement and attitude appear to be related in two ways. First, consumers who are highly involved with a stimulus, are less likely to be persuaded to change their attitudes with respect to that stimulus than consumers who are not highly involved with the stimulus. Second, highly involved consumers must be persuaded by objective and logical arguments.

Involvement and Opinion

MacStravic (1987) and Webster (1988) offered a good analysis of consumers opinion when selecting health care provider. Results of their studies reflect consumers’ subjective opinions about providers, not objective facts that can be managed and communicated for immediate effect.

Involvement and Beliefs

Krugman (1965), Rothschild and Ray (1974), Westbrook and Fornell (1979), Kassarjian (1981), and Slama (1984), defined involvement as the number of connections, or personal references that consumers spontaneously make between their own lives and the advertising stimulus. Krugman explained that under no involvement the repeated viewing of an advertisement results in the absence of perceptual defenses, the shifting of attributes which are
seen as salient, and the changing of an attitude only after behavioral completion solidifies the saliency shifts.

Involvement and Behavioral Intention

It is hypothesized that if a need arises consumer will visit a restaurant where a previous positive experience was obtained (Nolan and Swan, 1985). Such behavior may indicate that repeat consumers are satisfied consumers whereas the non-repeat consumers are dissatisfied consumers.

3) Restaurant Attributes

The National Restaurant Association define restaurant attributes as the intangible factors that affect consumer satisfaction. Attributes include factors such as facility location, theme, decor, cleanliness, menu prices, quality of food, speed of service, and management responsiveness to consumer’s needs.

4) Consumer Satisfaction/Dissatisfaction

Therefore, it is assumed that consumers with positive attitude, opinion, belief and behavioral intention, are satisfied when dining in ethnic restaurants; whereas, consumers with negative or neutral attitude, opinion, belief and behavioral intention are dissatisfied when dining in ethnic restaurants.

Foodservice researchers and professionals will benefit from this framework’s findings. These individuals may develop strategies aiming at positively influencing consumer
attitude, opinion, and beliefs to generate high involvement and ensure satisfaction. Such strategies could also be used to reduce consumer negative attitude, opinion, and belief to decrease or eliminate dissatisfaction.

NULL HYPOTHESES

Hₐ:

The null hypothesis states that there is no relationship between consumer orientation and level of satisfaction in ethnic restaurants.

In this hypothesis, it is believed that regardless of consumer orientation (active/passive) all consumers prior to purchase forms expectations of the product. These expectations are predictors of satisfaction. In this hypothesis it is assumed that active consumers (those who search and investigate a purchase before a decision is made) are more satisfied than passive consumers (those who do not search and investigate a purchase before a decision is made).

Hₐ:

The null hypothesis states that there is no relationship between consumer psychological involvement (attitude, opinion, belief, and behavioral intention) and the level of satisfaction in ethnic restaurants.
In this hypothesis, it is believed that regardless of consumer psychological involvement (attitude, opinion, belief, and behavioral intention) all consumers have the same level of satisfaction.

H$_{1}$:
The null hypothesis states that there is no relationship between restaurant attributes and consumer demographics in satisfaction/dissatisfaction when dining in ethnic restaurants.

In this hypothesis, it is believed that restaurant attributes and consumer demographics do not affect consumer satisfaction in ethnic restaurants.

RESEARCH DESIGN

This correlational study utilizes inferential and descriptive research techniques to investigate the relationship between certain variables. The study design employs one dependent variable and seven independent variables. The dependent variable in this study is consumer satisfaction/dissatisfaction with ethnic restaurants/food. The independent variables are:

1) consumer orientation,
2) consumer attitude toward ethnic restaurants,
3) consumer opinion about ethnic restaurants,
4) consumer beliefs about ethnic restaurants,
5) consumer behavioral intention toward ethnic restaurants,
6) the attributes of ethnic restaurants, and,
7) consumer demographics.

SAMPLE DESIGN

Sample selection is a very important step in conducting research. Gay (1987) stated that the sample's merit determines the generalizability of the results. Therefore, the most important criterion in this study's sample selection was the ability to increase the validity of the study's conclusions. The random sampling procedure was employed in this study. In simple random sampling, every individual has the same probability of being selected, and the selection of one individual in no way affects the selection of another individual. In other words, all individuals in the defined population have an equal and independent chance of being selected for the sample.

The sample of this study (n = 232) represented ethnic restaurant consumers in Washington, DC. metropolitan area. The sample population was composed of consumers who dined in any of the metropolitan area Washington, DC. ethnic restaurants (n = 21) who agreed to participate in the study.
PROCEDURES

Data for the study were collected by responses to a questionnaire designed to measure consumer orientation, psychological involvement and restaurant attributes as determinants of satisfaction/dissatisfaction in ethnic restaurants. The study was conducted during the summer of 1993. The Northern Virginia and the Metropolitan Washington, DC Restaurant Associations provided a list of names and addresses of ethnic restaurants who are members of the Association. Through personal visitations, the association's ethnic members (182) were contacted and asked to participate in the study. These members represented ethnic restaurants such as Italian, Mexican, Indian, Chinese, Japanese, Thai, Greek, and Middle-Eastern. All ethnic entrepreneurs were informed that the information provided through the survey would be used strictly for the purpose for which it was obtained and under no circumstance would information about the participants, or names of the establishments be divulged. Twenty-one ethnic restaurants agreed to participate in this study. The remaining (161) restaurant refused to take part due to managerial reasons.

Consumers who participated in the study, had their instrument administered by a wait person while consuming a complementary beverage and waiting for their check. As an incentive to increase participation, most restaurants agreed
to place the names of consumers who participated in the study in a raffle, where the prize was a complementary meal for two.

Every consumer who entered an ethnic restaurant that was participating in this study, had an equal chance of being selected in the sample. There was no follow up contact with consumers who refused to take part in the study. Similarly, the length and extensiveness of the instrument had eliminated any consumer bias. That is, only consumers who were genuinely interested in this topic participated in the study.

Upon completion of the instrument, questionnaires were collected and analyzed.

**INSTRUMENT**

Utilizing reviewed literature, an (86) item instrument consisting of four-parts was developed (Appendix 1). The instrument was designed to measure: (1) consumer orientation (active/passive), (2) consumer psychological involvement (attitude; opinion; belief, and behavioral intentions), (3) consumer satisfaction/dissatisfaction: a) importance of certain restaurants’ attributes toward satisfaction, and b) consumers satisfaction/ dissatisfaction with their dining experience; and (4) consumer demographics.

The first part of the instrument investigated consumer orientation (active/passive).
Consumer Orientation

Consumer orientation was measured using a scale developed by Slama (1984), that was based on the idea that purchasing involvement is defined as the relevance of the consumer decision process to the individual. Answering this section of the instrument required consumers to rate their extent of agreement or disagreement on a seven-point Likert type scale (1 = Strongly Disagree) and (7 = Strongly Agree). The scale items included statements such as "I rate the selection of an ethnic restaurant as being the highest importance to me personally" or "Specials do not excite me." Items one to 15 were designed to find the involvement level of the active consumer, while items 16 to 28 were designed to determine the involvement level of the passive consumer. Consumer orientation (active/passive), was determined from the mean differences between the active score and the passive score.

Psychological Involvement

The second section of the instrument measured consumers attitudes, opinions, beliefs, and behavioral intentions. Items from this section were adopted from Fishbein and Icek (1975) and MacStravic (1987).

Item one through six measured consumer attitude toward ethnic restaurants. Item 7 through 13 measured consumer opinion of ethnic restaurants. Such items were answered
using a seven point Likert-type scale. For example, participants responded to the following statements "The impact of my attitude toward a foreign country on my decision to patronize an ethnic restaurant is (1 = negative) and (7 = positive).

Items 14 through 21 measured consumer beliefs. Belief items were derived from the restaurant environment to which consumers were exposed; therefore, consumers' exposed to more objective information responded to statement such as: "Ethnic restaurants should maintain their identity through interior design, music, food, service, and personnel," while the individual's exposed to less objective information responded to statement such as: "Ethnic restaurants should maintain an appropriate selection of local dishes." This distinction between belief items was necessary to obtain appropriate measures of target beliefs (Fishbein and Icek, 1975). Respondents were requested to rate their beliefs concerning specific characteristics about an ethnic restaurant.

Items 22 through 24 measured consumer behavioral intentions. Measures of behavioral intentions were obtained by asking respondents if they would patronize an ethnic restaurant within the next few weeks. Also, another long term intention was obtained by asking respondents if they
would patronize an ethnic restaurant within the next few months.

To answer questions 14-24, respondents were asked to use a seven-point scale ranging from extremely unlikely to extremely likely.

For example:

Ethnic restaurants are some of the best places to eat:

Extremely Unlikely ---:---:---:---:---:---:--- Extremely Likely.

**Consumer Satisfaction/Dissatisfaction**

The third section of the instrument was adopted from ARA Foodservices (1993).

**Attributes**

The first part of section three measured on a seven-point scale the importance of certain attributes toward consumers’ satisfaction items 1 through 10. Questions one in this section were answered using a seven-point scale ranging from not important to most important. For example:

Please rate the importance of the restaurant hours of operations toward your satisfaction:

Not Important ---:---:---:---:---:---:--- Most Important.
Satisfaction with Dining

The second part of section three measured consumers satisfaction with the dining experience items 11 through 28. These items were answered using a seven-point Likert type scale anchored by the bi-polar adjectives (7 = Very Dissatisfied) and (1 = Very Satisfied). For example:

Please rate your satisfaction/dissatisfaction with the availability of popular food:

Very Dissatisfied---:---:---:---:---:---:--- Very Satisfied

The fourth section of the instrument measured consumer demographics. For example, type of ethnic restaurant, age, sex, education, and income.

INSTRUMENT VALIDITY AND RELIABILITY

Validity is the degree to which a test measures an intended hypothetical construct. In this study, the non-observable construct such as attitude, opinion, beliefs, and behavioral intentions, will explain the consumer behavior in relation to involvement and satisfaction/dissatisfaction with ethnic restaurants. Whereas, reliability is the consistency with which a test measures an attribute.

The instrument’s content validity was also evaluated by a panel of foodservice researchers and professionals. The panel evaluated the extent to which the items reflected consumers’ attitudes toward ethnic restaurants as a determinant of satisfaction/dissatisfaction.
Through a pre-test (n = 28), the reliability of the instrument was evaluated according to Green, Tull, and Albaum (1988). These authors suggested that in measuring an instrument reliability, the coefficient alpha should be used whenever possible. Therefore, the coefficient alpha was used to measure the reliability of this instrument. The coefficient alpha for each section of the instrument are presented in Tables 1, 2 and 3.
TABLE 1

RELIABILITY COEFFICIENT OF THE MEASURE OF CONSUMER ORIENTATION*

N = 28

<table>
<thead>
<tr>
<th>Consumer Orientation</th>
<th>No. of Items 28</th>
<th>Alpha for Raw Variables</th>
<th>Alpha for Standardized Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Consumer</td>
<td>15</td>
<td>.5743</td>
<td>.6006</td>
</tr>
<tr>
<td>Passive Consumer</td>
<td>13</td>
<td>.6385</td>
<td>.7209</td>
</tr>
</tbody>
</table>

* Consumer orientation was active if active mean was greater than passive mean. Consumer orientation was passive if passive mean was less than active mean.
TABLE 2

RELIABILITY COEFFICIENT OF THE MEASURE OF CONSUMER ATTITUDE, OPINION, BELIEF, AND BEHAVIORAL INTENTION

\( N = 28 \)

<table>
<thead>
<tr>
<th>Psychological Involvement</th>
<th>No. of Items</th>
<th>Alpha for Raw Variables</th>
<th>Alpha for Standardized Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Attitude</td>
<td>6</td>
<td>.7370</td>
<td>.7695</td>
</tr>
<tr>
<td>Consumer Opinion</td>
<td>7</td>
<td>.6924</td>
<td>.7237</td>
</tr>
<tr>
<td>Consumer belief</td>
<td>8</td>
<td>.7801</td>
<td>.7957</td>
</tr>
<tr>
<td>Consumer Behavioral Involvement</td>
<td>3</td>
<td>.7636</td>
<td>.7491</td>
</tr>
</tbody>
</table>
TABLE 3

RELIABILITY COEFFICIENT OF THE MEASURE OF RESTAURANTS' ATTRIBUTES TOWARD SATISFACTION AND SATISFACTION WITH DINING

N = 28

<table>
<thead>
<tr>
<th>Satisfaction in Restaurant attributes and dining</th>
<th>No. of Items 28</th>
<th>Alpha for Raw Variables</th>
<th>Alpha for Standardized Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction in restaurant attributes</td>
<td>10</td>
<td>.8192</td>
<td>.8272</td>
</tr>
<tr>
<td>Satisfaction in dining</td>
<td>18</td>
<td>.9449</td>
<td>.9442</td>
</tr>
</tbody>
</table>
DATA ANALYSIS

Collected data were coded and analyzed using the statistical package SAS Version (1990). Two statistical techniques were used: 1) Descriptive statistics that included, frequency distributions, means, and standard deviations and 2) Inferential statistics that included simple correlations, multiple correlations, regression analysis, analysis of variance (ANOVA), and t-test.

* Frequency counts and percentages were computed on all items of the survey.
* Except section four (demographics) mean scores were computed on all items.
* Cronbach alpha correlation coefficient was computed on the first three sections of the instrument (consumer orientation, psychological involvement, and CS/D) to determine the instrument internal consistency.
* Correlation analyses between consumer orientation (active, passive) and psychological involvement (attitude, opinion, belief, and behavioral intention) were computed.
* The stepwise multiple regression analysis was used to determine if satisfaction is a factor of consumer orientation.
The stepwise multiple regression analysis was used to determine if consumer psychological involvement (attitude, opinion, belief, and behavioral intentions) affects consumer satisfaction with dining.

The stepwise multiple regression analysis was used to determine if restaurant attributes impact consumer satisfaction.

The stepwise multiple regression analysis was used to determine if satisfaction items 25, 26, 27, and 28 (overall satisfaction) were motivated by consumer psychological involvement.

The general linear model procedure (GLM) was used to determine the relationship of consumer satisfaction to consumer orientation and demographics (age, sex, education, and income).
SUMMARY

In this exploratory correlational study, the nature of the relationship between consumer orientation, psychological involvement, and restaurant attributes as a measure of CS/D was investigated. A four part instrument was developed for this study. A pilot study was conducted to measure the instrument reliability. The correlational analyses technique (alpha) was used to determine the instrument's reliability and to examine the contribution of the items to alpha value. The final and revised instrument was distributed to consumers who visited selected ethnic restaurants in metropolitan Washington DC., during the summer of 1993.
CHAPTER IV

RESULTS

INTRODUCTION

Chapter three has elaborated on the research methodologies that were used to investigate the research question. Through the utilization of statistical analysis technique, this chapter presents the results of the proposed research questions.

