

THE JORDANIAN CONSUMERS' PERCEPTIONS OF QUALITY,  
PRICE AND RISK OF FOREIGN vs. DOMESTIC PRODUCTS  
- AN EMPIRICAL INVESTIGATION

by

HAMAD RASHED GHADIR  
BS University of Jordan 1973  
MS University of Oregon 1985

A Thesis submitted to the University of Sheffield  
in fulfilment of the requirements for the Degree  
of Doctor of Philosophy

School of Management and Economic Studies  
University of Sheffield

July, 1990

Volume I

To my parents,  
wife and children.

## ACKNOWLEDGEMENTS

I would first like to express my deep thanks to God for giving me the opportunity and the ability to complete this thesis.

My sincere thanks and appreciation go to my supervisor, Professor Arthur Meidan, for the effective guidance, advice and encouragement throughout the research and the preparation of the thesis. It is true that without Professor Meidan's directions, counselling and friendship, the completion of the thesis would have been impossible.

My thanks are due to Professor R.K. Wilkinson, Chairman of the School of Management and Economic Studies and the members of staff of the School of Management for their friendship, encouragement and the provision of research facilities within the School.

I am very grateful for the helpful comments by Professor R.M. Loynes of the Department of Statistics and Probability, and the other staff members on the statistical clinic for their interest, helpful suggestions in reviewing the statistical techniques and their valuable comments in data analysis.

I wish to thank Mr. R.K. Richards from the Computing Centre, University of Sheffield, for his assistance and advice in the computing work.

Many thanks are due to Ms. Cheryl Pyatt and Mrs. Denise Gould for their help in preparing and revising the typescript.

Thanks are also due to Mr. David Perrow of the Crookesmoor Library of Sheffield University and the rest of the librarians for their assistance in undertaking the computer library survey and facilitating the effective use of the library for the research purposes.

My gratitude is also due to Professor Ali Mahafzah, president of Mu'tah University, Jordan for the sponsorship of my research and the president's personal encouragement. The role of the colleagues at Mu'tah University as well as the students was vital in the success of this research, particularly during the field study - I am indebted for that assistance.

## ABSTRACT

The Jordanian Consumers' Perceptions of Quality, Price and Risk of Foreign vs. Domestic Products - An Empirical Investigation.

This thesis investigates the Jordanian consumers' perceptions of quality, price and risk of foreign vs. domestic product. The main objectives of this study are: (1) to identify the consumers perceptions of the quality, price and risk of the domestic versus foreign product and to find out whether consumers perceive the products of the various countries in the same way, despite their origin, or do they discriminate between them according to their source country?; (2) to find out whether the various countries can be clustered together, in respect of the consumers' perception of the quality, price and risk, according to their level of development; (3) to explore the level of the relationship between the three main cues: quality, price and risk for each country; (4) to profile the consumers' perceptions of quality, price and risk of foreign and domestic products according to their socio-demographic variables; (5) to investigate the differences among the consumers in regard of their attitudes towards such variables as the patriotic variables, business practices..... as well as the relationship between such variables and the consumers' attitudes (perceptions) of the domestic product quality, price and risk on one hand and their socio-demographic variables on the other hand; (6) to explore the differences between the consumers who attached high importance on the origin of the product in evaluating the product quality, price and risk and those who attached lower importance to the product origin and (7) to find out what the Jordanian industry and Jordanian Government can do in relation to the findings of this research.

The study employed both primary and secondary data. Primary data was collected through a structured direct questionnaire from a stratified

random sample of 1000 respondents. The municipalities records were used as a sampling frame. Specific statistical techniques were used to achieve the research objectives and to test the related hypotheses. The chi-squared Kolomogrov-Smirnov, T-test, and F-test are used to investigate the differences between the domestic product and the products of foreign origins as well as the differences among the consumers according to their socio-demographic variables. The Spearman Correlation Coefficient is utilised to investigate the relationship between the consumers' attitudes towards the domestic product and their perception of the quality, price and risk. The profile analysis is employed to demonstrate graphically the comparison between the domestic product and the products of the various countries. The multivariate discriminous analysis is used to investigate whether any of the socio-demographic variables could be strong enough to discriminate among the consumers and to be used as a basis for segmenting the consumers according to their demographic variables. The ANOVA analysis is used to test the significance of the differences between the domestic product quality, price and risk attributes and that of each of the participating countries. The Cluster Analysis is utilised to investigate the possibility of clustering the various countries according to the consumer's perceptions of the quality, price and risk attributes of their products. Finally factor analysis is used to group the 27 quality, price and risk attributes into smaller groups to aid in a wider understanding of the underlying dimensions of these variables. It is also used to achieve the same purpose for the attitude variables. In applying these techniques, the Sps computer package is utilised in all cases, except in the profile analysis case, where the SAS package is utilised.

The thesis is organised into fourteen chapters: the first chapter discussed the research problem, questions, objectives and hypothesis;

chapter two introduced the relevant theory behind the present study; the related literature is reviewed in chapter three; chapter four is devoted to the development of the research framework; chapters five and six are intended to explain the research design and the research methodology; chapter seven is related to testing the validity and reliability of the research and to introduce the characteristics of the study sample; chapters eight through to thirteen are concerned with the research findings, and finally chapter fourteen is the conclusion.

The countries of origin used in the study are: U.S.A., U.K., Japan, Russia, Romania, Taiwan, Egypt and Jordan. The product class employed in the present study is the major household electrical and gas appliances.

Overall, the findings of the study support the following main conclusions:

1. The country of origin appears to have a significant relationship with the consumers' perception of the quality, price and risk of the product.
2. The economic development of the source country appears to have a significant relationship with the consumers' perception of the quality, price and risk of the products of these countries in that, the countries with a relatively similar stage of development are grouped together and the developed countries' products are perceived to be higher in quality and price, but lower in risk than the products of developing countries.
3. The home country bias appears to be more relevant in comparing the domestic product to that of other countries in a relatively similar stage of development. That is, the Jordanian product is perceived to be higher in quality and price, but lower in risk than the developing countries' product. It is also perceived to be lower in quality and price but higher in risk than developed countries' products.

4. A consistent negative relationship between quality and risk is found for the products of the entire set of countries, in that the higher the consumers' perception of the products of the various countries, the lower their perception of the risk associated with these products. However, in spite of the significant relationship between price and quality, price and risk for most of the countries, the direction of the relationship is not consistent as it is in the case of the quality and risk.
5. It was found that only a relatively low percentage of the consumers who agreed in connecting the purchase of the domestic product with the patriotic duties. However, it appears that the higher the consumers agreement with such variables, the better their perception of the domestic product quality, price and risk.
6. Among the five socio-demographic variables, sex was found to be the lowest in discriminating among the consumers and age was found to be the highest.
7. The weight given to the origin of the product in the decision process was found to be of little importance in discriminating among the consumers in regard of their perception of the quality, price and risk of the products of the various countries.

The study suggests that it is to the benefit of the domestic producers to develop separate marketing strategies for the imported products of developed and developing countries, rather than dealing with the imported product under the general term "foreign".

## TABLE OF CONTENTS

	PAGE NO
ACKNOWLEDGEMENTS	i
ABSTRACT	ii
LIST OF CONTENTS	vi
LIST OF FIGURES	xiii
LIST OF TABLES	xv
CHAPTER ONE - INTRODUCTION	
1.1 Preface	1
1.2 Statement of the Problem	2
1.3 The Research Questions	4
1.4 Research Objectives	7
1.5 Research Hypotheses	9
1.6 Some Information about Jordan	11
1.6.1 The Population and Area	14
1.6.2 Foundation of the State	14
1.6.3 The Economy of Jordan	15
1.6.3.1 The Main Factors of the Jordanian Economy	15
1.6.3.2 The Difficulties of the Jordanian Economy	16
1.6.3.3 The Performance of the Economic Sectors in the Last Decade	18
1.7 The Trade Partnership between Jordan and the Participating Countries	23
1.8 Organization of the Thesis	24
CHAPTER 2 - THEORY BACKGROUND	29
2.1 Introduction	30
2.2 Definition of Terms	30
2.3 Price-Quality, Store Image-Quality, Manufacturer Image-Quality and Source Country Image-Quality Relationships	36
2.4 Assessment of Product Quality	38
2.5 Perceived Risk and Product Evaluation	41
2.5.1 Types of Risks	42
2.5.2 Perceived Risk and Country of Origin	44
2.6 The Role of Price in Product Evaluations	44
2.7 Consumerism	46
2.7.1 Consumerism and Product Quality	48
2.7.2 Consumerism and Price	48
2.7.3 Consumerism and Perceived Risk	48
2.7.4 The Use of Consumerism in the Present Research	49
2.8 Conclusions	51
CHAPTER 3 - LITERATURE REVIEW	53
3.1 Introduction	54
3.2 Product quality	54
3.2.1 The Final Consumer Research	54
3.2.1.1 The Research within developed countries using students as Surrogates for the ordinary consumers	55
3.2.1.2 Limitations of the research within developed countries using students as surrogates for ordinary consumers	63
3.2.1.3 Research within developing countries using students as surrogates for ordinary consumers	65
3.2.1.4 Limitations	66
3.2.1.5 Research within developed countries using ordinary consumers	66