COLLECTED DATA

The sample in this study was composed of consumers who dined in selected Washington, D.C. metropolitan area ethnic restaurants, during the months of July, August and September 1993. Instruments (450) were delivered to restaurants who agreed to participate in the study. Data collection was extended to the early September (September 7, 1993) to ensure sample's representativeness.

By the first cut-off date (August 16, 1993), this study had a response rate of 38.2% (172 responses). To increase the number of responses, an extended cut-off date was established (September 7, 1993). By September 7, 1993, 275 responses were received. Blank and Partially completed questionnaires (43) were eliminated before data analyses. Overall, this study had a total response rate of 51.5% or (232) responses that were coded and analyzed. Table 4, provides an analysis of participants response rate.
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target population</td>
<td>450</td>
<td>100</td>
</tr>
<tr>
<td>Total response rate</td>
<td>275</td>
<td>61.1</td>
</tr>
<tr>
<td>Less unusable responses</td>
<td>43</td>
<td>15.6</td>
</tr>
<tr>
<td>Total usable responses</td>
<td>232</td>
<td>51.5</td>
</tr>
</tbody>
</table>
RESPONDENTS' PROFILE

Consumers who participated in this study were individuals who dined in selected Washington D.C. metropolitan area ethnic restaurants. With regard to age, gender, education, income, and ethnic background, respondents were predominantly female (51.9%). Graduate studies represented (47.2%) of consumers highest educational level. The majority of the respondents (51.1%) were of Western European ethnic background. Similarly, 25.5% of the respondents reported that their annual family income exceeded $50,000. Table 5, represents the profile of the sample used in this study.
Table 5
RESPONDENT PROFILE

<table>
<thead>
<tr>
<th>Age:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 or under</td>
<td>8</td>
<td>3.0</td>
</tr>
<tr>
<td>20-25</td>
<td>65</td>
<td>28.1</td>
</tr>
<tr>
<td>26-30</td>
<td>38</td>
<td>16.5</td>
</tr>
<tr>
<td>31-40</td>
<td>48</td>
<td>20.8</td>
</tr>
<tr>
<td>41-55</td>
<td>46</td>
<td>19.9</td>
</tr>
<tr>
<td>55 and older</td>
<td>27</td>
<td>11.7</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>112</td>
<td>48.1</td>
</tr>
<tr>
<td>Female</td>
<td>120</td>
<td>51.9</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual family income:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $ 10,000</td>
<td>26</td>
<td>10.8</td>
</tr>
<tr>
<td>$ 10,001-$ 20,000</td>
<td>29</td>
<td>12.6</td>
</tr>
<tr>
<td>$ 20,001-$ 30,000</td>
<td>28</td>
<td>12.1</td>
</tr>
<tr>
<td>$ 30,001-$ 40,000</td>
<td>49</td>
<td>21.2</td>
</tr>
<tr>
<td>$ 40,001-$ 50,000</td>
<td>41</td>
<td>17.7</td>
</tr>
<tr>
<td>Over $ 50,000</td>
<td>59</td>
<td>25.5</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education level:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>16</td>
<td>6.5</td>
</tr>
<tr>
<td>Technical School/Junior College</td>
<td>28</td>
<td>12.1</td>
</tr>
<tr>
<td>College</td>
<td>79</td>
<td>34.2</td>
</tr>
<tr>
<td>Graduate Studies</td>
<td>109</td>
<td>47.2</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>100</td>
</tr>
<tr>
<td>Ethnic background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Western European</td>
<td>118</td>
<td>51.1</td>
</tr>
<tr>
<td>Eastern European</td>
<td>82</td>
<td>35.5</td>
</tr>
<tr>
<td>Mexican</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>Chinese</td>
<td>6</td>
<td>2.6</td>
</tr>
<tr>
<td>Japanese</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Thai</td>
<td>5</td>
<td>2.2</td>
</tr>
<tr>
<td>Greek</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>Indian</td>
<td>7</td>
<td>3.0</td>
</tr>
<tr>
<td>Middle-eastern</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>Others</td>
<td>232</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
VALIDITY AND RELIABILITY ESTIMATES

To establish the instrument reliability, the Cronbach alpha coefficient was used. Cronbach alpha tested the internal consistency of the items in relation to a single trait within the instrument (active consumer, passive consumer, attitude, opinion, belief, behavioral intention, satisfaction with attributes, and satisfaction with dining).

Table 6 provides the coefficient alpha for the data from the actual study. The table is divided into three sections. The first section reported consumer orientation (active, passive) coefficient alpha, the second section reported consumer psychological involvement (attitude, opinion, belief, and behavioral intention) coefficient alpha, and the third section reported the satisfaction with attributes, and satisfaction with dining (coefficient alpha). A coefficient alpha of 0.70 or higher was considered to be adequately reliable for group data purposes based on normally accepted procedures. There were no judgements made about individual consumers. The instrument's reliability scores exceeded the coefficient alpha of 0.70.
<table>
<thead>
<tr>
<th>SECTION ONE</th>
<th>No. of Items</th>
<th>Alpha for Raw Variables</th>
<th>Alpha for Standardized Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Orientation</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Consumer</td>
<td>15</td>
<td>.7646</td>
<td>.7633</td>
</tr>
<tr>
<td>Passive Consumer</td>
<td>13</td>
<td>.9175</td>
<td>.9156</td>
</tr>
<tr>
<td>SECTION TWO</td>
<td>No. of Items</td>
<td>Alpha for Raw Variables</td>
<td>Alpha for Standardized Variables</td>
</tr>
<tr>
<td>Psychological Involvement</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Attitude</td>
<td>6</td>
<td>.7646</td>
<td>.7871</td>
</tr>
<tr>
<td>Consumer Opinion</td>
<td>7</td>
<td>.7724</td>
<td>.7714</td>
</tr>
<tr>
<td>Consumer Belief</td>
<td>8</td>
<td>.8547</td>
<td>.8544</td>
</tr>
<tr>
<td>Consumer Behavioral Intention</td>
<td>3</td>
<td>.7477</td>
<td>.7505</td>
</tr>
<tr>
<td>SECTION THREE</td>
<td>No. of Items</td>
<td>Alpha for Raw Variables</td>
<td>Alpha for Standardized Variables</td>
</tr>
<tr>
<td>Satisfaction with restaurant attributes and dining</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with restaurant attributes</td>
<td>10</td>
<td>.8168</td>
<td>.8181</td>
</tr>
<tr>
<td>Satisfaction with dining</td>
<td>18</td>
<td>.9105</td>
<td>.9133</td>
</tr>
</tbody>
</table>

Through mean scores analysis, consumer orientation was determined. The mean of the active consumer equal the mean of questions 1 to 15. The mean of the passive consumer equal the mean of questions 16 to 29.
Consumer orientation was active if active mean was greater than passive mean. Consumer orientation was passive if passive mean was less than active mean.

HYPOTHESIS TESTING

The purpose of this study was to evaluate if consumer orientation, psychological involvement, restaurant attributes, and demographics affect satisfaction when dining in an ethnic restaurant. Chapter Three presented the research model and hypotheses that are guiding this study. This section reports the results of the statistical tests performed on the research hypotheses.
FINDINGS

I. EFFECT OF PSYCHOLOGICAL INVOLVEMENT ON SATISFACTION

The effect of consumer psychological involvement (attitude, opinion, belief, and behavioral intention) on satisfaction in dining in relation to active consumer, passive consumer, and all subjects is presented below.

This study's dependent variable is (consumer satisfaction/dissatisfaction). The range of the satisfaction scale was 1 = very dissatisfied and 7 = very satisfied. Correlation analysis that measure consumer satisfaction in relation to psychological involvement within each consumer orientation was conducted. Results of the correlation analysis for the active and passive consumer is presented in Figure 2. Information on instrument coding, is contained in (Appendix 2). Information on correlation analysis model is contained in (Appendix 3).
Correlation Analysis Between Satisfaction and Consumer Psychological Involvement

**Figure 2**

**SATISFACTION**

1. **Belief**
   - Behavioral Intention: $r = 0.08$, NS
   - Opinion: $r = 0.31$, NS
   - Attitude: $r = 0.13$, NS
   - Active Consumer: $r = 0.15$, NS
   - Passive Consumer: $r = 0.13$, NS
   - (mean score = 4.52)
   - (N = 64, 67)

2. **Statement**
   - Behavioral Intention: $r = 0.19$, $p < 0.05$
   - Opinion: $r = 0.28$, $p < 0.01$
   - Attitude: $r = 0.17$, $p < 0.04$
   - Active Consumer: $r = 0.12$, NS
   - Passive Consumer: $r = 0.18$, NS
   - (mean score = 9.7)
   - (N = 165, 167)
In the active group, opinion (r = 0.17, p<0.04), belief (r = 0.28, p<0.01), and behavioral intention (r = 0.19, p<0.02) were significantly correlated with satisfaction; however, attitude was not significantly correlated with satisfaction. In the passive group, none of the consumer psychological variables were significantly correlated with satisfaction. The correlations among the variables in active and passive group are given in Appendix 3.1 and 3.2.

The stepwise regression analysis was also conducted to determine the relationship between consumer satisfaction in relation to consumer psychological involvement (attitude, opinion, belief, and behavioral intention) within each consumer orientation. All the variables that did not meet the minimum significant level of (p<0.05) were deleted. For the active consumer group, belief was the only variable that met the minimum significant level. Belief and satisfaction were correlated (r² 0.08, p<0.01); however, the C(P) value (Mallow’s Coefficient) was negative. Results of the stepwise regression analysis for the active and passive consumer is presented in Table 7. Information on the stepwise regression analysis model is contained in (Appendix 4).
TABLE 7

STEPWISE REGRESSION ANALYSIS BETWEEN SATISFACTION AND CONSUMER PSYCHOLOGICAL INVOLVEMENT

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>DF</th>
<th>SUM OF SQUARES</th>
<th>MEAN SQUARES</th>
<th>F VALUE</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL</td>
<td>1</td>
<td>2415.44</td>
<td>2415.45</td>
<td>14.2</td>
<td>0.01</td>
</tr>
<tr>
<td>ERROR</td>
<td>164</td>
<td>27801.00</td>
<td>170.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>165</td>
<td>30216.45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PARAMETERS ESTIMATES:

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PARAMETER ESTIMATES</th>
<th>STANDARD ERROR</th>
<th>SUM OF SQUARES</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERCEPT</td>
<td>69.32</td>
<td>5.945</td>
<td>23187.45</td>
<td>136.0</td>
<td>0.01</td>
</tr>
<tr>
<td>BELIEF</td>
<td>0.51</td>
<td>0.137</td>
<td>2415.44</td>
<td>14.2</td>
<td>0.02</td>
</tr>
</tbody>
</table>

SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION

<table>
<thead>
<tr>
<th>STEP VARIABLE</th>
<th>MODEL</th>
<th>r²</th>
<th>C(P)</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BELIEF</td>
<td>0.08</td>
<td>-0.27</td>
<td>14.2</td>
<td>0.01</td>
</tr>
</tbody>
</table>

The means of satisfaction in active and passive group (91.37 vs. 86.84, out of a maximum of 112) were compared. The Tukey’s t-test revealed that the active group had significantly higher mean (p<0.02).

To further understand consumer psychological involvement and its impact on satisfaction, the stepwise regression analysis was conducted on all satisfaction items (items 11 to 24 and 28). That is every satisfaction with dining item was correlated with every consumer psychological involvement dimension (attitude, opinion, belief, and behavioral intention). Such analysis was separated
according to consumer orientation a) active, b) passive. Further, all subjects (active and passive combined) were analyzed. Only those satisfaction items which were significantly correlated with consumer psychological involvement (attitude, opinion, belief, and psychological involvement) are reported in a multiple regression equation. The following formula represents the stepwise regression analysis model:

\[ Y = b_0 + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 \]

Where,  
- \( Y \) = consumer satisfaction  
- \( b_0 \) = parameter estimate  
- \( b_1 x_1 \) = consumer attitude items  
- \( b_2 x_2 \) = consumer opinion items  
- \( b_3 x_3 \) = consumer belief items  
- \( b_4 x_4 \) = consumer behavioral intention items  
- \( b_5 x_5 \) = active consumer items  
- \( b_6 x_6 \) = passive consumer items

**ACTIVE GROUP**

In the equation, the variable included was the step higher than the step in which the C(P) value was higher than the step number.

Item 12: The satisfaction with decor/general appearance of a dining facility was shown to be significantly associated with seven consumer psychological involvement items. No attribute items, and none of the other satisfaction items were included (Table 8).
### TABLE 8
Satisfaction with Restaurant Decor/Appearance and Consumer Psychological Involvement Items for Active Group

**Summary of Stepwise Procedure for Dependent Variable**

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Model $R^2$</th>
<th>C(P)</th>
<th>F</th>
<th>Prob&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OPIN7 Authenticity in Design, Music, Food, Service, and Personnel</td>
<td>0.0499</td>
<td>16.28</td>
<td>4.62</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>BEL16 Flexible Hours of Operation</td>
<td>0.0811</td>
<td>12.42</td>
<td>3.71</td>
<td>0.05</td>
</tr>
<tr>
<td>3</td>
<td>OPIN10 Competency in Food Production/Sanitation</td>
<td>0.0931</td>
<td>12.16</td>
<td>5.20</td>
<td>0.02</td>
</tr>
<tr>
<td>4</td>
<td>OPIN8 Appropriate Selection of Local Dishes</td>
<td>0.1106</td>
<td>10.88</td>
<td>8.32</td>
<td>0.04</td>
</tr>
<tr>
<td>5</td>
<td>OPIN11 Availability of Ethnic Restaurants</td>
<td>0.1273</td>
<td>9.75</td>
<td>3.86</td>
<td>0.05</td>
</tr>
<tr>
<td>6</td>
<td>OPIN12 Food &amp; Beverage Prices</td>
<td>0.1459</td>
<td>8.25</td>
<td>6.47</td>
<td>0.01</td>
</tr>
<tr>
<td>7</td>
<td>BEL19 Ethnic Restaurants Are Good Places to Eat At</td>
<td>0.1635</td>
<td>6.9679</td>
<td>3.31</td>
<td>0.07</td>
</tr>
</tbody>
</table>

**Equation:**

$$\text{SATIS12} = 3 + 0.17(\text{OPIN7}) - 0.15(\text{OPIN8}) + 0.20(\text{OPIN10}) - 0.25(\text{OPIN11}) + 0.16(\text{OPIN12}) + 0.17(\text{BEL16}) + 0.14(\text{BEL19}).$$

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for OPIN7, OPIN10, OPIN12, BEL16, indicate that the more positive consumers' opinion and belief were, the more consumers were satisfied with the decor. The more consumers' belief BEL16
and BEL19 were positive, the more likely they were satisfied with the decor. The more negative consumers' opinion were OPIN8, OPIN11, the more they were satisfied with the decor.