3.2.1.6	Limitations	78
3.2.1.7	Research within developed countries using both students and ordinary consumers	79
3.2.1.8	Limitations	80
3.2.1.9	Research within developing countries using both students and ordinary consumers	80
3.2.1.10	Limitations	82
3.2.2	The Industrial Consumer Research	83
3.2.2.1	Industrial consumer research within developed countries	83
3.2.2.2	Limitations	89
3.2.2.3	Industrial consumer research within developing countries and the limitations of this research	90
3.2.3	Research Within Developing Countries Addressing Both Industrial and Final Consumer and the Limitations of this Research	94
3.3	Price and Product Evaluation	96
3.3.1	The Economic Model	97
3.3.2	The Behavioural Model	98
3.4	Risk and Product Evaluation	103
3.4.1	Risk and Consumer Behaviour	104
3.4.2	Perceived Risk and Country of Origin	108
3.4.2.1	Perceived risk - country of origin research addressed toward the final consumer in developed countries	108
3.4.2.2	Perceived risk - country of origin research addressed toward the industrial buyer in developed countries	109
3.4.2.3	Perceived risk research investigating the differences between the consumers of two countries in regard of the importance of perceived risk concept in the purchase decision	112
3.4.2.4	Limitations of the perceived risk - country of origin research	113
3.5	A Comparison Between the Previous Research and the Present Study	115
3.6	Concluding Remarks in Regard of the Previous Literature	117
3.6.1	General Limitations of the Previous Research	117
3.6.2	General Findings	120
CHAPTER FOUR - THE RESEARCH FRAMEWORK		123
4.1	Introduction	124
4.2	The Comprehensive Models	125
4.2.1	The Decision Process Model of the Problem Solving Model	125
4.2.2	The Howard Model	127
4.2.3	The Howard-Sheth Model	128
4.2.4	The Engel, Blackwell and Kollat Model	129
4.2.5	The Andreason Model	130
4.2.6	The Nicosia Model	131
4.2.7	The Howard-Ostlund Model	132
4.3	Quality, Price and Risk Models	134
4.3.1	A Framework of Cue Impact on Perceived Purchasing Risk and Handled Risk	134
4.3.2	The Model of Possible Price Effects	135
4.3.3	A Model of the Cognitive Process of Quality Perception	136
4.3.4	The Price Reliance Model	137
4.3.5	The Means End Model Relating Price, Quality and Value	139

4.4	The Country Cue Models	140
4.4.1	An Integrated Model of the Country Cue and Perceived Risk	140
4.4.2	Foreign Product Attitude Model of Stimuli-Response	142
4.5	The Research Framework	143
4.6	Summary of the Chapter	149
CHAPTER FIVE - RESEARCH DESIGN AND DATA COLLECTION		151
5.1	Introduction	152
5.2	Evaluating the Alternative Methods for Data Collection	152
5.2.1	Choosing the Most Appropriate Questioning Method	155
5.2.2	The Structure of the Questionnaire	158
5.3	Scale of Measurement	159
5.4	Questionnaire Development	163
5.5	Sampling Procedures and the Selection of the Appropriate Sampling Method	170
5.5.1	Sampling Procedures	170
5.5.2	Selecting the Appropriate Sampling Method	170
5.6	The Countries and Products Selected for the Study	173
5.6.1	The Selection of the Participating Countries	173
5.6.2	The Selection of the Product to be Tested in the Study	176
5.7	Delivering the Questionnaire and Field Work	177
5.7.1	The Response Rate	180
5.7.2	Preparing for the Data Analysis	183
5.8	Summary of the Chapter	186
CHAPTER SIX - RESEARCH METHODOLOGY		189
6.1	Introduction	190
6.2	Classification of Statistical Techniques	190
6.3	The Statistical Methods Used in the Study	193
6.3.1	Chi-Square Test	193
6.3.2	The Kolmogorov-Smirnov Test	193
6.3.3	The T-Test	194
6.3.4	The F-Test	195
6.3.5	The Spearman Rank Correlation Coefficient	195
6.3.6	Analysis of Variance	196
6.3.7	Discriminant Analysis	197
6.3.8	Factor Analysis	200
6.3.9	Cluster Analysis	204
6.3.10	Profile Analysis	208
6.4	Summary of the Chapter	210
CHAPTER SEVEN - VALIDITY, RELIABILITY AND SAMPLE CHARACTERISTICS		212
7.1	Introduction	213
7.2	Validity	213
7.3	Reliability	215
7.4	The Validity Method used in this Research	217
7.5	Testing the Reliability of the Research Data	219
7.6	The Importance of Reporting the Validity and Reliability of the Study	221
7.7	Sample Characteristics	222
7.8	Conclusions	235

CHAPTER EIGHT - A COMPARATIVE ANALYSIS OF THE CONSUMERS' PERCEPTION OF THE QUALITY OF THE DOMESTIC PRODUCT ATTRIBUTES AND THE QUALITY ATTRIBUTES OF FOREIGN PRODUCTS	238
8.1 Introduction	239
8.2 Interpretation of the Cluster Analysis Results	239
8.3 Domestic Product vs. Foreign Product	241
8.4 Domestic Product vs. The Developed Countries' Product	245
8.5 Domestic Product vs. The Developing Countries' Product	247
8.6 Ratings of Countries in Product Quality	253
8.7 Testing the Significance of the Differences	254
8.8 Domestic Product vs. The Product of Each of the Participating Countries	256
8.8.1 Jordan vs. Taiwan	256
8.8.2 Jordan vs. Romania	256
8.8.3 Jordan vs. Egypt	257
8.8.4 Jordan vs. Russia	257
8.8.5 Jordan vs. Japan	257
8.8.6 Jordan vs. U.K.	258
8.8.7 Jordan vs. U.S.A.	258
8.9 Tests of Hypotheses	258
8.10 Conclusions	260
CHAPTER NINE - A COMPARATIVE ANALYSIS OF THE CONSUMERS' PERCEPTION OF THE PRICE OF THE DOMESTIC PRODUCT AND THE PRICE OF FOREIGN PRODUCTS	263
9.1 Introduction	264
9.2 Interpretation of the Cluster Analysis Results	265
9.3 Domestic Product vs. Foreign Product	267
9.4 Domestic Product vs. Developed Countries' Product	270
9.5 Domestic Product vs. Developing Countries' Product	273
9.6 Ratings of Countries in Product Prices	277
9.7 Tests of the Significance of the Differences	277
9.8 Domestic Product vs. the Product of Each of the Participating Countries	278
9.8.1 Jordan vs. Taiwan	279
9.8.2 Jordan vs. Romania	279
9.8.3 Jordan vs. Egypt	280
9.8.4 Jordan vs. Russia	280
9.8.5 Jordan vs. Japan	280
9.8.6 Jordan vs. U.K.	281
9.8.7 Jordan vs. U.S.A.	281
9.9 Tests of Hypotheses	281
9.10 Conclusions	284
CHAPTER TEN - A COMPARATIVE ANALYSIS OF THE CONSUMERS' PERCEPTION OF THE RISK OF THE DOMESTIC PRODUCT AND THE RISK OF FOREIGN PRODUCTS	287
10.1 Introduction	288
10.2 Interpretation of the Cluster Analysis Results	289
10.3 Domestic Product vs. Foreign Product	290
10.4 Domestic Product vs. Developed Countries Product	293
10.5 Domestic Product vs. Developing Countries Product	294
10.6 Ratings of Countries in the Overall Risk of their Products	297
10.7 Tests of the Significance of the Differences	299
10.8 Domestic Product vs. the Product of Each of the Participating Countries	301

10.8.1	Jordan vs. Taiwan	301
10.8.2	Jordan vs. Romania	301
10.8.3	Jordan vs. Egypt	302
10.8.4	Jordan vs. Russia	303
10.8.5	Jordan vs. Japan	303
10.8.6	Jordan vs. U.K.	303
10.8.7	Jordan vs. U.S.A.	304
10.9	Test of Hypotheses	304
10.10	Conclusions	306