Item 13: The satisfaction with taste of food was shown to be significantly associated with one consumer psychological involvement item (Table 9).

| TABLE 9 |
| SATISFACTION WITH FOOD TASTE AND CONSUMER PSYCHOLOGICAL INVOLVEMENT FOR ACTIVE GROUP |

| SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION WITH TASTE OF FOOD |

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ATT4</td>
<td>0.0479</td>
<td>0.22</td>
<td>8.24</td>
</tr>
</tbody>
</table>

Equation:
SATIS13 = 4 + 0.22(ATT4).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for ATT4 indicate that the more positive consumers' attitude were, the more consumers were satisfied with the taste of food.
Item 17: The satisfaction with availability of nutritional information in ethnic restaurants shown to be significantly associated with three consumer psychological involvement items (Table 10).

| TABLE 10 |
| SATISFACTION WITH THE AVAILABILITY OF NUTRITIONAL INFORMATION AND CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR ACTIVE GROUP |

| SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION WITH AVAILABILITY OF NUTRITIONAL INFORMATION OF FOOD |

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$R^2$</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>1</td>
<td>BEL21</td>
<td>0.0890</td>
<td>10.49</td>
<td>12.11</td>
</tr>
<tr>
<td>2</td>
<td>ATT2</td>
<td>0.1254</td>
<td>5.55</td>
<td>7.14</td>
</tr>
<tr>
<td>3</td>
<td>OPIN8</td>
<td>0.1504</td>
<td>2.84</td>
<td>4.75</td>
</tr>
</tbody>
</table>

Equation:

$$SATIS17 = 3 + 0.21(ATT2) - 0.20(OPIN8) + 0.32(BEL21).$$

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for ATT2 indicate that the more positive consumers' attitude were, the more consumers were satisfied with the availability of nutritional information. The more positive consumers' belief were BEL16, the more likely they were satisfied with
the availability of nutritional information. The more negative consumers' opinion OPIN8 were, the more they were satisfied with the availability of nutritional information.

Item 18: The satisfaction with portion size of food served in ethnic restaurants was shown to be significantly associated with one consumer psychological involvement item (Table 11).

<table>
<thead>
<tr>
<th>TABLE 11</th>
<th>SATISFACTION WITH PORTION SIZE AND CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR ACTIVE GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY OF STEPWISE PROCEDURE OR DEPENDENT VARIABLE</td>
<td>SATISFACTION WITH PORTION SIZE</td>
</tr>
<tr>
<td>STEP</td>
<td>VARIABLE</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>BEL17</td>
</tr>
</tbody>
</table>

Equation:
SATIS8 = 5 + 0.15(BEL17).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for BEL17 indicates that the more positive consumers' belief were, the more likely they were satisfied with portion size.

Item 20: The satisfaction with speed of service in ethnic restaurants was shown to be significantly associated with one consumer psychological involvement item (Table 12).
TABLE 12
Satisfaction with Speed of Service and Consumer Psychological Involvement Items for Active Group

Summary of Stepwise Procedure or Dependent Variable
Satisfaction with Speed of Service

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL $r^2$</th>
<th>C(P)</th>
<th>COEFFICIENT* F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BINT24 ETHNIC ENTREPRENEUR</td>
<td>0.0804</td>
<td>2.35</td>
<td>10.6</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Equation:

SATIS20 = 4 + 0.22(BINT24).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for BINT24 indicate that the more positive consumers' behavioral intention were, the more likely they were satisfied with the speed of service.

Item 21: Satisfaction with employee appearance in an ethnic restaurant was shown to be significantly associated with one consumer psychological involvement item (Table 13).
TABLE 13
SATISFACTION WITH EMPLOYEE APPEARANCE AND CONSUMER
PSYCHOLOGICAL INVOLVEMENT ITEMS FOR ACTIVE GROUP

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL $r^2$</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BINT24 ETHNIC ENTREPRENEUR APPRECIATE YOUR PATRONAGE</td>
<td>0.0616</td>
<td>1.97</td>
<td>10.6 0.01</td>
</tr>
</tbody>
</table>

Equation:
SATIS2 = 4 + 0.18(BINT24).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for BINT24 indicates that the more positive consumers’ behavioral intention were, the more likely they were satisfied with employee appearance.

Item 28: The overall rating of satisfaction with dining experience was shown to be significantly associated with one consumer psychological involvement item (Table 14).


**TABLE 14**

SATISFACTION WITH OVERALL DINING EXPERIENCE AND CONSUMER
PSYCHOLOGICAL INVOLVEMENT ITEMS FOR ACTIVE GROUP

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL $r^2$</th>
<th>C(P)</th>
<th>(F)</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BEL15 HIGH LEVEL OF PROFESSIONALISM</td>
<td>0.0865</td>
<td>0.56</td>
<td>15.43</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Equation:
SATIS28 = 4 + 0.21(BEL16).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for BEL16 indicates that the more positive consumers' belief were, the more likely they were satisfied with the overall dining experience.

**PASSIVE GROUP**

Item 12: For the passive consumer, satisfaction with decor/general appearance of a dining facility was shown to be significantly associated with two consumer psychological involvement items (Table 15).
### TABLE 15
Satisfaction with Restaurant Decor/Appearance and Consumer Psychological Involvement Items for Passive Group

**Summary of Stepwise Procedure or Dependent Variable**

**Satisfaction with Decor/General Appearance**

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL ( R^2 )</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BEL17</td>
<td>0.0599</td>
<td>2.28</td>
<td>3.67</td>
</tr>
<tr>
<td></td>
<td>REASONABLE PRICES</td>
<td></td>
<td></td>
<td>0.05</td>
</tr>
<tr>
<td>2</td>
<td>ATT1</td>
<td>0.1056</td>
<td>1.00</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td>ATTITUDE TOWARD FOREIGN COUNTRY ON DECISION TO PATRONIZE ETHNIC RESTAURANTS</td>
<td></td>
<td></td>
<td>0.07</td>
</tr>
</tbody>
</table>

Equation:
SATIS12 = 5 + 0.23(ATT1) - 0.30(BEL17).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for ATT1 indicate that the more positive consumers' attitude were, the more they were satisfied with the decor. The more negative consumers' belief were BEL17, the more likely they were satisfied with the decor.

**Item 16:** For passive consumer, The satisfaction with service of food at proper temperature was shown to significantly associated with two consumer psychological involvement items (Table 16).
<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>COEFFICIENT* F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OPIN11 AVAILABILITY OF ETHNIC RESTAURANTS</td>
<td>0.0688</td>
<td>7.35</td>
<td>12.60</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>ATT2 ATTITUDE TOWARD ETHNIC GROUP ON SATISFACTION IN THAT CUISINE</td>
<td>0.1777</td>
<td>1.47</td>
<td>7.80</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Equation: 
SATIS16 = 6 - 0.41(ATT2) + 0.59(OPIN11).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for OPIN11 indicate that the more positive consumers' opinion were, the more they were satisfied with the service of food at proper temperature. The more negative consumers' attitude were ATT2, the more they were satisfied with the service of food at proper temperature.

Item 17: The satisfaction with availability of nutritional information was shown to be significantly associated with two consumer psychological involvement items (Table 17).
TABLE 17
SATISFACTION WITH AVAILABILITY OF NUTRITIONAL INFORMATION
AND CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR
PASSIVE GROUP

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OPIN11 AVAILABILITY OF ETHNIC RESTAURANTS</td>
<td>0.1083</td>
<td>2.27</td>
<td>7.29</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>BINT24 AUTHENTICITY DISPLAYED IN DESIGN, MUSIC, FOOD, SERVICE, AND PERSONNEL</td>
<td>0.1653</td>
<td>0.29</td>
<td>4.48</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>

Equation:
SATIS17 = 1 + 0.35(OPIN11) + 0.24(BINT24).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for OPIN11 indicate that the more positive consumers' opinion were, the more likely they were satisfied with the availability of nutritional information. The more positive consumer behavioral intention were BINT24, the more likely consumer were satisfied with the availability of nutritional information.

Item 19: Satisfaction with restaurants' cleanliness was shown to be significantly associated with one consumer psychological involvement item (Table 18).
TABLE 18
SATISFACTION WITH RESTAURANT CLEANLINESS AND CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR PASSIVE CONSUMER

SUMMARY OF STEPWISE PROCEDURE OF DEPENDENT VARIABLE SATISFACTION WITH RESTAURANT CLEANLINESS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL 1</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BEL21  Availability of appropriate selection of local dishes</td>
<td>0.165</td>
<td>3.77</td>
<td>12.28</td>
</tr>
</tbody>
</table>

Equation:
SATIS19 = 8 - 0.46(BEL21).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for BEL21 indicate that the more negative consumers' belief were, the more likely they were satisfied with restaurant cleanliness.

Item 23: Satisfaction with management responsiveness to consumer needs/problems was shown to be significantly associated with three consumer psychological involvement items (Table 19).
TABLE 19
SATISFACTION WITH MANAGEMENT RESPONSIVENESS AND CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR THE PASSIVE GROUP

SUMMARY OF STEPWISE PROCEDURE OF DEPENDENT VARIABLE SATISFACTION WITH MANAGEMENT RESPONSIVENESS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>COEFFICIENT* F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OPIN7</td>
<td>AUTHENTICITY DISPLAYED IN DESIGN, MUSIC, FOOD, SERVICE AND PERSONNEL 0.1152</td>
<td>2.41</td>
<td>3.99</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>OPIN11</td>
<td>AVAILABILITY OF ETHNIC RESTAURANTS 0.0626</td>
<td>4.00</td>
<td>6.00</td>
<td>0.05</td>
</tr>
<tr>
<td>3</td>
<td>BEL21</td>
<td>DINING IN AN ETHNIC RESTAURANT WITHIN THE NEXT FEW WEEKS 0.1567</td>
<td>1.57</td>
<td>2.95</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Equation: \( SATIS23 = 3 + 0.23(\text{OPIN11}) + 0.052(\text{OPIN7}) + 0.04(\text{BEL21}) \).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for OPIN11, OPIN7 indicate that the more positive consumers’ opinion were, the more they were satisfied with management responsiveness. The more positive consumers’ belief were BEL21, the more likely they were satisfied with management responsiveness.

Item 24: Satisfaction with restaurants’ hours of operation was shown to be significantly associated with four consumer psychological involvement items (Table 20).
**TABLE 20**
SATISFACTION WITH RESTAURANT HOURS OF OPERATION AND CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR PASSIVE GROUP

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>R²</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>1</td>
<td>OPIN8  APPROPRIATE SELECTION OF LOCAL DISHES</td>
<td>0.720</td>
<td>7.22</td>
<td>4.54</td>
</tr>
<tr>
<td>2</td>
<td>OPIN11 AVAILABILITY OF ETHNIC RESTAURANTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>BEL20 AUTHENTICITY DISPLAYED IN DESIGN, MUSIC,</td>
<td>0.1088</td>
<td>6.56</td>
<td>5.84</td>
</tr>
<tr>
<td></td>
<td>FOOD, SERVICE AND PERSONNEL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>BINT23 DINING IN AN ETHNIC RESTAURANT WITHIN</td>
<td>0.1618</td>
<td>4.71</td>
<td>3.42</td>
</tr>
<tr>
<td></td>
<td>THE NEXT FEW MONTHS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Equation:
SATIS24 = 4 + 0.26(OPIN8) + 0.35(OPIN11) - 0.25(BEL20) - 0.19 (BINT23).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for OPIN8 and OPIN11 indicate that the more positive consumers' opinion were, the more they were satisfied with restaurants' hours of operation. The more negative consumers' belief and behavioral intention were BEL20 and BINT 23, the more likely they were satisfied with restaurants' hours of operation.
ALL SUBJECTS ACTIVE/PASSIVE

Item 11: The satisfaction with availability of popular food was shown to be significantly associated with one consumer psychological involvement item (Table 21).

| TABLE 21 |
| SATISFACTION WITH AVAILABILITY OF POPULAR FOODS |
| CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS |
| FOR ALL SUBJECTS |

<p>| SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION WITH AVAILABILITY OF POPULAR FOODS |</p>
<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$r^2$</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>1</td>
<td>BEL15</td>
<td>0.0928</td>
<td>1.25</td>
<td>21.99</td>
</tr>
</tbody>
</table>

Equation:
SATIS11 = 3 + 0.29(BEL15).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for BEL15 indicates that the more positive consumers' belief were, the more likely consumers were satisfied with employees high level of professionalism.

Item 12: The satisfaction with decor and general appearance of a dining facility was shown to be significantly associated with six consumer psychological involvement items and four consumer orientation items (Table 22).
TABLE 22
SATISFACTION WITH DECOR AND FACILITY APPEARANCE PREDICTED FROM CONSUMER PSYCHOLOGICAL INVOLVEMENT AND ORIENTATION ITEMS FOR ALL SUBJECTS

SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE
SATISFACTION WITH DECOR AND FACILITY APPEARANCE

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OPIN7 AUTHENTICITY DISPLAYED IN DESIGN, MUSIC, FOOD, SERVICE AND PERSONNEL</td>
<td>0.0410</td>
<td>31.20</td>
<td>11.14 0.01</td>
</tr>
<tr>
<td>2</td>
<td>ACT14 SAVING MONEY</td>
<td>0.0688</td>
<td>26.14</td>
<td>4.71 0.03</td>
</tr>
<tr>
<td>3</td>
<td>PASS18 NO INTEREST IN BARGAINS</td>
<td>0.0964</td>
<td>21.10</td>
<td>13.48 0.01</td>
</tr>
<tr>
<td>4</td>
<td>PASS28 NOT GETTING UPSET OVER A MEAL</td>
<td>0.1169</td>
<td>17.89</td>
<td>4.51 0.03</td>
</tr>
<tr>
<td>5</td>
<td>BEL18 ABILITY TO DESCRIBE MENU ITEMS</td>
<td>0.1291</td>
<td>16.77</td>
<td>4.25 0.04</td>
</tr>
<tr>
<td>6</td>
<td>BEL16 HOURS OF OPERATION</td>
<td>0.1459</td>
<td>14.49</td>
<td>2.93 0.08</td>
</tr>
<tr>
<td>7</td>
<td>BINT22 DINING IN AN ETHNIC RESTAURANT WITHIN THE NEXT FEW WEEKS</td>
<td>0.1570</td>
<td>13.68</td>
<td>10.93 0.01</td>
</tr>
<tr>
<td>8</td>
<td>BINT23 DINING IN AN ETHNIC RESTAURANT WITHIN THE NEXT FEW MONTHS</td>
<td>0.1745</td>
<td>11.20</td>
<td>6.30 0.01</td>
</tr>
<tr>
<td>9</td>
<td>BEL21 APPROPRIATE SELECTION OF LOCAL DISHES</td>
<td>0.1855</td>
<td>10.42</td>
<td>3.45 0.06</td>
</tr>
<tr>
<td>10</td>
<td>PASS22 REFERENCE WILL NOT HELP IN DINING DECISION</td>
<td>0.1974</td>
<td>9.39</td>
<td>3.06 0.08</td>
</tr>
</tbody>
</table>

Equation:
SATIS12 = 4 + 0.12(ACT14) - 0.18(PASS18) + 0.08(PASS22) + 0.10(PASS28) + 0.20(OPIN7) + 0.11(BEL16) - 0.14(BEL18) - 0.145(BEL21) + 0.36(BINT22) - 0.24(BINT23).
* Raw score coefficient and constant are listed in the above equation.
In this equation the regression coefficients for ACT14, PASS22, PASS28, OPIN7, BEL16, and BINT22 indicate that the more positive consumers' orientation, opinion, belief, and behavioral intention were, the more they were satisfied with the decor. The more negative consumers' orientation, belief, and behavioral intention were PASS18, BEL18, BEL21, and BINT23, the more they were satisfied with the decor.

Item 13: Satisfaction with the taste of food was shown to be significantly associated with one consumer psychological involvement item and two consumer orientation items (Table 23).
TABLE 23
SATISFACTION WITH FOOD TASTE AND CONSUMER PSYCHOLOGICAL INVOLVEMENT AND ORIENTATION ITEMS FOR ALL SUBJECTS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>COEFFICIENT* F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PASS29 NOT GETTING UPSET OVER A MEAL</td>
<td>0.0427</td>
<td>13.73</td>
<td>19.05</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>BEL14 ETHNIC STAFF HAVE A CARING MANNER</td>
<td>0.0906</td>
<td>4.38</td>
<td>13.54</td>
<td>0.01</td>
</tr>
<tr>
<td>3</td>
<td>PASS23 NOT GETTING UPSET OVER FOOD ALL RESTAURANTS ARE ALIKE</td>
<td>0.1103</td>
<td>1.72</td>
<td>4.71</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Equation: SATIS13 = 4 + 0.12(PASS23) - 0.24(PASS29) + 0.26(BEL14).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for PASS23, and BEL14 indicate that the more positive consumers' orientation and belief were, the more they were satisfied with the taste of food. were positive. The more negative consumers' orientation were PASS29, the more they were satisfied with the taste of food.

Item 14: The satisfaction with food eye appeal factor was shown to be significantly associated with one consumers psychological involvement item (Table 24).
TABLE 24
SATISFACTION WITH FOOD EYE APPEAL AND CONSUMER ORIENTATION ITEM FOR ALL SUBJECTS

SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION WITH FOOD EYE APPEAL

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PASS16 NO INTEREST IN SHOPPING FOR A PLACE TO EAT</td>
<td>0.0504</td>
<td>4.71</td>
<td>11.41</td>
</tr>
</tbody>
</table>

Equation:
SATIS14 = 6 - 0.16(PASS16).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for PASS16 indicates that the more negative consumers' psychological involvement were, the more consumers were satisfied with food eye appeal.

Item 15: The Satisfaction the serving of cold menu item at a cold temperature was shown to be significantly associated with one consumer psychological involvement item and one consumer involvement item (Table 25).
### Table 25
Satisfaction with Serving of Cold Menu Items Cold and Consumer Psychological Involvement and Orientation Items for All Subjects

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Model $R^2$</th>
<th>C(P)</th>
<th>Coefficient*</th>
<th>F</th>
<th>Prob&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ATT2</td>
<td>0.0342</td>
<td>5.46</td>
<td>13.56</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PASS28</td>
<td>0.0640</td>
<td>1.72</td>
<td>6.81</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>

Equation:
SATIS15 = 6 + 0.14(PASS28) - 0.25(ATT2).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for PASS28 indicate that the more positive consumers' orientation were, the consumers were satisfied with serving cold menu items cold. The more negative consumers' attitude were ATT2, the consumers were satisfied with serving cold menu items cold.

Item 16: The satisfaction with serving of hot menu item at a hot temperature was shown to be significantly associated with one consumer psychological involvement item and one consumer orientation item (Table 26).
TABLE 26
SATISFACTION WITH SERVING OF HOT MENU ITEMS HOT AND
CONSUMER PSYCHOLOGICAL INVOLVEMENT AND ORIENTATION
ITEMS FOR ALL SUBJECTS

SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE
SATISFACTION WITH SERVING HOT MENU ITEMS HOT

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ATT2 ATTITUDE TOWARD ETHNIC GROUP ON SATISFACTION IN THAT CUISINE</td>
<td>0.0511</td>
<td>6.04</td>
<td>18.09</td>
</tr>
<tr>
<td>2</td>
<td>PASS24 CONSUMERISM ISSUES ARE IRRELEVANT TO ME</td>
<td>0.0852</td>
<td>0.17</td>
<td>7.98</td>
</tr>
</tbody>
</table>

Equation:
SATIS16 = 6 + 0.14(PASS24) - 0.25(ATT2).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for PASS24 indicate that the more positive consumers' orientation were, the more they were satisfied with serving hot menu items hot. The more negative consumers' attitude were ATT2, the more they were satisfied with serving hot menu items hot.

Item 17: The satisfaction with availability of nutritional information was shown to be significantly associated with two consumer psychological involvement items and two consumer orientation items (table 27).
TABLE 27
SATISFACTION WITH AVAILABILITY OF NUTRITIONAL INFORMATION
AND CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR ALL
SUBJECTS

SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE
SATISFACTION WITH AVAILABILITY OF NUTRITIONAL INFORMATION

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL $R^2$</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PASS29 NOT GETTING UPSET OVER FOOD ALL RESTAURANTS ARE ALIKE</td>
<td>0.1083</td>
<td>18.02</td>
<td>5.42</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>BEL16 FLEXIBLE HOURS OF OPERATION</td>
<td>0.1543</td>
<td>8.16</td>
<td>12.54</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>PASS24 CONSUMERISM ISSUES ARE IRRELEVANT TO ME</td>
<td>0.1809</td>
<td>3.30</td>
<td>6.33</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>OPIN8 APPROPRIATE SELECTION OF LOCAL DISHES</td>
<td>0.2013</td>
<td>0.04</td>
<td>5.39</td>
<td>0.02</td>
<td></td>
</tr>
</tbody>
</table>

Equation:
SATIS17 = $3 + 0.15($PASS24) + 0.14($PASS29) - 0.18($OPIN8) + 0.29 ($BEL16).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for PASS24, PASS29, and BEL16 indicate that the more positive consumers' orientation and belief were, the more they were satisfied with the availability of nutritional information. The more negative consumers' opinion were OPIN8, the more they were satisfied with the availability of nutritional information.
Item 18: The satisfaction with portion size of food served in ethnic restaurants was shown to be significantly associated with four two consumer orientation items (Table 28).

**TABLE 28**
Satisfaction with Portion Size and Consumer Orientation Items for All Subjects

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PASS16 NO INTEREST IN SHOPPING FOR A PLACE TO EAT</td>
<td>0.0622</td>
<td>18.28</td>
<td>28.35</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>PASS26 FLEXIBLE IN EATING ALL KINDS OF FOODS</td>
<td>0.1010</td>
<td>10.71</td>
<td>6.02</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ACT6 LOYAL CONSUMER</td>
<td>0.1332</td>
<td>4.75</td>
<td>7.70</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>ACT14 MONEY IS NOT A FACTOR WHEN SELECTING A RESTAURANT</td>
<td>0.1518</td>
<td>2.18</td>
<td>4.63</td>
<td>0.03</td>
<td></td>
</tr>
</tbody>
</table>

Equation:
SATIS18 = 5 + 0.12(ACT6) + 0.11(ACT14) - 0.27(PASS16) + 0.1065 (PASS26).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for ACT6, ACT14, and PASS26 indicate that the more positive consumers' orientation were, the more they were satisfied with portion size. The more negative consumers' orientation were PASS16, the more they were satisfied with portion size.
Item 19: Satisfaction with restaurant cleanliness was shown to be significantly associated with one consumer psychological involvement item (Table 29).

TABLE 29
SATISFACTION WITH RESTAURANT CLEANLINESS AND CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR ALL SUBJECTS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL r²</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ETHNIC STAFF HAVE CARING MANNER</td>
<td>0.0339</td>
<td>4.51</td>
<td>7.49</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>

Equation: SATIS19 = 4 + 0.18(BEL14).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for BEL14 indicates that the more positive consumers' belief were, the more they were satisfied with restaurant cleanliness.

Item 22: The satisfaction with courtesy of ethnic restaurant employees was shown to be significantly associated with two consumer orientation items (Table 30).
### TABLE 30
SATISFACTION WITH EMPLOYEE COURTESY AND CONSUMER ORIENTATION ITEMS FOR ALL SUBJECTS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACT9 FACT BASED DECISION</td>
<td>0.0523</td>
<td>9.46</td>
<td>11.18</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>ACT15 PRAISING ETHNIC RESTAURANT FOR HOURS</td>
<td>0.0902</td>
<td>2.61</td>
<td>8.86</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Equation:
SATIS22 = 3 + 0.22(ACT9) + 0.16(ACT15).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for ACT9 and ACT15 indicate that the more positive consumers’ orientation were, the more they were satisfied with employee courtesy.

Item 24: The satisfaction with hours of operation of an ethnic restaurant was shown to be significantly associated with one consumer orientation item (Table 31).
TABLE 31
SATISFACTION WITH HOURS OF OPERATION OF AN ETHNIC RESTAURANT AND CONSUMER ORIENTATION FOR ALL SUBJECTS

SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION WITH HOURS OF OPERATION OF ETHNIC RESTAURANTS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACT8 CONSUMER LOYALTY TOWARD ETHNIC RESTAURANTS</td>
<td>0.1137</td>
<td>6.24</td>
<td>27.42 0.01</td>
</tr>
</tbody>
</table>

Equation:
SATIS24 = 4 + 0.28(ACT8).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for ACT8 indicate that the more positive consumers' orientation were, the more they were satisfied with hours of operation.

Item 25: The satisfaction with overall rating of service of an ethnic restaurant was shown to be significantly associated with one consumer orientation item (Table 32).
### TABLE 32
SATISFACTION WITH OVERALL SERVICE AND CONSUMER ORIENTATION ITEMS FOR ALL SUBJECTS

**SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION WITH THE OVERALL IMPACT OF SERVICE**

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL r^2</th>
<th>C(P)</th>
<th>COEFFICIENT* F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACT15 PRAISING ETHNIC RESTAURANT FOR HOURS</td>
<td>0.560</td>
<td>4.70</td>
<td>12.64</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Equation:
SATIS25 = 4 + 0.1642(ACT15).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for ACT15 indicate that the more positive consumers' orientation were, the more they were satisfied with overall rating of service.

**Item 27**: The satisfaction with overall rating of dinner in an ethnic restaurant was shown to be significantly associated with one consumer orientation item (Table 33).
TABLE 33
SATISFACTION WITH OVERALL DINNER AND CONSUMER ORIENTATION ITEMS FOR ALL SUBJECTS

SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION WITH THE IMPACT OF OVERALL RATING OF DINNER

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL $r^2$</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACT15</td>
<td>PRAISING ETHNIC RESTAURANT FOR HOURS</td>
<td>0.0457</td>
<td>7.55</td>
</tr>
</tbody>
</table>

Equation:
SATIS27 = 5 + 0.15(ACT15).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for ACT15 indicates that the more positive consumers' orientation were, the more they were satisfied about the overall rating of dinner.

Item 28: The satisfaction with overall rating of dining experience in an ethnic restaurant was shown to be significantly associated with one consumer psychological involvement item (Table 34).
TABLE 34
SATISFACTION WITH OVERALL DINNING EXPERIENCE AND
CONSUMER PSYCHOLOGICAL INVOLVEMENT ITEMS FOR ALL SUBJECTS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL</th>
<th>C(P)</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ATT6 IT IS WISE TO PURCHASE ETHNIC FOODS</td>
<td>0.0282</td>
<td>1.02</td>
<td>6.12</td>
</tr>
</tbody>
</table>

Equation:
SATIS28 = 5 + 0.15(ATT6).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficient for ATT6 indicates that the more positive consumers' attitude were, the more they were satisfied with the overall dining experience.
II. EFFECT OF PSYCHOLOGICAL INVOLVEMENT AND RESTAURANT ATTRIBUTES ON OVERALL SATISFACTION WITH SERVICE, LUNCH, DINNER, AND DINING EXPERIENCE

To fully understand consumer behavior, and predict some of the unique factors that impact satisfaction, satisfaction items (25, 26, 27, and 28) were statistically analyzed with consumer psychological involvement, restaurant attributes, and satisfaction items 11-24. The stepwise regression procedure was employed to accurately determine the issues that affect consumer satisfaction. For each satisfaction item, a stepwise regression table is presented.

In this model, each of the following satisfaction items (satisfaction with service), (satisfaction with lunch), (satisfaction with dinner), and (overall satisfaction) served as the dependent variable. The independent variable was consumer psychological involvement, restaurant attributes, and satisfaction items 11-24.

Satisfaction item 25: The satisfaction with overall rating of service in ethnic restaurants was shown to be significantly associated with six satisfaction with dining items and one restaurant attribute item (Table 35).
TABLE 35
SATISFACTION WITH OVERALL RATING OF SERVICE AFFECTED BY
RESTAURANT ATTRIBUTE AND SATISFACTION WITH DINING ITEMS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SATIS24 HOURS OF OPERATION</td>
<td>0.4024</td>
<td>83.04</td>
<td>30.10</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>SATIS20 SPEED OF SERVICE</td>
<td>0.4831</td>
<td>43.5</td>
<td>11.58</td>
<td>0.01</td>
</tr>
<tr>
<td>3</td>
<td>SATIS11 AVAILABILITY OF POPULAR FOODS</td>
<td>0.5219</td>
<td>25.66</td>
<td>13.73</td>
<td>0.01</td>
</tr>
<tr>
<td>4</td>
<td>SATIS23 MANAGEMENT RESPONSIVENESS</td>
<td>0.5446</td>
<td>15.97</td>
<td>11.51</td>
<td>0.01</td>
</tr>
<tr>
<td>5</td>
<td>SATIS14 FOOD EYE APPEAL</td>
<td>0.5581</td>
<td>11.05</td>
<td>8.39</td>
<td>0.01</td>
</tr>
<tr>
<td>6</td>
<td>SATIS17 AVAILABILITY OF NUTRITIONAL INFORMATION RECOMMENDATION OF A FRIEND</td>
<td>0.5674</td>
<td>8.26</td>
<td>6.23</td>
<td>0.01</td>
</tr>
<tr>
<td>7</td>
<td>IMPORT1</td>
<td>0.5758</td>
<td>5.97</td>
<td>4.21</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Equation:
SATIS26 = 0.637 + 0.08(IMPORT1) + 0.15(SATIS11) + 0.12(SATIS14) - 0.08(SATIS17) + 0.17(SATIS20) + 0.17(SATIS23) + 0.27(SATIS24).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for IMPORT1, SATIS11, SATIS14, SATIS20, SATIS23, and SATIS24 indicates that the more positive consumers' satisfaction and restaurant attribute were, the more they were satisfied with the overall rating of service. The more negative consumers' satisfaction were SATIS17, the more they were satisfied with the overall rating of service. The model for this item is
the overall rating of service. The model for this item is provided in Appendix 5. Similarly, figure 3 and 3.1 offer an illustration of the model.
Figure 3

Satisfaction With Service

Restaurant Attributes

$R^2 = 0.57$, $p = 0.001$

Satisfaction With Service

Involvement

Consumer Psychological

$R = 0.06$, $p = 0.05$
Figure 3.1

Satisfaction with Service

Restaurant Attributes
Involvement and Consumer Psychological

\[ r^2 = 0.57, p > 0.01 \]
Satisfaction item 26: The satisfaction with overall rating for lunch in an ethnic restaurant was shown to be significantly associated with four consumer psychological involvement items and four restaurant attribute items (Table 36).