CHAPTER ELEVEN - COMBINING THE QUALITY, PRICE AND RISK ATTRIBUTES OF THE PRODUCTS OF THE VARIOUS COUNTRIES AND TESTING THE INTER-RELATIONSHIP AMONG THESE CUES 310

11.1	Introduction	311
11.2	Interpretation of the Cluster Analysis Results	312
11.3	The Ratings of the Countries in the Overall Combination of the Product, Quality, Price and Risk Attributes	313
11.4	Tests of the Significance of the Differences	314
11.5	The Relationship between the Three Cues	315
11.5.1	Price and Quality	315
11.5.2	Risk and Quality	318
11.5.3	Price and Risk	320
11.6	The Main Factors for the Product Image of Each Country	322
11.6.1	The Jordanian Product	323
11.6.2	The Egyptian Product	325
11.6.3	The Romanian Product	325
11.6.4	The Taiwanese Product	327
11.6.5	The Russian Product	328
11.6.6	The Japanese Product	329
11.6.7	The U.K. Product	330
11.6.8	The U.S.A. Product	331
11.7	Conclusions	333

CHAPTER TWELVE - THE JORDANIAN CONSUMERS ATTITUDES TOWARD THE DOMESTIC PRODUCT AND ITS RELATIONSHIP WITH THEIR PERCEPTION OF ITS QUALITY, PRICE AND RISK 337

12.1	Introduction	338
12.2	The Results of Factor Analysis	338
12.3	Tests of the Significances of the Differences Among the Consumers Attitudes Toward the Domestic Product	339
12.4	The Relationship between the Consumers' Attitudes Toward the Domestic Product and their Perceptions of its Quality Attributes	343
12.4.1	The Relationship Between the Patriotic Variables and the Quality Perceptions	344
12.4.2	The Relationship Between the Consumers' Attitudes Towards the Quality Control and Their Perception of the Domestic Product Quality Attributes	345
12.4.3	Quality-Price Relationship Variables and Quality Perception	347
12.4.4	The Relationship Between the Consumers' Attitudes Toward Foreign Products and Their Perception of Domestic Product Quality Attributes	347
12.4.5	The Consumers' Evaluation of the Reasons for Buying Inferior Products and Their Perception of the Domestic Product Quality Attributes	349

12.4.6	The Relationship Between the Consumers' Attitudes Towards the Local Industry Capabilities and Their Perception of the Domestic Product Quality Attributes	350
12.4.7	The Relationship Between the Consumers' Attitudes Towards the Marketing Orientation of the Jordanian Firms and Their Perception of the Domestic Product Quality Attributes	351
12.4.8	The Relationship Between the Consumers' Attitudes Towards Their Ability to Evaluate the Product Quality as Well as the Needs For Local Firms to Get and Apply Technology and Their Perception of the Domestic Product Quality Attributes	351
12.4.9	The Relationship Between the Consumers' Attitudes Towards the Domestic Product and Their Perception of its Price Variables	352
12.4.10	The Relationship Between the Consumers' General Attitudes and Their Perception of the Domestic Product Risk Attributes	354
12.4.11	The Relationship between the Demographic Variables and the Attitude Variables	356
12.5	Tests of Hypotheses	358
12.6	Conclusions	358
CHAPTER THIRTEEN - ANALYSIS OF THE ASSOCIATION BETWEEN THE DEMOGRAPHIC VARIABLES AND THE CONSUMERS' PERCEPTION OF THE QUALITY, PRICE AND RISK ATTRIBUTES		364
13.1	Introduction	365
13.2	The Results of the Discriminant Analysis	366
13.3	The Results of the Chi-Square Analysis	368
13.4	The Importance of the Origin of the Product on its Evaluation	385
13.5	The Socio-Demographic Variables in Related Literature	388
13.6	Conclusions	392
CHAPTER FOURTEEN - SUMMARY AND CONCLUSIONS		394
14.1	Summary of the Findings	395
14.1.1	Findings on the Product Quality	396
14.1.2	Findings on the Product Price	396
14.1.3	Findings on the Product Perceived Risk	397
14.1.4	Findings on the Combination of Quality, Price and Risk Cues	397
14.1.5	Findings on the Jordanian Consumers' Attitudes	399
14.1.6	Findings on the Relationship between the Consumers Demographic Variables and their Perception of the Products of the Various Countries	402
14.2	The Implications of the Research Findings	403
14.2.1	General Implications	403
14.2.2	Implications for the Jordanian Industry	405
14.2.3	Implications for the Jordanian Government	408
14.3	Contributions of the Research	409
14.3.1	Theoretical Contribution	409
14.3.2	Methodological Contribution	410
14.3.3	Practical Contribution	411
14.4	Limitations of the Research	413
14.5	Areas for Further Research	414

REFERENCES		417
BIBLIOGRAPHY		430
APPENDIX A	The Cover Letter in both the English and Arabic Languages	437
APPENDIX B	The Instructions in both the English and Arabic Languages	440
APPENDIX C	The Questionnaire	443
APPENDIX D	The Validity and Reliability Tables	463
APPENDIX E	The Tables Related to Chapter 12	497
APPENDIX F	The Mean Ratings of the Quality, Price and Risk Attributes for the Eight Countries According to Each of the Six Socio-Demographic Variables	538
APPENDIX G	The Results of the Discriminant Analysis - All Groups Stacked Histogram, and the Correct Classification Percentages - for the Sex and the Consumers' Perceptions of the Origin Importance on Product Evaluation for the Eight Countries as Examples for the DA Printout	555

## LIST OF FIGURES

FIGURE 1.1	Organisation of the thesis	24A
FIGURE 2.1	Product evaluation	31A
FIGURE 2.2	Definition of quality	33A
FIGURE 2.3	Assessment of product quality	38A
FIGURE 2.4	The main concerns of the consumerism movement	48A
FIGURE 3.1	A taxonomy of research on consumer attitudes towards domestic vs. foreign products	54A
FIGURE 3.2	The final consumer research related to product quality in developed countries	55A
FIGURE 3.3	The quality cue - country of origin research in developing countries	65A
FIGURE 3.4	The quality cue - country of origin industrial buyer research	83A
FIGURE 3.5	The risk perception - country cue research	108A
FIGURE 4.1	The problem solving model	125A
FIGURE 4.2	The Howard model	127A
FIGURE 4.3	The Howard Sheth model	128A
FIGURE 4.4	The Engel, Blackwell and Kollat model	129A
FIGURE 4.5	The Anderson model	130A
FIGURE 4.6	Nicosia's consumer behaviour decision model	131A
FIGURE 4.7	The Howard-Ostlund model	132A
FIGURE 4.8	A framework of cue impact on perceived purchasing and handled risk of apparel retail buyer	134A
FIGURE 4.9	Model of possible price effects	135
FIGURE 4.10	A model of the cognitive process of quality perception	136
FIGURE 4.11	Price reliance model	137
FIGURE 4.12	The means-end model relating price, quality and value	139
FIGURE 4.13	An integrated model of the country cue and perceived risk	140A
FIGURE 4.14	Foreign product attitude model of stimuli-response (FPAM S-R)	141
FIGURE 4.15	The research framework	143A
FIGURE 5.1	Research design process	152A
FIGURE 5.2	The process of selecting the appropriate type of data and the appropriate collecting method	152B
FIGURE 5.3	Selecting the most appropriate communication method	155A
FIGURE 5.4	The selection of the appropriate scale of measurement	159A
FIGURE 5.5	Questionnaire development procedures	164A
FIGURE 5.6	Selecting the appropriate sampling method	170A
FIGURE 5.7	The details of response rates at various stages	180A
FIGURE 8.1	A dendogram presents the formation of the final clusters of the consumers' perceptions of the quality of the products of the participating countries using the complete linkage method	240C
FIGURE 8.2	A profile of the consumers' perception of the quality attributes of the domestic product vs. foreign product	241B
FIGURE 8.3	A profile of the consumers' perception of the quality attributes of the domestic product vs. developed countries' product	245B
FIGURE 8.4	A profile of the consumers' perception of the quality attributes of the domestic product vs. developing countries' product	247B
FIGURE 8.5	A profile of the consumers' perception of the quality attributes of the domestic product vs. the quality attribute of the product of each of the participating countries	256B
FIGURE 9.1	A dendogram presents the formation of the final clusters of the consumers' perceptions of the price of the products of the participating countries using the complete linkage method	265C