**TABLE 36**
SATISFACTION WITH OVERALL RATING OF LUNCH AND CONSUMER PSYCHOLOGICAL INVOLVEMENT AND RESTAURANT ATTRIBUTE ITEMS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SATIS14</td>
<td>FOOD EYE APPEAL</td>
<td>0.5705</td>
<td>153.87</td>
<td>4.35</td>
</tr>
<tr>
<td>2</td>
<td>SATIS24</td>
<td>HOURS OF OPERATION</td>
<td>0.6960</td>
<td>95.13</td>
<td>28.67</td>
</tr>
<tr>
<td>4</td>
<td>IMPORT7</td>
<td>RESTAURANT REPUTATION</td>
<td>0.7511</td>
<td>72.48</td>
<td>7.52</td>
</tr>
<tr>
<td>5</td>
<td>OPIN10</td>
<td>COMPETENCY IN FOOD PRODUCTION/ SANITATION</td>
<td>0.7714</td>
<td>64.64</td>
<td>4.50</td>
</tr>
<tr>
<td>7</td>
<td>SATIS20</td>
<td>SPEED OF SERVICE</td>
<td>0.7824</td>
<td>59.31</td>
<td>4.17</td>
</tr>
<tr>
<td>8</td>
<td>BEL15</td>
<td>DISPLAY OF HIGH LEVEL OF PROFESSIONALISM</td>
<td>0.7924</td>
<td>56.47</td>
<td>5.36</td>
</tr>
</tbody>
</table>

Equation:
SATIS26 = 2 - 0.23(OPIN10) + 0.16(BEL15) + 0.16(IMPORT7) + 0.18(SATIS14) + 0.14(SATIS20) + 0.29(SATIS24).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for BEL15, IMPORT7, SATIS14, SATIS20, and SATIS24 indicate that more positive consumers' belief, restaurant attribute, and
satisfaction with dining were, the more consumers were satisfied with the overall rating of lunch. The more negative consumers’ opinion were OPIN10, the more they were satisfied with the overall rating of lunch. The model for this item is provided in Appendix 6. Similarly, figure 4 and 4.1 offer an illustration of the model.
Figure 4.1

Restaurant Attributes
Involvement and
Consumer Psychological
Satisfaction with Lunch

\[ r^2 = 0.80, \ p > 0.01 \]
Satisfaction item 27: The satisfaction with overall rating for dinner in ethnic restaurants was shown to be significantly associated with one consumer psychological involvement item and four restaurant attribute items (Table 37).

**TABLE 37**
SATISFACTION WITH OVERALL RATING OF DINNER AND CONSUMER PSYCHOLOGICAL INVOLVEMENT AND RESTAURANT ATTRIBUTE ITEMS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SATIS28 OVERALL DINING EXPERIENCE</td>
<td>0.2049</td>
<td>25.54</td>
<td>43.28</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>SATIS22 EMPLOYEES COURTESY</td>
<td>0.2709</td>
<td>11.63</td>
<td>15.13</td>
<td>0.01</td>
</tr>
<tr>
<td>3</td>
<td>SATIS24 HOURS OF OPERATION</td>
<td>0.2952</td>
<td>7.79</td>
<td>5.71</td>
<td>0.01</td>
</tr>
<tr>
<td>4</td>
<td>IMPORT10 RECOMMENDATION BY AN ETHNIC ACQUAINTANCE APPROPRIATE SELECTION OF LOCAL DISHES</td>
<td>0.3192</td>
<td>4.00</td>
<td>5.81</td>
<td>0.01</td>
</tr>
<tr>
<td>5</td>
<td>OPIN8</td>
<td>0.3340</td>
<td>2.43</td>
<td>3.65</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Equation:
SATIS27 = 3 - 0.10(OPIN8) - 0.13(IMPORT10) + 0.17(SATIS22) + 0.20(SATIS24) + 0.32(SATIS28).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for SATIS22, SATIS24, and SATIS28 indicate that the more positive consumers' satisfaction were, the more consumers
were satisfied with the overall rating of dinner. The more negative consumers' opinion and restaurant attributes were OPIN8 and IMPORT10, the more consumers were satisfied with the overall rating of dinner. The model for this item is provided in Appendix 7. Similarly, figure 5 and 5.1 offer an illustration of the model.
Figure 5
Satisfaction with Dinner

- Restaurant Attributes
- Consumer Psychological Involvement

$F = 0.26, p < 0.001$
$\chi^2 = 0.03, p > 0.05$

Satisfaction with Dinner
Figure 5.1: Satisfaction with Dinner

Satisfaction with Dinner

Restaurant Attributes

$R^2 = 0.33$, $P > 0.01$

Consumer Psychological Involvement and
Satisfaction item 28: The satisfaction with overall rating for dining experience in ethnic restaurants was found to be significantly associated with one restaurant attribute item and three satisfaction with dining items (Table 38).

**TABLE 38**
SATISFACTION WITH OVERALL RATING OF DINING EXPERIENCE AND RESTAURANT ATTRIBUTE AND SATISFACTION WITH DINING ITEMS

---

**SUMMARY OF STEPWISE PROCEDURE FOR DEPENDENT VARIABLE SATISFACTION WITH THE IMPACT OF OVERALL RATING OF DINNER**

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>C(P)</th>
<th>F</th>
<th>PROB&gt;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SATIS20 SPEED OF SERVICE</td>
<td>0.2837</td>
<td>34.46</td>
<td>89.49</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>SATIS13 TASTE OF FOOD</td>
<td>0.3382</td>
<td>16.78</td>
<td>18.54</td>
<td>0.01</td>
</tr>
<tr>
<td>3</td>
<td>IMPORT7 HOURS OF OPERATION</td>
<td>0.3726</td>
<td>6.37</td>
<td>12.27</td>
<td>0.01</td>
</tr>
<tr>
<td>4</td>
<td>SATIS11 AVAILABILITY OF POPULAR FOODS</td>
<td>0.3870</td>
<td>3.19</td>
<td>5.22</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Equation:
SATIS28 = 1 + 0.18(IMPORT7) + 0.13(SATIS11) + 0.19(SATIS13) + 0.31(SATIS20).

* Raw score coefficient and constant are listed in the above equation.

The coefficients for IMPORT7, SATIS11, SATIS13, and SATIS20 indicate that the more positive restaurants’ attribute and consumers’ satisfaction with dining items were, the more consumers were satisfied with overall rating of dining experience. This item’s model is provided in Appendix 8. Similarly, figure 6 and 6.1 offer the model’s illustration.

120
FIGURE 6
Satisfaction with Dining Experience

Restaurant Attributes

Consumer Psychological Involvement

$R^2 = 0.39, P < 0.05$

Satisfaction with Dining
Figure 6.1: Satisfaction with Dining Experience

$r^2 = 0.39, P < 0.01$

Consumer Psychological Involvement And Restaurant Attributes

Satisfaction with Dining
III. FACTORS AFFECTING FUTURE PURCHASE DECISIONS (RESTAURANT VISITATIONS)

To further understand consumer behavior, and unlock the mystery surrounding future visitations, the stepwise regression procedure was administered to determine the impact of consumer psychological involvement, overall dining experience, restaurant attributes, and satisfaction with dining items on consumer future visitations (behavioral intention items 22 and 23.

Behavioral intention item 22 indicates consumer future behavior (dining in an ethnic restaurant within the next few weeks). In this model (Appendix 9), behavioral intention items 22 and 23 served as the dependent variables. Consumer psychological involvement (attitude, opinion and belief), restaurant attribute and consumer satisfaction with dining served as the independent variable. Such behavior was shown to be significantly associated only with consumer psychological involvement Figure 7 and Table 39.
### TABLE 39
BEHAVIORAL INTENTION OF DINING IN AN ETHNIC RESTAURANT
WITHIN THE NEXT FEW WEEKS RELATED TO CONSUMER PSYCHOLOGICAL
IN卷VOLVEMENT ITEMS

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BEL19 ETHNIC RESTAURANTS ARE GOOD PLACES TO EAT AT</td>
<td>0.3372</td>
<td>C(P) 78.0 F 11.396 Prob&gt;F 0.01</td>
</tr>
<tr>
<td>2</td>
<td>ATT5 IT IS WISE TO PATRONIZE ETHNIC RESTAURANTS</td>
<td>0.4125</td>
<td>45.67 10.80 0.01</td>
</tr>
<tr>
<td>3</td>
<td>BEL21 APPROPRIATE SELECTION OF LOCAL DISHES</td>
<td>0.4607</td>
<td>25.71 20.42 0.01</td>
</tr>
<tr>
<td>4</td>
<td>ATT2 ATTITUDE TOWARD ETHNIC GROUP ON SATISFACTION IN THAT CUISINE</td>
<td>0.4726</td>
<td>22.27 6.92 0.01</td>
</tr>
<tr>
<td>5</td>
<td>ATT3 POSITIVE ATTITUDE TOWARD ETHNIC RESTAURANTS</td>
<td>0.4853</td>
<td>18.53 3.76 0.05</td>
</tr>
<tr>
<td>6</td>
<td>BEL17 REASONABLE FOOD PRICES</td>
<td>0.04935</td>
<td>16.76 9.39 0.01</td>
</tr>
<tr>
<td>7</td>
<td>BEL20 AUTHENTICITY IN DESIGN, MUSIC, FOOD, SERVICE, AND PERSONNEL</td>
<td>0.5032</td>
<td>14.35 4.50 0.03</td>
</tr>
<tr>
<td>8</td>
<td>BEL18 ABILITY TO DESCRIBE MENU ITEMS</td>
<td>0.5141</td>
<td>11.39 6.19 0.01</td>
</tr>
<tr>
<td>9</td>
<td>OPIN10 COMPETENCY IN FOOD PRODUCTION/SANITATION</td>
<td>0.5332</td>
<td>6.70 5.20 0.02</td>
</tr>
</tbody>
</table>

Equation:
\[ \text{BINT22} = -0.01 - 0.11(\text{ATT2}) + 0.14(\text{ATT3}) + 0.25(\text{ATT5}) + 0.13(\text{OPIN10}) + 0.23(\text{BEL17}) - 0.17(\text{BEL18}) + 0.25(\text{BEL19}) + 0.16(\text{BEL20}) + 0.26(\text{BEL21}). \]

* Raw score coefficient and constant are listed in the above equation.
Figure 2

Visitation

Restaurant Attributes

Future Visitation

Within Next Few Weeks

Overall Dining Experience

Psychological Involvement

R² = 0.05, P < 0.02

R² = 0.4, P > 0.01

R² = 0.01, P > 0.08

R² = 0.4, P > 0.01

R² = 0.04, P > 0.04, Negative C(p)
In table 39 equation, the regression coefficients for ATT3, ATT5, OPIN10, BEL17, BEL 19, BEL20, and BEL21 indicate that the more positive consumers' psychological involvement were, the more consumers were willing to dine in ethnic restaurant within the next few weeks. The more negative consumers' psychological involvement were ATT2, OPIN8, and BEL18, the more consumers were willing to dine in ethnic restaurant within the next few weeks.

Behavioral intention item 23, predicts future consumer behavior (dining in an ethnic restaurant within the next few months). Such behavior is shown to be significantly associated with four consumer psychological involvement items and one restaurant attribute item Figure 8 and Table 40.


TABLE 40

BEHAVIORAL INTENTION OF DINING IN AN ETHNIC RESTAURANT WITHIN THE NEXT FEW MONTHS RELATED TO CONSUMER PSYCHOLOGICAL INVOLVEMENT AND RESTAURANT ATTRIBUTES

SUMMARY OF STEPWISE PROCEDURE FOR DINING IN AN ETHNIC RESTAURANT WITHIN THE NEXT FEW MONTHS WITH THE IMPACT OF PSYCHOLOGICAL INVOLVEMENT, RESTAURANT ATTRIBUTES, AND SATISFACTION WITH DINING EXPERIENCE

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MODEL R²</th>
<th>COEFFICIENT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BEL19</td>
<td>0.2436</td>
<td>C(P) 42.26</td>
</tr>
<tr>
<td></td>
<td>ETHNIC RESTAURANTS ARE GOOD PLACES TO EAT AT</td>
<td></td>
<td>F 72.79</td>
</tr>
<tr>
<td>2</td>
<td>ATT4</td>
<td>0.3250</td>
<td>C(P) 15.60</td>
</tr>
<tr>
<td></td>
<td>POSITIVE ATTITUDE TOWARD ETHNIC FOODS</td>
<td></td>
<td>F 27.13</td>
</tr>
<tr>
<td>3</td>
<td>ATT2</td>
<td></td>
<td>C(P) 0.3387</td>
</tr>
<tr>
<td></td>
<td>ATTITUDE TOWARD ETHNIC GROUP ON SATISFACTION IN THAT CUISINE</td>
<td>12.81</td>
<td>4.60 0.05</td>
</tr>
<tr>
<td>4</td>
<td>BEL17</td>
<td>0.3522</td>
<td>C(P) 10.05</td>
</tr>
<tr>
<td></td>
<td>REASONABLE FOOD PRICES</td>
<td></td>
<td>F 4.65 0.05</td>
</tr>
<tr>
<td>5</td>
<td>IMPORT10</td>
<td></td>
<td>C(P) 0.3643</td>
</tr>
<tr>
<td></td>
<td>RECOMMENDATION BY ETHNIC FRIENDS</td>
<td>7.80</td>
<td>4.22 0.05</td>
</tr>
<tr>
<td>6</td>
<td>OPIN8</td>
<td>0.3747</td>
<td>C(P) 6.14</td>
</tr>
<tr>
<td></td>
<td>APPROPRIATE SELECTION OF LOCAL DISHES</td>
<td></td>
<td>F 3.67 0.05</td>
</tr>
</tbody>
</table>

Equation:
BINT23 = 4 -0.12(ATT2) + 0.38(ATT4) - 0.11(OPIN8) + 0.19(BEL17) + 0.37(BEL19) - 0.12(IMPORT10).

* Raw score coefficient and constant are listed in the above equation.