FIGURE 9.2	A profile of the consumers' perception of the price attributes of the domestic product vs. foreign products	268A
FIGURE 9.3	A profile of the consumers' perception of the price attributes of the domestic product vs. developed countries' product	271A
FIGURE 9.4	A profile of the consumers' perception of the price attributes of the domestic product vs. developing countries' product	273A
FIGURE 9.5	A profile of the consumers' perception of the price attributes of the domestic product vs. the prices attribute of the product of each of the participating countries	278A
FIGURE 10.1	A dendogram presents the formation of the final clusters of the consumers' perceptions of the risk attributes of the products of the participating countries using complete linkage method.	290A
FIGURE 10.2	A profile of the consumers' perception of the risk attributes of the domestic product vs. foreign products	290B
FIGURE 10.3	A profile of the consumers' perception of the risk attributes of the domestic product vs. developed countries' product	293A
FIGURE 10.4	A profile of the consumers' perception of the risk attributes of the domestic product vs. developing countries' product	294A
FIGURE 10.5	A profile of the consumers' perception of the risk attributes of the domestic product vs. the risk attributes of the product of each of the participating countries	301A
FIGURE 11.1	A dendogram presents the formation of the final clusters of the consumers' perception of the combination of quality, price and risk attributes of the products of the participating countries using complete linkage	312C
FIGURE 14.1	A map portraying Jordanian consumers' perception of products of various countries of origin taking account of quality and risk attributes	404A
FIGURE 14.2	A map portraying Jordanian consumers' perception of products of various countries of origin - taking account of quality and risk attributes	404A
FIGURE 14.3	A map portraying Jordanian consumers' perception of products of various countries of origin - taking account of price and risk attributes	405A



LIST OF TABLES

TABLE 1.1	The external trade between Jordan and the participating countries	23
TABLE 7.1	The distribution of the sample by sex	222A
TABLE 7.2	The distribution of the sample by age	222A
TABLE 7.3	The distribution of the sample by education	222A
TABLE 7.4	The distribution of the sample by major (field of study)	222A
TABLE 7.5	The distribution of the sample by income	225A
TABLE 7.6	The cross tabulation of sex by age	225A
TABLE 7.7	The cross tabulation of sex by education	225A
TABLE 7.8	The cross tabulation of sex by major	228A
TABLE 7.9	The cross tabulation of sex by income	228A
TABLE 7.10	The cross tabulation of income by age	229A
TABLE 7.11	The cross tabulation of education by age	229A
TABLE 7.12	The cross tabulation of major (field of study) by age	230A
TABLE 7.13	The cross tabulation of major by education	232A
TABLE 7.14	The cross tabulation of income by education	233A
TABLE 7.15	The cross tabulation of income by major	233A
TABLE 7.16	The cross tabulation of origin importance by sex	233A
TABLE 7.17	The cross tabulation of the evaluation of origin importance by age	233A
TABLE 7.18	The cross tabulation of the evaluation of origin importance by education	233A
TABLE 7.19	The cross tabulation of the evaluation of origin importance by major (field of study)	233A
TABLE 7.20	The cross tabulation of the evaluation of origin importance by income	234A
TABLE 7.21	The Spearman correlation coefficients among the Jordanian product quality variables (Appendix D)	464
TABLE 7.22	The Spearman correlation coefficients among the Jordanian product risk variables (Appendix D)	465
TABLE 7.23	The Spearman correlation coefficients among the Jordanian product price variables (Appendix D)	466
TABLE 7.24	The Spearman correlation coefficients among the Egyptian product quality variables (Appendix D)	467
TABLE 7.25	The Spearman correlation coefficients among the Egyptian product risk variables (Appendix D)	468
TABLE 7.26	The Spearman correlation coefficients among the Egyptian product price variables (Appendix D)	469
TABLE 7.27	The Spearman correlation coefficients among the Taiwanese product quality variables (Appendix D)	470
TABLE 7.28	The Spearman correlation coefficients among the Taiwanese product risk variables (Appendix D)	471
TABLE 7.29	The Spearman correlation coefficients among the Taiwanese product price variables (Appendix D)	472
TABLE 7.30	The Spearman correlation coefficients among the Russian product quality variables (Appendix D)	473
TABLE 7.31	The Spearman correlation coefficients among the Russian product risk variables (Appendix D)	474
TABLE 7.32	The Spearman correlation coefficients among the Russian product price variables (Appendix D)	475
TABLE 7.33	The Spearman correlation coefficients among the Romanian product quality variables (Appendix D)	476

TABLE 7.34	The Spearman correlation coefficients among the Romanian product risk variables (Appendix D)	477
TABLE 7.35	The Spearman correlation coefficients among the Romanian product price variables (Appendix D)	478
TABLE 7.36	The Spearman correlation coefficients among the U.K. product quality variables (Appendix D)	479
TABLE 7.37	The Spearman correlation coefficients among the U.K. product risk variables (Appendix D)	480
TABLE 7.38	The Spearman correlation coefficients among the U.K. product price variables (Appendix D)	481
TABLE 7.39	The Spearman correlation coefficients among the U.S. product quality variables (Appendix D)	482
TABLE 7.40	The Spearman correlation coefficients among the U.S. product risk variables (Appendix D)	483
TABLE 7.41	The Spearman correlation coefficients among the U.S. product price variables (Appendix D)	484
TABLE 7.42	The Spearman correlation coefficients among the Japanese product quality variables (Appendix D)	485
TABLE 7.43	The Spearman correlation coefficients among the Japanese product risk variables (Appendix D)	486
TABLE 7.44	The Spearman correlation coefficients among the Japanese product price variables (Appendix D)	487
TABLE 7.45	The Alpha coefficients test of the reliability of the data concerning the quality, price and risk variables for the product of Jordan (Appendix D)	488
TABLE 7.46	The Alpha coefficients test of the reliability of the data concerning the quality, price and risk variables for the product of Egypt (Appendix D)	489
TABLE 7.47	The Alpha coefficients test of the reliability of the data concerning the quality, price and risk variables for the product of Taiwan (Appendix D)	490
TABLE 7.48	The Alpha coefficients test of the reliability of the data concerning the quality, price and risk variables for the product of Romania (Appendix D)	491
TABLE 7.49	The Alpha coefficients test of the reliability of the data concerning the quality, price and risk variables for the product of Russia (Appendix D)	492
TABLE 7.50	The Alpha coefficients test of the reliability of the data concerning the quality, price and risk variables for the product of Japan (Appendix D)	493
TABLE 7.51	The Alpha coefficients test of the reliability of the data concerning the quality, price and risk variables for the product of U.K. (Appendix D)	494
TABLE 7.52	The Alpha coefficients test of the reliability of the data concerning the quality, price and risk variables for the product of U.S.A. (Appendix D)	495
TABLE 7.53	The Alpha coefficients test of the reliability of the data concerning the general attitude variables (Appendix D)	496
TABLE 8.1	The results of the hierarchical cluster analysis for clustering the eight countries according to the consumers' perception of the quality attributes of their products (the squared Euclidean dissimilarity coefficient matrix)	240A
TABLE 8.2	The process of establishing clusters from the eight countries according to the consumers' perception of the quality attributes of their products (the Agglomeration Schedule using complete linkage)	240

TABLE 8.3	A comparison of the consumers' perception of the domestic product quality vs. the foreign product quality	241A
TABLE 8.4	A comparison of the domestic product quality vs. the developed countries' product quality	245A
TABLE 8.5	A comparison of the domestic product quality viz-a-viz with developing countries' product quality	247A
TABLE 8.6	Ratings of the participating countries according to the consumers' perception of the overall quality of their products	253A
TABLE 8.7	T-test results of the significances of the differences between the mean rating of the domestic product and the mean rating of each country	254A
TABLE 8.8	The ANOVA results of the comparison of the Jordanian product quality to the quality of the participating countries' product	256A
TABLE 8.9	Results of testing hypothesis four for each cue for each of the participating countries	258A
TABLE 9.1	The results of the Hierarchical cluster analysis for clustering the eight countries according to the consumers' perception of the price of their products. (The squared Euclidean dissimilarity coefficient matrix)	265A
TABLE 9.2	The process of establishing clusters from the eight countries according to the highest similarity of the perception of the attributes of their products (the Agglomeration schedule using complete linkage)	265B
TABLE 9.3	A comparison of the prices of the domestic product vs. that of foreign products	267A
TABLE 9.4	A comparison of the overall prices of the domestic product to that of developed countries	270A
TABLE 9.5	A comparison of the overall prices of the domestic and that of developing countries	273B
TABLE 9.6	Rating of the participating countries according to the consumers' perception of the overall price of their products	277A
TABLE 9.7	A comparison of the prices of the domestic products and that to each of the participating countries	277B
TABLE 9.8	The ANOVA results of the differences between the domestic product prices and the product prices of the participating countries on each of the price variables	278B
TABLE 9.9	Results of testing hypothesis four concerning the consumers' perceptions of the domestic product price vs. tht of the participating countries	283A
TABLE 10.1	The results of the Hierarchical cluster analysis for clustering the eight countries according to the consumers' perception of the risk of their products (the squared Euclidean dissimilarity coefficient matrix)	289A
TABLE 10.2	The process of establishing clusters from the eight countries according to the highest similarity of the perception of the risk attributes of their products (the Agglomeration schedule using complete linkage)	289B
TABLE 10.3	A comparison of the domestic product risk vs. that of foreign products	291A
TABLE 10.4	A comparison of the overall risk of the domestic product vs. that of developed countries	293B
TABLE 10.5	A comparison of the risk of the Jordanian product vs. that of the developing countries	294B

TABLE 10.6	The ratings of the participating countries according to the consumers' perceptions of the overall risk of their products	297A
TABLE 10.7	A comparison of the overall risk of the Jordanian product to that of each of the participating countries	299A
TABLE 10.8	The ANOVA results of the differences between the risk of the domestic product and that of each of the participating countries on each of the risk variables	301B
TABLE 10.9	Results of testing hypothesis four concerning the consumers' perception of the domestic products price vs. that of the participating countries' product	305A
TABLE 11.1	Test of the differences between the domestic product and the foreign, developed and developing countries' product in the combination of overall quality, price and risk	311A
TABLE 11.2	The results of the Hierarchical cluster analysis for clustering the eight countries according to the consumers' perception of the combination of the quality, price and risk attributes of their products (The squared Euclidean dissimilarity coefficient matrix)	312A
TABLE 11.3	The process of establishing clusters from the eight countries according to the highest similarity of the perception of the combination of the quality, price and risk attributes of their products (the Agglomeration schedule using complete linkage)	312B
TABLE 11.4	The ratings of the countries on the overall quality, price and risk combination	313A
TABLE 11.5	A comparison of the combination of the quality, price and risk of the Jordanian product to that of each country	314A
TABLE 11.6	The relationship between the price and quality, price and risk and risk and quality	315A
TABLE 11.7	The relationship between the overall quality and each of the six types of risk to each of the participating countries	319A
TABLE 11.8	The main factors of the Jordanian product	323A
TABLE 11.9	The main factors of the Egyptian product	325A
TABLE 11.10	The main factors of the Romanian product	325B
TABLE 11.11	The main factors of the Taiwanese product	327A
TABLE 11.12	The main factors of the Russian product	328A
TABLE 11.13	The main factors of the Japanese product	329A
TABLE 11.14	The main factors of the U.K. product	330A
TABLE 11.15	The main factors of the U.S.A. product	331A
TABLE 12.1	Factor analysis results with varimax rotation (Appendix E)	498
TABLE 12.2	The test of the differences in the consumers' attitudes (The Kolmogorov-Smirnov goodness of fit test) (Appendix E)	502
TABLE 12.3	The percentage distribution of the consumers' agreement with the attitude statements (Appendix E)	503
TABLE 12.4	The relationship between the consumers' response to the attitude variables and their perception of the domestic product quality attributes (Appendix E)	508
TABLE 12.5	The relationship between the consumers' response to the attitude variables and their perception of the domestic product price attributes (Appendix E)	512
TABLE 12.6	The relationship between the consumers' response to the attitude variables and their perception of the domestic product risk attributes (Appendix E)	516
TABLE 12.7	The relationship between the consumers' response to the attitude variables and the socio-demographic variables as well as the importance of the product origin (Appendix E)	520

TABLE 12.8	Results of testing the hypotheses related to the relationship between the consumers' attitudes toward the domestic product and their perception of its quality attributes (Appendix E)	523
TABLE 12.9	Results of testing the hypotheses related to the relationship between the consumers' attitudes and their perception of the domestic product and their perception of its price attributes (Appendix E)	527
TABLE 12.10	Results of testing the hypotheses related to the consumers' perception towards the domestic product and their perception of its risk attributes (Appendix E)	531
TABLE 12.11	Results of testing the hypotheses related to the relationship between the consumers' attitudes toward the domestic product and their socio-demographic variables (Appendix E)	535
TABLE 13.1	Summary of discriminant analysis results : percent of grouped cases correctly classified	366A
TABLE 13.2	The Chi-squared results of the differences among the consumers with regard to their sex	369A
TABLE 13.3	The Chi-squared results of the differences among the consumers with regard to their age	371A
TABLE 13.4	The Chi-squared results of the differences among the consumers with regard to their education	376A
TABLE 13.5	The Chi-squared results of the differences among the consumers with regard to their field of study (major)	380A
TABLE 13.6	The Chi-squared results of the differences among the consumers with regard to their income level	382A
TABLE 13.7	The Chi-squared results of the product origin importance on the product evaluation	385A
TABLE 13.8	The mean ratings of the product attributes according to the consumers' sex (Appendix F)	539
TABLE 13.9	The mean ratings of the product attributes according to the consumers' age (Appendix F)	540
TABLE 13.10	The mean ratings of the product attributes according to the consumers' education level (Appendix F)	542
TABLE 13.11	The mean ratings of the product attributes according to the consumers' field of study (Appendix F)	546
TABLE 13.12	The mean ratings of the product attributes according to the consumers' income (Appendix F)	550
TABLE 13.13	The mean ratings of the product attributes according to the importance of the product origin (Appendix F)	554

## CHAPTER ONE

### INTRODUCTION

- 1.1 Preface
- 1.2 Statement of the Problem
- 1.3 The Research Questions
- 1.4 Research Objectives
- 1.5 Research Hypotheses
- 1.6 Some Information about Jordan
  - 1.6.1 The Population and Area
  - 1.6.2 Foundation of the State
  - 1.6.3 The Economy of Jordan
    - 1.6.3.1 The Main Factors of the Jordanian Economy
    - 1.6.3.2 The Difficulties of the Jordanian Economy
    - 1.6.3.3 The Performance of the Economic Sectors in the Last Decade
- 1.7 The Trade Partnership between Jordan and the Participating Countries
- 1.8 Organization of the Thesis

## 1.1 PREFACE

Consumer behaviour is probably one of the most important elements in the designing of a marketing strategy. According to Kottler (1972) consumers are the focal point of any marketing activity. An adequate understanding of consumer behaviour is essential for the prosperity of any marketing enterprise, whether it is selling soap, a political candidate, a document duplicating service or holding a garage sale (Zaltman and Wallendorf 1979).

Hawkins et al (1983) reported Thomas S. Carrol president and chief executive officer of the marketing orientated Lever Brothers Company as saying: "Understanding and properly interpreting consumer wants is a whole lot easier said than done. Every week our marketing researchers talk to more than 4,000 consumers to find out what they think about our products and those of competitors, what they think of possible improvements to our products ..... what their hopes and dreams are for themselves and for their families ..... consumer behaviour is our key to planning and managing in this ever changing environment."

Many studies either by individual firms, or by academic researchers have been done in the field of consumer behaviour in developed countries, particularly in the U.S.A., which perhaps cover every individual product and every segment of the consumers. On the other hand, very little has been done in developing countries in this regard. According to Hoover and Associates (1978) for the most part, the international marketer must rely on knowledge of consumer behaviour which has been developed within the United States. The vast majority of basic consumer research has been conducted in the U.S.A. and most of the available consumer theories with practical applications are based on this research.

The need for marketing research studies in less developing countries was emphasised by Kaynak (1982) who stated that "marketing research in L.D.C. markets is needed to determine the areas in which comparative advantage exists; to study the consumer preferences of final consumers or of the consumers of immediate products; to set up standards of pricing and marketing efficiency and to seek out alternatives which can expand industries based upon changing factor endowments" (Abbott 1961).

Since it is well documented in the consumer behaviour literature that consumers are not homogeneous in their behaviour even in the same country with relatively similar values, it is obvious that the consumers of another country with different values will be more heterogeneous in comparison with the consumers of the first country. Schiffman and Kanuk (1983) explained perception which is only one dimension of the consumer behaviour as, "perception is a personal phenomena, each individual has a perceived image of himself or herself as a certain kind of person with certain traits, habits, possessions, relationships and ways of behaving".

In such a situation one cannot apply the results of any studies done at a specific place to specified consumers at certain times on other consumers in another place at a different time. This argument is supported by Dickensheets (1963) who stated that "it is quite different, therefore, to use existing information gathered from western culture and to try to adapt this to L.D.C.'s".

Thus, the need for more research concerning the consumers of the developing countries including the Jordanian consumers, is well justified. Both the international marketers and the Jordanian local producers, with keen interest in meeting the consumers needs and wants, will benefit from the findings of this study. Also, the Jordanian legislator and regulators, who had shown a growing interest in the protection of the domestic product,



will have another dimension to consider, that is, that the consumer is, the main factor in the success or failure of the domestic product.