In this equation the regression coefficients for ATT4, BEL17, and BEL19 indicate the more positive consumers' psychological involvement were, the more consumers were willing to dine in ethnic restaurants within the next few months. The more negative consumers' psychological
involvement and restaurant attribute ATT2, OPIN8, and IMPORT10 were, the more consumers were willing to dine in ethnic restaurants within the next few months.
Visitation, Experience, and Restaurant Attributes on Consumer Future Experience, Psychological Involvement, Overall Dining Effect of Consumer Psychological Involvement, Overall Dining

Figure 8

Few Months Within Next Few Visitations

Restaurant Attributes

$F = 0.06', p < 0.02$, Negative C(p)

$F = 0.4', p < 0.01$

Overall Dining Experience

$F = 0.01', p < 0.01$

Psychological C(p)

$F = 0.35', p < 0.01$

Involvement Psychology
IV. EFFECT OF DEMOGRAPHICS ON CONSUMER SATISFACTION

The General Linear Model (GLM) procedure was conducted to determine the effect of consumer demographics and consumer orientation on satisfaction. Similarly, Tukey's test was conducted to determine in which group the significant differences between the means exist. Result of the model showed that only consumer orientation and age significantly affect satisfaction. The effect of consumer orientation on satisfaction has already been described in the first section of this chapter. Tukey's test showed that consumers who are under 19 years of age had significantly lower satisfaction as compared to all other age groups (age group 4: 93.6\(^a\); age group 5: 92.4\(^a\); age group 2: 89.3\(^a\); age group 3: 88.6\(^a\); age group 6: 88.6\(^a\) and age group 1: 71.0 \(^b\) out of a maximum of 112) dissimilar superscript indicates significant differences \(P<0.05\).

Similarly, the General Linear Model (GLM) procedure was conducted to determine the effect of consumer demographics and consumer orientation on restaurant attributes. Tukey's test was conducted to determine in which group the significant differences between the means exist. Results of the model showed that only consumer age significantly effect restaurant attributes as they impact satisfaction. Tukey's test showed that consumers who are 25 years of age and younger have significantly different satisfaction than the
other age groups (age group 6: 58.6\textsuperscript{a}, age group 4: 57.2\textsuperscript{a}, age group 3: 56.2\textsuperscript{a}, age group 5: 55.8\textsuperscript{a}, age group 2: 54.2\textsuperscript{b}, age group 1: 49.2\textsuperscript{b}) dissimilar superscript indicates significant differences at p<0.05.

**SUMMARY**

This chapter presented an analysis of consumers' satisfaction. Satisfaction was the independent variable which was used to examine the relationships among the variables being tested (consumer orientation and consumer psychological involvement). The statistical tests have determined that consumer orientation and psychological involvement (opinion, belief, and behavioral intention) have a significant effect on satisfaction. Whereas, the variable attitude in (consumer psychological involvement) did not have any significant affect on consumer satisfaction.

The objectives of this research have been answered through the previously presented descriptive and inferential statistical tests. A further discussion on the implications of this study's findings is presented in the next chapter.
CHAPTER FIVE

DISCUSSION

INTRODUCTION

The previous chapter presented the results of collected and analyzed data. This chapter will discuss the findings of this study, and integrate findings into the theoretical foundations on which this study is based upon. The study’s overall implications on foodservice researchers and practitioners are discussed.

Findings of the research hypothesis are stated below:

1. Consumer orientation was found to have a significant impact on satisfaction. That is, an active consumer is more likely to be satisfied than a passive consumer.

2. Both, consumer orientation, and consumer psychological involvement were found to have a significant impact on satisfaction. That is, the active consumer group (a person who has a positive opinion, belief, and/or behavioral intention) is more likely to be a satisfied consumer. Also, for the active consumer group, the psychological involvement variable (attitude), showed no significant affect on satisfaction; whereas, for the passive consumer group psychological involvement (attitude, opinion, belief, and behavioral intention) had no significant relationship with satisfaction.

132
3. Restaurant attributes were found to have a significant impact on consumer satisfaction. For example, menu prices, location, hours of operation, staff competency, and personality of the restaurateur were significantly associated with satisfaction.

**DEPENDENT VARIABLE**

The dependent variable in this model (Figure 4) was consumer satisfaction. The average satisfaction score ranged from (1 = very dissatisfied to 7 = very satisfied), with a mean score of 5.73. A 5.73 score or greater indicates that ethnic restaurant consumers were generally satisfied consumers. Such findings, along with others reported in the literature suggest that satisfaction in dining is almost certain. In studies conducted by Swan, Trawick, and Carroll (1980), the National Restaurant Association (1983), and Parkash and Lounsbury (1983), consumer satisfaction was determined in relation to expectations. That is, consumers who expect good food, speed and courteous service, and reasonable prices and receive what they expect, are usually satisfied consumers. Whereas, consumers who do not receive what they expect are usually dissatisfied.

However, to further understand consumer satisfaction with dining, the Cognitive Dissonance Theory, from which the confirmation/disconfirmation paradigm of consumer
satisfaction/dissatisfaction was adopted (Anderson, 1973). The Cognitive Dissonance Theory claims that dissonance is a state occurring whenever a consumer holds two cognitions which are inconsistent. The theory assumes that dissonance is unpleasant, so people try to reduce dissonance. That is, the theory hypothesizes that difference between performance and expectations will be reduced by the consumer who adjusts his/her perception of the product to be more consistent with his/her expectations. When dining in a restaurant, consumers undertake an economic risk with the expectation of material benefits on the purchase of an intangible experience. Related to the above theory, it can be speculated that a consumer would try to become satisfied with his/her purchase in order to justify his/her investment for an intangible return.

If one is to conclude that the adaptation of the Cognitive Dissonance Theory makes satisfaction a sure thing is totally wrong. Therefore, restaurant operators and foodservice researchers should further investigate this issue, in an attempt to find ways to reduce the Cognitive Dissonance Theory, while predicting with greater certainty issues that satisfy consumers. Only with further research using other foodservice settings, could the previously mentioned high satisfaction phenomenon be explained.
HYPOTHESES DISCUSSION

This study hypothesized that consumer satisfaction is a function of: 1) Consumer orientation, and 2) consumer psychological involvement. This study’s findings support the idea that individual differences among consumer orientation (active/passive) with respect to the satisfaction in a dining facility do exist. Specifically, some consumers (active) perceive dining as more involving process than the (passive) consumers.

The data also supports the prediction that consumer’s orientation impact satisfaction differently. Active consumers who perceive dining to be a more involving activity, were more satisfied than the passive consumers who perceive dining as a less involving activity. Therefore, active consumers were more likely to be satisfied than passive ones.

Through data analyses, it was found that both consumer orientation and psychological involvement have significantly affected consumer satisfaction. However, when consumer psychological involvement (attitude, opinion, belief, and behavioral intention) were evaluated within each consumer orientation (active/passive), it was found that only in the active consumer was psychological involvement significantly related to that person’s satisfaction.
With regard to consumer orientation as related to satisfaction, this study supports WestBrook and Fornell’s (1979) finding. Given a homogeneous product, systematic differences in the levels of consumer satisfaction exist. Similarly, in evaluating consumer psychological involvement, findings of this study supports existing involvement literature (opinion, belief, and behavioral intention) as they impact satisfaction. Correlation analysis findings revealed that consumer’s opinion \( (r = 0.17, p < 0.04) \), belief \( (r = 0.28, p < 0.01) \), and behavioral intention \( (r = 0.19, p < 0.02) \) significantly affected satisfaction. The \( r^2 \) value for opinion (.029), belief (.078), and behavioral intention (.036) indicate less than 10\% of the variance of consumer satisfaction score is explained by these variables.

**Satisfaction and Opinion**

MacStravic (1987) and Webster (1988) offered an analysis of consumers opinion when selecting health care providers. Results of their studies reflect consumers’ subjective opinions about providers, not objective facts. Similarly, findings of this study support the above researchers position. Consumer opinion of ethnic restaurants was shown to significantly affect satisfaction. From the sign of the regression coefficient, one would believe that individuals who held positive opinion about
ethnic restaurant, ethnic food, and ethnic individuals would be more satisfied than individuals who held negative opinion.

Satisfaction and Beliefs

Krugman (1965), Rothschild and Ray (1974), WestBrook and Fornell (1979), Kassarjian (1981), and Slama (1984) found that involvement creates a number of connections, or personal references that consumers spontaneously make between their own lives and the stimulus. Krugman explained that under no involvement the repeated viewing of an advertisement results in the absence of perceptual defenses, the shifting of attributes which are seen as salient, and the changing of an attitude only after behavioral completion solidifies the saliency shifts (satisfaction). Similarly, findings of this study support the above researchers preposition. Consumer beliefs about ethnic restaurants were shown to significantly affect satisfaction. From the sign of the regression coefficient, one would believe that individuals who held positive beliefs about ethnic restaurant, ethnic food, and ethnic individuals would be more satisfied than individuals who held negative beliefs.
Satisfaction and Behavioral Intention

Nolan and Swan (1985) found a positive relationship between consumer satisfaction and the frequency of visiting a restaurant. Satisfied consumers were found to have a higher frequency of revisiting a restaurant than non-satisfied ones. Such behavior indicates that repeat consumers are satisfied consumers whereas the non-repeat consumers are dissatisfied consumers. Findings of this study support Nolan and Swan’s (1984) conclusion.

Consumers’ behavioral intentions toward ethnic restaurants were shown to be significantly related to satisfaction. From the sign of the regression coefficient, one would believe that individuals who held positive behavioral intentions toward ethnic restaurant, showed more interest in revisiting the restaurant than the consumers who held negative behavioral intention.

Satisfaction and Attitude

Findings revealed that the psychological involvement attitude ($r = 0.12$, NS) had no significant effect on satisfaction. Such finding refute existing literature. In the psychological involvement literature, it has been constantly shown that a consumer’s satisfaction is affected by that person’s attitude or perception of the product.
Sereno (1968), Bowen and Chaffee (1974), Petty and Cacioppo (1980), and Parameswaran & Spinelli (1984) stated that a consumer's attitude appears to affect that person's satisfaction. Consumers who are highly involved with a stimulus, are less likely to be persuaded to change their attitudes with respect to that stimulus than consumers who are not highly involved with the stimulus. Contrary to existing literature, in this study, consumer attitude was shown not to have any significant effect on satisfaction. Such findings are attributed to the following factors:

1. When consumers were asked if their attitude toward a foreign country impacted their decision to visit an ethnic restaurant, 14% affirmed the above statement and 51% were undecided. A total of 65% of the consumers unequivocally reported that their attitude toward a foreign country does impact their decision on patronizing an ethnic restaurant. For example, during the Tianamen Square crisis in China, metropolitan DC area Chinese restaurant suffered loss of business due to the public perception that the Chinese government is oppressive and not applying democratic principles. "Even our regular lunch or dinner customers have stopped visiting us. When the crisis was over, business was as usual" said the owner of a Chinese restaurant in the Washington, DC area.
2. When consumers were asked if their attitude toward an ethnic group impacted their satisfaction with that cuisine, 12% affirmed that above statement, while 49% were undecided. A total of 61% of the respondents said that ethnicity had nothing to do with satisfaction in an ethnic cuisine. Despite such response, the reality is different. For example, during the 1992 Gulf War, Middle-Eastern restaurant operator in the Washington, DC area said that he had suffered excessive business losses to the public perceptions that all Middle-Eastern states or individuals are aggressors.

3. Sixty-five percent of the respondents had a positive attitude toward ethnic restaurants, (57%) had a positive attitude toward ethnic foods, and (68%) had no objection to consuming or visiting ethnic restaurants. However, in today's complex business environment, stated attitude change quickly. Such sudden change in consumer attitudes is a factor that effects consumer satisfaction.

In product or service settings, attitude may affect satisfaction with the product. However, in the case of ethnic restaurant, the scenario is different. If a consumer likes ethnic foods and he/she is very satisfied with the service that he/she receives, one would assume that there is no need for such consumer to change his/her attitude as long
as his/her needs are met. However, any changes in the orientation of that ethnic group, would immediately affect consumer satisfaction. That is, for the psychological involvement (attitude), satisfaction is associated with perception. As long as consumers hold a positive perception of an ethnic group, they might be satisfied with that ethnic cuisine. Similarly, once perception change, dissatisfaction may occur.

Therefore, it is believed that the above discussion has justified how and why psychological involvement variables (opinion, belief, and behavioral intention) impact satisfaction. Similarly, the above discussion has also clarified why the psychological involvement variable attitude did not significantly impact satisfaction in this study.

Factors Affecting Satisfaction

In the active group, consumer attitude toward ethnic foods, consumer opinion toward an ethnic group, availability of an appropriate selection of local dishes, and restaurant attributes flexible hours of operations, reasonable prices, and employee professionalism are the most frequent and significant factors affecting the satisfaction of such group.
In the Passive group, attitude toward a foreign country, attitude toward an ethnic group, authenticity displayed in design and personnel, and availability of an appropriate selection of local dishes and restaurant prices are some of the most frequent and significant factors affecting the satisfaction of such group.

When both groups were combined (active/passive), satisfaction was affected by restaurant authenticity, hours of operations, employee courtesy and professionalism, and availability of local dishes.

Such findings support the National Restaurant Association (1983) and Nolan and Swan (1985) conclusions. That is, restaurant attributes are important factors in determining consumer satisfaction. However, by differentiating between the orientation of each group (active/passive), it was possible to obtain a better understanding of the factors that satisfy each group. Such closer understanding may help ethnic restaurant operators to design their facilities/services around meeting such groups needs.

**FACTORS AFFECTING OVERALL SATISFACTION**

Items that dealt with overall satisfaction with service, satisfaction with lunch, satisfaction with dinner, and overall satisfaction with dining experience were analyzed separately. That is, each of the above
satisfaction items was a dependent variables, and consumer
psychological involvement, restaurant attributes,
satisfaction items 11 to 24, and satisfaction item 28 served
as the independent variables. Chunben (1990) and Green
(1993) reported that restaurant attributes affect consumer
satisfaction. Similarly, this study's findings, support the
above researchers conclusions. A prototype of type of
attributes that affect satisfaction is presented below.

Satisfaction with Service

Findings indicate that overall satisfaction with
service ($R^2 = 0.57, p<0.05$) is affected by: restaurants
hours of operation ($p<0.01$), speed of service ($p<0.01$),
availability of popular foods ($p<0.01$), management
responsiveness to consumer needs ($p<0.01$), food eye appeal
($p<0.01$), availability of nutritional information ($p<0.01$),
and recommendation of a friend ($p<0.01$).

Satisfaction with Lunch

Findings indicate that overall satisfaction with lunch
($R^2 = 0.80, p<0.05$) is affected by: food eye appeal
($p<0.01$), restaurants' hours of operation ($p<0.01$), attitude
toward ethnic restaurants ($p<0.01$), restaurants' reputation
($p<0.01$), personnel competency in food production/sanitation
($p<0.01$), attitude toward ethnic foods ($p<0.01$), and speed
of service ($p<0.05$).
Satisfaction with Dinner

Findings indicate that overall satisfaction with dinner ($R^2 = 0.33$, $p<0.05$) is affected by: overall dining experience ($p<0.01$), employee courtesy ($p<0.01$), restaurant hours of operation ($p<0.01$), recommendation of an ethnic acquaintance ($p<0.01$), and appropriate selection of local dishes ($p<0.01$).

Overall Satisfaction with Dining

Findings indicate that overall satisfaction with dining experience ($R^2 = 0.38$, $p<0.01$) is affected by the following factors: speed of service ($p<0.01$), taste of food ($p<0.01$), hours of operation ($p<0.01$), and availability of popular foods ($p<0.01$).

An analysis of the most frequent factors that affect consumers satisfaction revealed the following.

1. Speed of service was reported as the most important factor in determining consumer satisfaction.

2. Restaurant hours of operation, food eye appeal, availability of popular foods, and restaurant reputation were reported as the second most frequent determinant of satisfaction.

3. Other important issues that are equally important in ensuring consumer satisfaction represented issues such as: recommendation of a friend, availability of nutritional information, appropriate selection of local
dishes, personnel competency in food
production/sanitation, and employee’s courtesy.
Restaurant operators who want to earn the satisfaction
of their consumers should develop strategies aimed at
meeting these consumer needs.

FACTORS AFFECTING FUTURE VISITATIONS

This study contributes to the fields of hospitality
education, foodservice research, and foodservice operators
through analyzing the factors that affect consumers’ future
visitations. Behavioral intention items 22, and 23
were analyzed separately. Each behavioral intention item
was a dependent variables, and consumer orientation,
psychological involvement, and other satisfaction items
served as independent variables. Nolan and Swan (1985)
reported that consumer satisfaction is determined by the
frequencies of consumer visitations. Findings of this study
support the above researchers conclusions, and contribute to
their findings by reporting that consumers’ psychological
involvement and restaurant attributes significantly affect
consumer future visitations.

Future Visitations (Few Weeks)

When analyzing consumers future visitations (dining in
an ethnic restaurant within the next few weeks), only
consumers’ psychological involvement ($R^2 = 0.53$, $p<0.01$)
significantly impacted consumer future visitations. For
example, the following consumer psychological involvement factors showed a significant impact on consumer future visitation with in the next few weeks. Ethnic restaurants are good places to eat (p<0.01), it is wise to patronize ethnic restaurants (p<0.01), availability of appropriate selection of local dishes (p<0.01), attitude toward ethnic group on satisfaction on that cuisine (P<0.01), reasonable food prices (p<0.01), authenticity in design, menu, food, service, and personnel (p<0.01), and personnel competency in food production/sanitation (p<0.05).

Surprisingly, overall dining experience (R² = 0.01, NS) and restaurant attributes (R² = 0.04, NS) had no significant impact on consumer future visitations within the next few weeks. When analyzing the effect of psychological involvement and restaurant attributes on overall dining experience, it was noted that only restaurant attributes impacted overall dining experience (R² = 0.39, p<0.01).

Future Visitations (Few Months)

When analyzing consumers future visitations (dining in an ethnic restaurant within the next few months), consumers psychological involvement was the only factor that significantly impact consumer future visitations (R² = 0.35, p<0.02). For example, the following consumer psychological involvement factors showed a significant impact on consumer future visitation within the next few months.
Ethnic restaurants are good places to eat at (p<0.01), positive attitude toward ethnic foods (p<0.01), attitude toward ethnic group on satisfaction on that cuisine (p<0.05), reasonable food prices (p<0.05), recommendation of an ethnic friend (p<0.05) and appropriate selection of local dishes (p<0.05).

Surprisingly, overall dining experience ($R^2 = 0.01$, NS) and restaurant attributes ($R^2 = 0.02$, NS) had no significant impact on consumer future visitations within the next few months. When analyzing the effect of psychological involvement and restaurant attributes on overall dining experience, it was noted that only restaurant attributes impacted overall dining experience ($R^2 = 0.37$, p<0.01).

Therefore, one can conclude that restaurant operators who want to ensure consumer future visitations while maintaining a high level of satisfaction should consider developing strategies aiming at improving consumers' psychological aspects: attitude, opinion, and belief. An ethnic restaurant that offers an authentic design, diversified menu, competent personnel, and reasonably priced product will be meeting consumers' needs, developing long term loyalty, and satisfying its stockholders' objectives, profits maximization. Being menu focused, and operation oriented is not good enough. Restaurant and foodservice entrepreneurs should consider enhancing their restaurants'
attributes (location, owner’s personality, reputation, hours of operation, staff competency, and the ability to seat and serve quickly) as they impact consumers’ future visitations.

However, "it is easier said than done," and it is not the objective of this study to investigate how a foodservice operator can go about accomplishing such tasks. Only with further research in this area can the hospitality industry and foodservice operators design a restaurant, develop a diversified menu that is reasonably priced, and hire and retain competent personnel. Through such process, the restaurant industry can meet consumer needs, develop customer loyalty, and generate long term repeat business.
SUMMARY

This chapter discussed the study's results that were presented in the fourth chapter of the study. The relationships among the variables were discussed whenever statistical results suggested or supported a significant relationship. With respect to hypotheses tested, theoretical and practical implications of the findings were discussed. The conclusion, limitation of the study along with future research suggestions will be discussed in the next chapter.
CONCLUSION

INTRODUCTION

The present study has provided empirical evidence to the applicability of consumer involvement framework in explaining satisfaction. Consumer orientation (active/passive), and consumer psychological involvement (attitude, opinion, belief, and behavioral intention) and restaurant attribute can be used to: 1) predict consumer satisfaction in dining, and 2) predict overall evaluation of service, lunch, and dinner. The results of the present study have provided empirical support to consumer orientation/consumer psychological involvement effects on consumer satisfaction. These findings not only contribute to consumer self-concept theory, and satisfaction/dissatisfaction theory, but also have practical implications to the restaurant industry.

The present study has provided empirical support that it is consumer orientation/psychological involvement which ultimately determine satisfaction. The practical implication is that it is more important for restaurant operators to manage consumer experience by delivering the required benefits and desired consumption values rather than just to manage consumer expectations.
SIGNIFICANT FINDINGS

The following are the most significant findings from the empirical analyses:

1. With regard to consumer orientation in explaining consumer satisfaction in ethnic restaurants, it was found that one could explain satisfaction better within the orientation of the active consumer than within the orientation of the passive consumer.

2. In measuring consumer satisfaction, psychological involvement variables (opinion, belief, and behavioral intention) were found to have a significant impact on satisfaction. In consumer psychological involvement, the variable (attitude) had no significant impact on satisfaction.

3. When dining in ethnic restaurants, consumer’s orientation, and consumers’ psychological involvement affect satisfaction. The findings indicate that the more the consumer is involved in restaurant selection, the more he/she was satisfied.

4. The attributes of an ethnic restaurant were found to have an impact on consumer satisfaction. For example, menu prices, location, hours of operation, staff competency, and personality of the restaurateur were significantly associated with the response to satisfaction items 25-28.
RESEARCH CONTRIBUTIONS

The most significant contribution of this study is outlined in two forms:

Theoretical Contributions

First, this study introduced an encompassing consumer involvement/satisfaction in dining framework. The findings discussed in previous chapters constitute substantial contributions to the understanding of consumer satisfaction with dining in general, and to the satisfaction with ethnic restaurants in particular.

Second, this study contributes to existing consumer behavior literature the fields of marketing and psychology. This study provides empirical evidence of the importance of consumer orientation, and psychological involvement in predicting satisfaction.

Practical Contributions

From the strategic marketing/operational point of view, the findings of this study will help restaurant operators to:

1. Design marketing programs that ensure overall satisfaction in service, lunch, dinner, and the dining experience. Such satisfaction could be delivered by meeting consumer needs in such areas as: restaurant hours of operation, speed of service, personnel competency, employee courtesy, availability of popular
foods, food eye appeal, and management responsiveness.

2. Predict consumer future visitation (next few weeks/months) by understanding consumer psychological involvement and consumer perceptions of restaurant's attributes.

From a theoretical/operational perspective, the disconfirmation paradigms (the degree to which actual performance deviate from expected) do not explicitly explain satisfaction and perceived performance. Findings of the proposed framework explains the factors that affect satisfaction, and provides a means for measuring performance by understanding restaurant attributes as they impact satisfaction. That is, the results of this study can help ethnic restaurant operators understand their consumer needs and develop promotional strategies aiming at maximizing consumer's satisfaction with dining.

In summary, data produced from this study provide preliminary evidence to suggest that involvement is an important construct in satisfaction with dining. Similarly, ample evidence was presented to suggest that a consumer, product, and operational based involvement affect satisfaction.
LIMITATIONS

Several limitations should be mentioned in interpreting the results of the present study.

1. Each of the four psychological involvement variables had few measures of several constructs expectation, perceptions, and satisfaction that were used in some of the casual modeling analysis because of the interdependency of the data. This is one of the limitations in the present study, because as Duncan (1975) points out, it is sometimes felt that the investigator is better off with multiple indicators on the summarized theory. That is, there is a chance that an error in one indicator may be offset by a compensating error in another.

2. A possible selection bias might have been introduced by consumer participation ratio. More consumers who were having dinner in ethnic restaurants agreed to participate in the study than consumers who were having lunch. Therefore, the generalization of the research findings might be a problem.

3. Consumer satisfaction is situation specific. The present research evaluated consumer satisfaction in one metropolitan area in the country. The consumers in this metropolitan area might not be representative of the general dining population. Therefore, the results
of the study may not be generalized to other dining situations.

4. The impact of economic variables were not evaluated in this study. Some consumers paid all their expenses, some were on expense account, and some did not pay the expenses at all because they were guests of other customers.

5. Lastly, time and location were limitations. This study was conducted in one urban center of the country (Washington DC) for a three months period. A study that is conducted during a longer period of time in major urban centers across the country may generate different results.

RECOMMENDATIONS FOR FUTURE RESEARCH

It is suggested that other researchers interested in consumer behavior issues should test this model at different local, regional, national, and international areas to further advance the theoretical underpinnings inherent to the model.

Second, the most important consideration in psychological research is error reduction. It is suggested that future research on the issue should include individual and situational dimension variables to effectively predict satisfaction.
Third, future involvement/satisfaction studies should consider the measurement or control the economic variable "who pays for dining" so satisfaction effect would be clearly presented.

Lastly, future research should consider overcoming the stated limitations.
REFERENCES


Scherer, R. (1993, February 25). Jamaican "jerk" cooking turns up the heat; the spicy Caribbean cuisine, which gives new meaning to the word "marinade", is catching on as the next ethnic food trend. *The Christian Science Monitor*, pp. 10.


APPENDIX 1

INSTRUMENT
### SECTION I
CONSUMER ORIENTATION

PLEASE CIRCLE YOUR RESPONSES USING THE SCALE STRONGLY AGREE TO STRONGLY DISAGREE TO INDICATE YOUR LEVEL OF AGREEMENT WITH EACH OF THE FOLLOWING STATEMENTS:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Disagree</td>
<td>Slightly Disagree</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Agree</td>
<td>Slightly Agree</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

1. I rate the selection of an ethnic restaurant as being highest importance to me personally.
2. I am really committed to getting the most for my money.
3. The process of selecting a restaurant interests me.
4. Choosing a restaurant is of great interest to me.
5. I have a preference for one type of ethnic restaurant over others.
6. I usually patronize the same ethnic restaurant time after time.
7. If I had decided to patronize an ethnic restaurant before actually acquiring some information, I might easily have changed my intended choice upon receiving negative information from friends.
8. If I received information that was contrary to my perception of an ethnic restaurant, I would--at all costs--keep my choice.
9. Because of my personal values, I feel that fact based decisions ought to be important to me.

10. It is important to me to be aware of all the alternatives before selecting a restaurant.

11. I am willing to spend extra time shopping in order to get the lowest possible price on meals of like quality.

12. I pay attention to advertisements for restaurants in which I am interested.

13. While dining in an ethnic restaurant if I encountered a bad experience I would return.

14. I don't like to waste a lot of time trying to save money when selecting a restaurant.

15. I could talk about my favorite ethnic restaurant for a long time.

16. I have little or no interest in shopping for a place to eat.

17. Food critics reports are not very relevant to me.

18. I am not interested in bargain seeking.

19. I often take advantage of coupon offers in newspapers.

20. Most ethnic restaurants are alike.

21. On restaurant selection, the choice I make is of little consequence.

168
22. Usually reading about restaurants or asking people about them won't really help me make a decision.

23. Consumerism issues are irrelevant to me.

24. If I were eating out it wouldn't make much difference which restaurant I chose.

25. The type of food I consume makes very little difference to me.

26. Specials don't excite me.

27. While dining in an ethnic restaurant if I encountered a bad experience I would return.

28. It doesn't make much sense to get upset over an ethnic meal since most ethnic restaurants are about the same.
SECTION II
PSYCHOLOGICAL INVOLVEMENT

THIS SECTION IS DESIGNED TO MEASURE ATTITUDES AND OPINIONS. PLEASE CIRCLE YOUR RESPONSES USING THE POSITIVE TO NEGATIVE SCALE TO INDICATE YOUR LEVEL OF FEELING TOWARD EACH OF THE FOLLOWING STATEMENTS:

1. The impact of my attitude toward a foreign country on my decision to patronize an ethnic restaurant is.

2. The impact of my attitude toward an ethnic group on my satisfaction in that cuisine is.

3. My attitude toward ethnic restaurants is.

4. My attitude toward ethnic foods is.

5. My patronizing of ethnic restaurants would be.

6. My purchasing of ethnic foods would be.

7. The authenticity displayed through interior design, music, food, service, and personnel is.

8. An authentic restaurant which offers an appropriate selection of local dishes is.

9. An unusual environment in an ethnic restaurant is.
10. A high level of competence in food production and sanitation by ethnic restaurant is.

11. Availability of ethnic restaurants is.

12. The price for food and beverages in ethnic restaurant is.

13. A cordial service in an ethnic restaurant is.
PLEASE ANSWER THIS SET OF QUESTIONS BY CIRCLING THE NUMBER THAT MOST CLOSELY CORRESPONDS TO YOUR BELIEFS AND BEHAVIORAL INTENTIONS TOWARD ETHNIC RESTAURANTS.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td>Staff of ethnic restaurants have a very caring manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15.</td>
<td>Ethnic restaurants display a high level of professionalism.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16.</td>
<td>The hours of operation of ethnic restaurants are flexible.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17.</td>
<td>Food prices at ethnic restaurants are reasonable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>18.</td>
<td>Ethnic restaurant personnel know how to describe food items to the consumer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>19.</td>
<td>Ethnic restaurants are some of the best places to eat.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>20.</td>
<td>Ethnic restaurants maintain their identity through interior design, music, food, service, and personnel.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>21.</td>
<td>Ethnic restaurants maintain an appropriate selection of local dishes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>22.</td>
<td>Would you dine in an ethnic restaurant within the next few weeks?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
23. Would you dine in an ethnic restaurant within the next few months?  
   1  2  3  4  5  6  7

24. Would you receive sincere appreciation of your business by an ethnic entrepreneur?  
   1  2  3  4  5  6  7
SECTION III
CONSUMER SATISFACTION/DISAPPROVEMENT

THIS SECTION IS DESIGNED TO MEASURE CONSUMER SATISFACTION/DISAPPROVEMENT WITH ETHNIC RESTAURANTS.