## 1.2 STATEMENT OF THE PROBLEM

Despite the growing importance of the consumers in the market place and the increased emphasis on the need for marketing research, very little has been done in Jordan, as well as in many of the developing countries, in this respect. Mahmoud and Rice (1984) summarised the marketing problems in developing countries by stating that "with reference to the problems of implementing marketing strategy, the present conditions in developing countries include the paucity of marketing information, the duality of the economy, a poor infrastructure, often unstable political conditions and inadequate administrative and technical skills". Thus, the lack of marketing information which is mainly the natural result of the lack of marketing research comes on top of the problems in the developing countries.

The situation in Jordan is not so different to that of the rest of the developing countries. However, in examining the current situation of the Jordanian economy, we registered the following observations:

1. The balance of trade in Jordan showed an increasing deficit (JD 876.6 million). The deficit was mostly due to an increase in the import of consumer goods compared to the imports of capital goods for development purposes (Tarrif 1984).
2. The government is imposing many regulations to restrict the free-trade in an effort to protect the local industry from foreign competition.
3. Some of the Jordanian firms went out of business and others barely survived due to the import of the same products of foreign origin (Almalki 1988).

4. The government is trying to take several measures to encourage foreign investors to participate in the development plan (1986-90) by giving them several incentives (Law no.11, 1987, encouragement of investment) while the already existing firms cannot stand foreign competition and are demanding more protection.
5. In late 1988 and through 1989, the Jordanian currency was depreciated by as much as 50% against the major foreign currency, due to the shortage of foreign exchange reserve in the Central Bank of Jordan. This led to major efforts by the higher officials to bring in grants from other Arab states.

In solving the Jordanian economy problems, most of the efforts were directed toward the pure economic dimension of the problem. This included the feasibility studies of establishing new factories, expanding the size of the existing factories, limiting or even restricting the imported products, fixing and monitoring the exchange rate, regulating the amount of foreign currency to be transferred abroad and so on.

However, there is one missing point in all of these procedures, that, is the Jordanian citizen, the consumers of the domestic product and foreign product. To the best knowledge of the researcher, very little, if any, research has been conducted to investigate the Jordanian consumers' needs and wants. This includes the local business firms, the Jordanian academics and possibly the government agencies. As an example, there was a proposed project in 1989 to establish a consumer protection agency in Jordan.

The best explanation about the marketing situation in Jordan as one of the developing countries can be summarized as: "Despite the tremendous importance of marketing for every economy, it is still considered by most economic and government planners of L.D.C.'s to be a passive element of the

economic system. In these countries, economic planners tended to focus their attention on investment in projects designed to increase industrial and agricultural production capabilities .... the reason for the absence of a specification of marketing's role in development policies of L.D.C.'s may well lie in the lack of theoretical understanding of the position of marketing in the various stages of development processes" (Kaynak 1982, p.25).

The international marketing literature in general stresses the point that the majority of business people and government officials in developing countries (Jordan is not an exception) know little about marketing. The economic planning decisions are made largely by government economists who know little about marketing. The company business planning in these countries suffers from too much product orientation (see for example Keegan 1984, Walsh 1982, Kaynak 1982 and Kindra 1984).

The fact that consumers differ from economists and that not all of their behaviour patterns are built on economic reasoning, should be appreciated. What consumers perceive about the product may not necessarily reflect the nature and the physical attributes of the product. Both the Jordanian officials and the local firms may not be aware of the consumers preference of domestic and foreign products. How they evaluate the quality, price and risk attributes of the products of various origin. What is their attitude toward the connection of the purchase of the domestic product to their patriotic duties, their attitude toward the local business practices, government involvement in controlling quality, restricting imported goods and such factors?

It is the main theme of this research to explore the previous issues and to add a new dimension to the Jordanian policy makers, local business, international business and international marketing research, that can be

taken into account. The product class chosen for investigation, is the main electrical and gas appliances produced in developing and developed countries, in addition to Jordan. The developed countries selected for the study were: U.S.A., U.K., Japan and Russia. The developing countries were: Romania, Taiwan and Egypt.

### 1.3 THE RESEARCH QUESTIONS

The main focus of the research will be concentrated in finding answers to the following questions.

1. What are the perceptions of the Jordanian consumers of the:
  - a) domestic product quality, price and risk
  - b) foreign products quality, price and risk
  - c) developing countries product quality, price and risk
  - d) developed countries product quality, price and risk
  - e) the products of each of the participating countries quality, price and risk?
2. Are there any differences in the consumers perception of the domestic product quality, price and risk and that of foreign, developed, developing and each individual country?
3. What are the main strengths and weaknesses of the domestic product in comparison to that of the previous categories?
4. Is there any relationship between the consumers perception of the quality of the product of each country and their perception of its price, on one hand and their perception of its risk on the other hand?
5. Is there any relationship between the consumers perception of the product price and their perception of its risk?

6. Are there any differences among the Jordanian consumers in regard to their perception of the domestic product quality, price and risk according to their socio-demographic variables?
7. What are the consumers attitudes toward relating the purchase of the domestic product to the patriotic duties, business practices, government role in controlling quality, restricting free trade etc?
8. Are there any differences between the consumers who perceive the origin of the product as an important variable in the purchasing decision and those who give it lower importance in both the perception of domestic and foreign product quality, price and risk and in the general attitude variables?
9. Are there any relationships between the consumers response to the general attitude variables and their perception of the domestic product quality, price and risk?

As far as the researcher is aware, such a study has not been conducted neither in Jordan, nor in any other developing countries. According to Chao (1989), while the importance of consumers perception of product quality has long been recognised in domestic marketing, it has received relatively little attention from international marketing researchers.

The importance of the study can be emphasised by the following quotations.

Ernest Dichter (1961) stated that "the little phrase 'made in' can have tremendous influence on the acceptance and success of a product over and above the specific advertising techniques".

Nagashima (1970) reported that people from different countries may have 'made in' images which are different. 'Made in' images are affected by many factors, including national characteristics, representative products, political and economic background, history and traditions. The impact of

these factors on people from different cultural, social, political and economic levels may differ, resulting in the formation of 'made in' images which are dissimilar in many respects.

#### 1.4 RESEARCH OBJECTIVES

The major concern of this research is to investigate the Jordanian consumers perceptions of the domestic product quality, price and risk vs. the product of foreign countries. Therefore, the following are the major objectives of the research.

1. To identify the consumers perceptions of the quality, price and risk of the domestic product and foreign products in general and to find out whether consumers perceive the products of the various countries in the same way, despite their origin, or do they discriminate between them according to their source country?
2. To find out if the various countries can be grouped together, in respect of the consumers perception of the quality, price and risk, according to their level of development. That is, to find out if the countries known as developed and developing can be grouped into these two categories, according to the consumers evaluation of their products.
3. To compare the consumers' perceptions of the domestic product quality, price and risk to that of each of the participating countries.
4. To explore the level of the relationship between the three main cues: quality, price and risk for each country. That is, to find out the existence of relationships between perceived quality - perceived price, perceived quality - perceived risk, and perceived risk - perceived price.

5. To profile the consumers' perceptions of quality, price and risk of foreign and domestic products according to their socio-demographic variables, such as consumers' sex, age, education, income ..... etc. That is to see if there are any differences among the consumer according to such variables and to specify the important variables in this regard.
6. To investigate the differences among the consumers in regard of their attitudes towards such variables as the patriotic, business practices, the expectations of the domestic industry future and the role of government in protecting domestic business and their perception of the domestic product quality, price and risk on one hand and the relationship between the attitude variables and the consumers socio-demographic variables on the other hand.
7. To explore the differences between the consumers who attached high importance on the origin of the product in evaluating the product quality, price and risk and those who attached lower importance to the product origin.
8. To examine the relationship between the ratings of the product origin in product evaluation and the consumers perception of the quality price and risk of the domestic product.
9. To find out what the Jordanian industry, the Jordanian government and to some extent the foreign suppliers can do with relation to the findings of this research.

As in any research project, this research aims to come up with some conclusions and implications which might help the industry in Jordan to have some idea about the consumers of their products and to visualise a strategy which can best serve the consumers and the industry. In the meantime, the government of Jordan, as one of the developing countries

which rely on regulations in organizing the development of the country, may find the results of the study useful in modernizing its policies towards the domestic industry, the foreign suppliers and the consumers. Finally, those who already export to Jordan, or those who might be interested in conducting business in Jordan, and those who need to know more about an example of a developing country consumers' behaviour, might find this research helpful.