PLEASE CIRCLE A NUMBER TO INDICATE HOW IMPORTANT THE FOLLOWING ATTRIBUTES TO YOU WHEN YOU SELECT AN ETHNIC RESTAURANT.

1 7
NOT IMPORTANT : : : : : : MOST IMPORTANT

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recommendation of a friend.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Staff competency in explaining menu items.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Ability to be seated quickly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Location of the restaurant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Personality of the restaurateur.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Reputation of the restaurant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Restaurant’s hours of operation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Congeniality of the restaurant staff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Recommendation by another ethnic acquaintance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PLEASE CIRCLE A NUMBER TO INDICATE YOUR LEVEL OF SATISFACTION/ DISSATISFACTION WITH THE FOLLOWING QUESTIONS.

1 = Very Dissatisfied  2 = Somewhat dissatisfied
3 = Quite Dissatisfied  4 = Neither Satisfied Nor Dissatisfied
5 = Somewhat Satisfied  6 = Quite Satisfied
7 = Very Satisfied

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>Availability of popular foods</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12.</td>
<td>Decor/general appearance of the dining facility</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13.</td>
<td>Taste of food</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>14.</td>
<td>Eye appeal of food items</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>15.</td>
<td>Cold menu items served at proper temperature</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>16.</td>
<td>Hot menu items served at proper temperature</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>17.</td>
<td>Availability of nutritional information</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>18.</td>
<td>Portion sizes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>19.</td>
<td>Cleanliness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>20.</td>
<td>Speed of service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>21.</td>
<td>Appearance of employees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>22.</td>
<td>Courtesy of employees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>23.</td>
<td>Responsiveness of management</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>24.</td>
<td>Hours of operation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>25.</td>
<td>Overall rating of service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>26.</td>
<td>Overall rating of lunch</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>27.</td>
<td>Overall rating of dinner</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>28.</td>
<td>Overall rating of dining experience</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

175
Section IV
CONSUMER DEMOGRAPHICS

PLEASE ANSWER THIS SET OF QUESTIONS BY PLACING AN (X) WHERE APPROPRIATE.

1) In what age group do you belong?
   ____1. 19 or under
   ____2. 20-25
   ____3. 26-30
   ____4. 31-40
   ____5. 41-55
   ____6. 55 and older

2) Please indicate your gender.
   ____1. Male
   ____2. Female

3) Which of the following best describes your marital status?
   ____1. Single
   ____2. Married
   ____3. Divorced
   ____4. Separated
   ____5. Widowed

4) What is your average annual family income?
   ____1. Under $10,000
   ____2. $10,001-$20,000
   ____3. $20,001-$30,000
   ____4. $30,001-$40,000
   ____5. $40,001-$50,000
   ____6. Over $50,000

5) What is your highest education level?
   ____1. High School
   ____2. Technical School/Junior College
   ____3. College
   ____4. Graduate School

6) What is your ethnic background?
   ____1. Eastern European
   ____2. Mexican
   ____3. Western European
   ____4. Chinese
   ____5. Japanese
   ____6. Thai
   ____7. Greek
   ____8. Indian
   ____9. Polynesian
   ____10. Cuban
   ____11. Middle-eastern
   Others ___________________________
APPENDIX 2

INSTRUMENT CODING

CONSUMER ORIENTATION

ACTIVE =
ACT1 + ACT2 + ACT3 + ACT4 + ACT5 + ACT6 + ACT7 + ACT8 + ACT9 + ACT10 +
ACT11 + ACT12 + ACT13 + ACT14 + ACT15

PASSIVE =
PASS1 + PASS2 + PASS3 + PASS4 + PASS5 + PASS6 + PASS7 + PASS8 + PASS9 +
PASS10 + PASS11 + PASS12 + PASS13 + PASS14 + PASS15 + PASS16 + PASS17 +
PASS18 + PASS19 + PASS20 + PASS21 + PASS22 + PASS23 + PASS24 + PASS25 +
PASS26 + PASS27 + PASS28 + PASS29

CONSUMER PSYCHOLOGICAL INVOLVEMENT

ATTITUDE =
ATT1 + ATT2 + ATT3 + ATT4 + ATT5 + ATT6

OPINION =
OPIN1 + OPIN2 + OPIN3 + OPIN4 + OPIN5 + OPIN6 + OPIN7 + OPIN8 + OPIN9 +
OPIN10 + OPIN11 + OPIN12 + OPIN13

BELIEF =
BEL14 + BEL15 + BEL16 + BEL17 + BEL18 + BEL19 + BEL20 + BEL21

BEHAVIOR INTENTIONS =
BINT22 + BINT23 + BINT24

CONSUMER SATISFACTION/DISSATISFACTION

RESTAURANT ATTRIBUTES = (IMPORTNT)

IMPORTNT =
IMPORT1 + IMPORT2 + IMPORT3 + IMPORT4 + IMPORT5 + IMPORT6 + IMPORT7 + IMPORT8 +
IMPORT9 + IMPORT10

SATISFACTION WITH DINING = (SATSFCTN)

SATSFCTN =
SATIS1 + SATIS12 + SATIS13 + SATIS14 + SATIS15 + SATIS16 +
SATIS17 + SATIS18 + SATIS19 + SATIS20 + SATIS21 + SATIS22 +
SATIS23 + SATIS24 + SATIS25 + SATIS26 + SATIS27 + SATIS28
APPENDIX 3

Correlation Analysis Between
Satisfaction and Consumer Psychological Involvement

PROC CORR;
VAR ATTITUDE OPINION BELIEF BINT;

*SAS
APPENDIX 3.1

Pearson Correlations Between Satisfaction and Consumer Psychological Involvement for the Active Group

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Opinion</td>
<td>.559 (.001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Belief</td>
<td>.559 (.001)</td>
<td>.496 (.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Behavioral Intention</td>
<td>.499 (.001)</td>
<td>.429 (.001)</td>
<td>.661 (.001)</td>
<td></td>
</tr>
<tr>
<td>5. Satisfaction</td>
<td>.124 (.129)</td>
<td>.166 (.032)</td>
<td>.282 (.001)</td>
<td>.192 (.013)</td>
</tr>
</tbody>
</table>

Note: Number in parentheses indicate significance levels associated with correlations.
APPENDIX 3.2

Pearson Correlations Between Satisfaction and Consumer Psychological Involvement for the Passive Group

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Opinion</td>
<td>.695 (.001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Belief</td>
<td>.547 (.001)</td>
<td>.525 (.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Behavioral Intention</td>
<td>.380 (.001)</td>
<td>.214 (.088)</td>
<td>.462 (.001)</td>
<td></td>
</tr>
<tr>
<td>5. Satisfaction</td>
<td>.132 (.297)</td>
<td>.138 (.274)</td>
<td>-.033 (.793)</td>
<td>.080 (.524)</td>
</tr>
</tbody>
</table>

Note: Number in parentheses indicate significance levels associated with correlations.
APPENDIX 4

Stepwise Regression Analysis Between Satisfaction and Consumer Psychological Involvement
For the Active/Passive Consumer

PROC STEPWISE;*
MODEL SATIS=
   ATT1 ATT2 ATT3 ATT4 ATT5 ATT6
   OPIN1 OPIN2 OPIN3 OPIN4 OPIN5 OPIN6
   OPIN7 OPIN8 OPIN9 OPIN10 OPIN11 OPIN12 OPIN13
   BEL14 BEL15 BEL16 BEL17 BEL18 BEL19 BEL20 BEL21
   BINT22 BINT23 BINT24;

   * Same model for other satisfaction items i.e., satis12 through satis28;
APPENDIX 5

Stepwise Regression Analysis of Service Rating
as Affected by Consumer Psychological Involvement
and Restaurant Attributes

PROC STEPWISE;
MODEL SATIS25=
ATT1 ATT2 ATT3 ATT4 ATT5 ATT6
OPIN1 OPIN2 OPIN3 OPIN4 OPIN5 OPIN6
OPIN7 OPIN8 OPIN9 OPIN10 OPIN11 OPIN12 OPIN13
BEL14 BEL15 BEL16 BEL17 BEL18 BEL19 BEL20 BEL21
BINT22 BINT23 BINT24
IMPORT1 IMPORT2 IMPORT3 IMPORT4 IMPORT5 IMPORT6
IMPORT7 IMPORT8 IMPORT9 IMPORT10
SATIS11 SATIS12 SATIS13 SATIS14 SATIS15 SATIS16
SATIS17 SATIS18 SATIS19 SATIS20 SATIS21 SATIS22
SATIS23 SATIS24 SATIS28;
APPENDIX 6

Stepwise Regression Analysis of Lunch Rating
as Affected by Consumer Psychological Involvement
and Restaurant Attributes

PROC STEPWISE;
MODEL SATIS26=
ATT1 ATT2 ATT3 ATT4 ATT5 ATT6
OPIN1 OPIN2 OPIN3 OPIN4 OPIN5 OPIN6
OPIN7 OPIN8 OPIN9 OPIN10 OPIN11 OPIN12 OPIN13
BEL14 BEL15 BEL16 BEL17 BEL18 BEL19 BEL20 BEL21
BINT22 BINT23 BINT24
IMPORT7 IMPORT2 IMPORT3 IMPORT4 IMPORT5 IMPORT6
IMPORT7
IMPORT8 IMPORT9 IMPORT10
SATIS11 SATIS12 SATIS13 SATIS14 SATIS15 SATIS16
SATIS17 SATIS18 SATIS19 SATIS20 SATIS21 SATIS22
SATIS23 SATIS24 SATIS28;
APPENDIX 7

Stepwise Regression Analysis of Dinner Rating
as Affected by Consumer Psychological Involvement
and Restaurant Attributes

PROC STEPWISE;
MODEL SATIS27=
ATT1 ATT2 ATT3 ATT4 ATT5 ATT6
OPIN1 OPIN2 OPIN3 OPIN4 OPIN5 OPIN6
OPIN7 OPIN8 OPIN9 OPIN10 OPIN11 OPIN12 OPIN13
BEL14 BEL15 BEL16 BEL17 BEL18 BEL19 BEL20 BEL21
BINT22 BINT23 BINT24
IMPORT1 IMPORT2 IMPORT3 IMPORT4 IMPORT5 IMPORT6 IMPORT7
IMPORT8 IMPORT9 IMPORT10
SATIS11 SATIS12 SATIS13 SATIS14 SATIS15 SATIS16
SATIS17 SATIS18 SATIS19 SATIS20 SATIS21 SATIS22
SATIS23 SATIS24 SATIS28;
APPENDIX 8

Stepwise Regression Analysis of Overall Dining Experience Ratings Affected by Consumer Psychological Involvement and Restaurant Attributes

PROC STEPWISE;
MODEL SATIS28=
   ATT1 ATT2 ATT3 ATT4 ATT5 ATT6
   OPIN1 OPIN2 OPIN3 OPIN4 OPIN5 OPIN6
   OPIN7 OPIN8 OPIN9 OPIN10 OPIN11 OPIN12 OPIN13
   BEL14 BEL15 BEL16 BEL17 BEL18 BEL19 BEL20 BEL21
   BINT22 BINT23 BINT24
   IMPORT1 IMPORT2 IMPORT3 IMPORT4 IMPORT5 IMPORT6
   IMPORT7 IMPORT8 IMPORT9 IMPORT10
   SATIS11 SATIS12 SATIS13 SATIS14 SATIS15 SATIS16
   SATIS17 SATIS18 SATIS19 SATIS20 SATIS21 SATIS22
   SATIS23 SATIS24;
APPENDIX 9
Effect of Consumer Psychological Involvement, Overall Dining Experience, and Restaurant Attributes on Consumer Future Visitations
(Few Weeks=BINT22/Few Months=BINT23).

PROC STEPWISE;

MODEL SATIS28=
      ATT1 ATT2 ATT3 ATT4 ATT5 ATT6
      OPIN1 OPIN2 OPIN3 OPIN4 OPIN5 OPIN6
      OPIN7 OPIN8 OPIN9 OPIN10 OPIN11 OPIN12 OPIN13
      BEL14 BEL15 BEL16 BEL17 BEL18 BEL19 BEL20 BEL21;

MODEL SATIS28=
      IMPORT1 IMPORT2 IMPORT3 IMPORT4 IMPORT5 IMPORT6
      IMPORT7 IMPORT8 IMPORT9 IMPORT10
      SATIS11 SATIS12 SATIS13 SATIS14 SATIS15 SATIS16
      SATIS17 SATIS18 SATIS19 SATIS20 SATIS21 SATIS22
      SATIS23 SATIS24;

MODEL BINT22*=

      ATT1 ATT2 ATT3 ATT4 ATT5 ATT6
      OPIN1 OPIN2 OPIN3 OPIN4 OPIN5 OPIN6
      OPIN7 OPIN8 OPIN9 OPIN10 OPIN11 OPIN12 OPIN13
      BEL14 BEL15 BEL16 BEL17 BEL18 BEL19 BEL20 BEL21;

MODEL BINT22=

      IMPORT1 IMPORT2 IMPORT3 IMPORT4 IMPORT5 IMPORT6
      IMPORT7 IMPORT8 IMPORT9 IMPORT10
      SATIS11 SATIS12 SATIS13 SATIS14 SATIS15 SATIS16
      SATIS17 SATIS18 SATIS19 SATIS20 SATIS21 SATIS22
      SATIS23 SATIS24;

PROC GLM;
BINT22 = SATIS28

* Same model for BINT23.
VITA


In 1985, he came to the United States to pursue his college education. In 1987, he graduated with a B.S. in Hotel and Restaurant Management and a minor in Business from Oklahoma State University. In 1989, he graduated with an M.S. in Hospitality and Tourism from the University of Wisconsin-Stout, and in 1993, he completed the requirements of his Ph.D. in Hotel Restaurant and Institutional Management from Virginia Polytechnic Institute and State University.

After his graduation from the University of Wisconsin-Stout, he joined the nutrition faculty at West Virginia University. As an assistant professor, he has developed and coordinated the restaurant management program, and undertaken a number of research projects that have been published in The International Journal of Hospitality Management, Hospitality and Tourism Educator, Journal of College and University Foodservice, Journal of Nutrition in Recipe and Menu Development, Journal of the American Dietetic Association, FIU Hospitality Review, Journal of Travel and Tourism Marketing, and various conference proceedings and trade journals.

He is currently a Board Member of the Hospitality and Tourism Educator, Editor (Journal Abstract) for the Journal of College and University Foodservice, and Journal of Travel and Tourism Marketing. His other professional affiliations include membership in the Council on Hotel Restaurant and Institutional Education, Academy of Marketing Research, and Society of Travel and Tourism Educators.