These are the main objectives which should be achieved through this research. As can be seen, the objectives are highly related and indivisible. They are all aimed to explain one phenomenon, that is, the perceptions of domestic and foreign products for three main cues; quality, price and risk.

#### 1.5 RESEARCH HYPOTHESES

The goal of this study was to investigate the perceptions of the domestic product quality, price and risk of the domestic product vs. the foreign product. In particular the products of U.K., U.S.A., Japan, Russia, Romania, Taiwan and Egypt in addition to the Jordanian product. Sixty four variables measuring the attributes of the product quality, price and risk variable, the general attributes and socio-demographic variables of the Jordanian consumers were used in the study.

Thus the number of hypotheses to be tested will be very large. Using the formula of the maximum number of inter-relationships that can be generated:

$$K = n(n-1)/2$$

where K = the number of inter-relationships

n = the number of variables



It is found that the number of hypotheses to be tested is 2016. This large number of inter-relationships is in fact related to only one of the eight countries. Thus, the actual maximum number of the inter-relationships is approaching 16128. This is without adding the inter-relationships between the various countries, which will make the number of hypotheses much higher. In addition to that, it was expected that the findings would lead to the formulation of new hypotheses that could be tested in future research. Therefore, the main hypotheses of this research stated in their null form are as follows.

1. There is no significant difference in the consumers' perception of the quality, price and risk of the domestic product and that of foreign products. This hypothesis can be sustained to the following hypotheses:
  - a) there is no significant difference between the domestic product quality, price and risk and that of foreign countries in general.
  - b) there is no significant difference between the domestic product quality, price and risk and that of developing countries as a group.
  - c) there is no significant difference between the domestic product quality, price and risk and that of developed countries as a group.
  - d) there is no significant difference between the quality, price and risk of the domestic product and that of each individual country among the seven countries chosen for this study.
2. There is no relationship between the consumers' perception of the product quality and their perception of its price.
3. There is no relationship between the consumers' perception of the product quality and their perception of its risk.

4. There is no relationship between the consumers perception of the product price and their perception of its risk.
5. There is no significant difference in the the consumers' perception of the quality, price and risk of the domestic and foreign products according to their socio-demographic variables.
6. There is no relationship between the consumers' perception of the domestic product quality, price and risk and their attitudes toward such variables as the patriotic feelings, business practices, government policies in restricting trade and controlling quality and the consumers' expectations of the future of the domestic industry.
7. There is no significant difference among the Jordanian consumers in regard of their general attitude variables.
8. There is no relationship between the consumers' socio-demographic variables and their general attitude variables.
9. There is no difference between the consumers who considered the origin of the product to be important in the buying process and those who did not in regard of their perception of the domestic product quality, price and risk.
10. There is no relationship between the consumers' evaluation of the importance of the product origin in the purchase decision and their socio-demographic variables.
11. There is no relationship between the consumers general attitude variables and their evaluation of the importance of the source country product evaluation process.

## 1.6 SOME INFORMATION ABOUT JORDAN

In this type of study, one should be required to give some basic information about the test country. However, the information will be very brief with one main objective, that is, to familiarize the reader with the country under investigation.

### 1.6.1 THE POPULATION AND AREA

In 1986 the population of Jordan was estimated at 2.8 million. Of the total population, males constitute approximately 52%. Approximately 75% of the population are under 30 years of age, of whom 52% are under 15 years of age. The vast majority of the population are Sunni Muslims. About 6% of the total population are Christians (The Economic Intelligence Unit 1987). The official and spoken language is Arabic. The area of Jordan (east bank only) is 91860 square kilometers. About 80% of the total area is desert and only 10% of the cultivated area is irrigated.

### 1.6.2 FOUNDATION OF THE STATE

In March 1921 the State of Transjordan was established as a self-governing principality with Britain as the mandate power. In 1946 Great Britain recognised Jordan as an independent state known as the Hashemite Kingdom of Jordan. King Abdullah Bin Al-Hussain became the first King of Jordan. After the assassination of the founder of the Kingdom in 1951, his eldest son, King Talal, became the second King in modern Jordanian history. Due to the illness of King Talal, he ruled only briefly and in 1952 he was succeeded by his son, King Hussain Bin Talal, the present King of Jordan.

### 1.6.3 THE ECONOMY OF JORDAN

Jordan has one of the smallest national economies in West Asia, with a GDP of \$3.45 billion in 1985 (UNIDO 1987). The Jordanian economy has been featured of its increasing openness. This has been reflected by the high growth of the trade sector relative to GNP. The volume of Jordan's foreign trade for the period 1973-1985 increased at an average growth rate of 27% per annum, while the GNP increased at an average 18.5% per annum for the same period. The trade ratio (imports and exports to GNP) has escalated to the growth in imports rather than exports (Amerah and Al-Hajji 1987).

During the period 1973-83 Jordan achieved the highest rate of growth of GDP (11.1% per annum) among all developing and developed countries (the World Bank 1985). Despite the economic slow down in the region since 1980, Jordan experienced the highest rates of growth (4.1% annually) when economies such as Saudi Arabia and the United Arab Emirates contracted significantly and Kuwait and Syria had annual growth rates of less than 2% per annum (UNIDO 1987). However, the average growth rate of GDP has declined to between 2% and zero% per annum for the period 1982-1987, while the population growth rate was close to 4% per annum (Kanovsky 1989).

#### 1.6.3.1 The Main Factors of the Jordanian Economy

According to Abdeljaber (1986) the principal elements in Jordan's economy are: the energetic human resources, pragmatic economic policies, efficient use of available resources and location.

1. Human Resources. Despite the low participation rate in the labour force, due to the high ratio of the young population (52% are under 15 years of age) which resulted in a high dependancy rate (approximately 5:1), Jordan's human resources were considered the basic factor of production and main source of income growth. The remittances from Jordanian workers abroad contribute to 26.4% of the total receipt of foreign exchange in

1984, and 25.2% of GNP for the same year (Abdeljaber 1986). The Ministry of Labour estimated there were 325,000 Jordanians working abroad. It was also estimated that, including family dependents, the number of Jordanian expatriates was between 800,000 and 1,000,000 in 1985 (Konovsky 1989).

2. Pragmatic Economic Policies. Since the early 1950's, Jordan has followed a free enterprise economic philosophy. The government role was mainly related to the planning of national investment, providing an adequate infrastructure, supplementing private capital in establishing large projects, and regulating the economic activities. This policy encouraged the private sector in participating in the economic development of the country. The private enterprises expanded in number and activity since the early 1950's.

3. Efficient Use of Available Resources. Jordan is known for its limited natural resources. However, whatever resources the country can acquire, it tried to make the best of it. There are minimal cases of resource wasting. Major industrial projects are based on the utilization of local natural resources (phosphate, potash, cement, etc). Feasibility studies were usually carried out before allocating funds for such projects.

4. Location. Being a small country bordered by larger and more wealthy countries, Jordan has adopted an open economy where flows of trade, labour and capital can move with few restrictions. Thus, Jordan's location has the advantage of being used as a transit country in West Asia. The transportation sector which employs more than 40,000 workers benefited from the intra-regional activities.

#### 1.6.3.2 The Difficulties of the Jordanian Economy

Due to the heavy dependence on foreign aid, particularly from the rich Arab countries, and the steady decline of this aid the Jordanian economy started to face serious problems which have appeared on the surface since

1988. However, the indications of these problems were apparent from the early 1980's. The main problems of the Jordanian economy are mainly attributed to the severe lack of natural resources, the small size of cultivated area and the high growth rate on the population. The following are the symptoms of the above problems.

1. Unemployment. The unemployment percentage has risen from 2% in 1981 to approximately 15% in 1988 and probably 30% in 1990 (Kanovsky 1989). Given the nature of this unemployment which was mostly among females, educated (college graduates and over), professionals (doctors, engineers, lawyers) and high skilled labour (Al-Zoubi 1988), the solution appeared to rely on the need of restructuring the economy. The dependence on the Gulf States for absorbing the surplus of the Jordanian workers might not be suitable at this stage, especially with the increased slow down on the economies of these countries, and their tendency to replace foreign workers by local employees. The suggested solutions of replacing the foreign workers in Jordan (approximately 150,000) by Jordanian workers, might not be applicable because of the mismatch between most of the positions occupied by those workers (mostly in agriculture and other unskilled positions) and the qualification of the Jordanian job seekers.

2. The decline in Jordan's convertible foreign exchange reserves which reached minimum level in 1986 (\$275 million according to Business America 1987). In 1988 the government was obliged to abandon the fixed exchange rate of the Jordanian dinar, which led to a serious devaluation (approximately 50% against the major currencies). Also it was obliged to restrict the import of some products and to enter in rescheduling of the government debt.

3. Jordan has always suffered from a considerable trade deficit, imports of goods and services exceeded exports of goods and services. The trade deficit rose to \$1.8 billion in 1987. This deficit was financed by the surpluses of invisible exports (remittances of Jordanians working abroad, foreign grants, etc). With the deteriorations in both the grants and the remittances, coupled with the low reserve of foreign exchange, one can expect to find that serious problems are on their way.

4. Other serious structural problems facing the economy relate to: (1) the level of defence expenditure, amounting to one quarter or more of the annual budget. Defence has inevitably hampered the development process and contributed to permanent budget deficit, (2) instability and uncertainty in the region has deterred private enterprise from investing in productive activity. This has reinforced the merchantability in Jordan and contributed to successive large deficits on the balance of trade, (3) the absence of an indigenous energy source combined with the country's inability to feed itself, strain the balance of trade still further (EIU 1986).

#### 1.6.3.3 The Performance of the Economic Sectors in the Last Decade

The investigation of the economic sectors might give better understanding of the Jordanian economy. This will include agriculture, industry, construction, tourism and services.

A) Agriculture. The importance of the agriculture sector stems from its being the main source of income for about 20% of the population. It provides employment for 12% of the labour force, contributes to improving the balance of trade and achieving food security (five year plan 1986-90). Most government investments in agricultural projects were directed towards the irrigation sector which represent only 10% of the cultivated area. However, inspite of the consistent increase, the agricultural output, its

contribution to the GDP has declined from 14% in 1972 to about 7.2% in 1987. Farm export (mainly fruits and vegetables) to the neighbouring Arab countries has declined since 1987. This was due both to stiff competition from other exporters and to the development of the agricultural project in the Gulf States (Kanovsky 1989). With regard to livestock, Jordan produces less than 30% of its beef and lamb requirements. In conclusion, food imports are surpassing exports. The deficit was about £300 million in 1987.

The problems facing the agricultural sector are related to: (1) the scarcity of water resources and fluctuations in time and place (five year plan 1986-90), (2) the marketing of fruit and vegetables both internally and abroad, has been chaotic, (3) the absence of effective quality control is a barrier to export to Europe (Kanovsky 1985).

The 1986-90 development plan aimed to increase the irrigable lands to the maximum extent which available water resources permit. It calls for extending the east Ghor Canal, converting surface canals into a piped irrigation system, diverting water from Wadi Mujib to irrigate the southern Ghor Lands, increasing irrigated lands in Wadi Araba, and some other projects (development plan 1986-90).

B) Industry. Jordanian industry may be described as a dualistic industrial structure. Most small and medium-sized firms are in the textile and food manufacturing branches. Most manufacturing enterprises are localized in a narrow industrial belt stretching from Amman to Zarga in the north west of the country (UNIDO 1987). Most of Jordan's public and semi publically owned companies are operating at a loss and many private companies are struggling to stay afloat (Business America 1987). According to Abdeljaber (1986), the Jordanian industry was a fast growing sector in Jordan rising from HD 40.5 million in 1974 to JD 237 million in 1984. The



government has taken an active role to promote the Jordanian industry, particularly since 1975. This role was transacted on financing large and medium scale enterprises, such as phosphates, potash, cement, glass, etc and in taking measures to encourage private investors through tariff protection, subsidies, favourable tax treatment and in some cases a complete ban on competitive products.

In 1985-87 industry (including mining and manufacturing) accounted for 20-21% of gross domestic product and 10-11% of total employment. It was planned (1981-1985 development plan) that the value added in industry was to rise by a most ambitious 17.8% per annum. In reality, the growth rate was 4.9%. The goal for the 1986-90 development plan was to sustain the 4.9% growth rate. However, the indication showed that the value added for the first two years was declining (Kanovsky 1989).

The main problems and issues facing the Jordanian industry were summarized by Abdeljaber (1986) as follows.

1. Efficient Management. Large projects of potash, fertilizers, glass and south cement are operating at loss. Effective management is needed to minimise the loss in the first place and to then gain profits. However, the potash company has started to report profits (\$12 million in 1988).

2. Enhancing Marketing Ability. Since most of the above mentioned projects are orientated toward exporting to the international markets, where the government can afford little in this matter, there is an urgent need for a marketing orientated management. This type of management should be able to identify the suitable markets for these products and take an active role in promoting the Jordanian product in these markets.

3. Shortening and speeding the lengthy procedures of project's licensing and encouraging the private investors (local or foreigner) to invest in Jordan. Financing the projects proposed in the developments plans. Thus it is required to attract private investors by giving incentives and privileges, rather than complicating the procedures.

4. The quality of the domestic product is questionable. The need for getting the quality of the Jordanian product improved to attain a strong competitive position is needed.

C) Construction. This sector was booming in the late 1970's and early 1980's. The output of this sector rose from JD 16.8 million in 1974 to JD 127 million in 1984. However, in 1985 the output started to decline, it reached JD 124.4 million and 112.5 million in 1985/86 respectively. In 1986 construction formed 8% of GDP at factor cost, dropping from 9.1% in the previous year and 10.9% in 1980 (EIN 1987-88). There were 55.5 thousand Jordanian workers in the construction sector in 1984 (Abdeljaber 1986).

The rapid decline in this sector since the early 1980's was due, directly or indirectly, to the economic slow down in the Gulf countries which negatively affected remittances, financial aid to the government and private investment in real estate by wealthy Arabs (Kanovsky 1989).

D) Tourism. Jordan has an abundance of archaeological, historical, religious and tourist sites of great importance (development plan 1986-90). Tourist income in 1975 was \$112 million, by 1981 it had risen to \$548 million. It was projected to grow up to \$900 million in 1985, but in reality it declined to \$518 million.

While Jordan has good potential for expanding tourist activities and income, several problems need to be resolved including:

1. The Jordanian tourist industry is not effective with regard to the marketing of tourism. The failure is mainly due to the lack of experience, organisation and imagination.

2. Airfares are extremely expensive for the ordinary holiday makers.

3. Tourists are concerned about the stability of the middle eastern countries and personal safety negatively affected tourists visiting Jordan, particularly from Europe and North America.

4. Joint tours with neighbouring countries (Syria, Egypt, Israel, Iraq) are ignored.

E) Other Services. In comparison with other countries at a similar level of per capita production and income, Jordan's economy appeared to be significantly orientated towards services including transportation and communications, trade and finance, various personal and business services, as well as government services (Kanovsky 1989). Despite the emphasis in all Jordan's development plans to restructure the economy in favour of the goods producing sectors, there has been no actual progress in this regard. In 1974 the service sector contributed to 62.7% of the GDP compared with 61.6% ten years later (Abdeljaber 1986).

According to Kanovsky (1989), the high share of services is attributed mainly to the following factors.

1. The persistently high import surplus is financed mainly by foreign aid and tends to orient the economy toward services required to transport and maintain the imported goods.

2. The remittances of Jordanians working abroad contributed to the finance of imported goods associated with the provision of local services.

3. The relatively high level of military and security expenditures increased the share of services in the economy.

4. The apparent fast growth in transit trade, particularly with Iraq, contributed to the increase of the share of services.

5. The greater emphasis on high educational and health levels compared with other countries at similar levels of per capita income, increased the shape of services.

6. Although the tourist income (\$580 million in 1987) is far below the official expectations, this income is considered to be relatively high in relation to the country's GNP \$5.5 billion in 1987.

#### 1.7 THE TRADE PARTNERSHIP BETWEEN JORDAN AND THE PARTICIPATING COUNTRIES

The countries selected for this study are U.S.A, U.K., Japan, Egypt, Russia, Romania and Taiwan. All countries are trade partners with Jordan although at various levels. Table 1.1 summarizes the Jordanian external trade with the participating countries. It was observed that while the U.S.A., U.K. and Japan are the main suppliers of the Jordanian market among the participating countries, the U.S.S.R. and Romania were the

TABLE 1.1

#### The External Trade Between Jordan and the Participating Countries

COUNTRY	EXPORT	IMPORT	%TOTAL IMPORT	% TOTAL EXPORT
USA	304.9	75528.9	8.88	0.135
UK	928.8	68785.9	8.09	0.413
Japan	5690.2	66641.7	7.84	2.52
Egypt	3978.6	9166.1	1.08	1.68
Russia	---	6045.5	0.71	0
Romania	7523.9	14672.4	0.89	2.01
Taiwan	2900.9	18039.8	2.12	1.29

for the year 1986 in (000 JD's)

lowest. However, the seven selected countries constitute about 30% of the total imported products. With regard to the Jordanian export to those countries, it was observed that the seven countries constitute only around 9% of the Jordanian total export. Nonetheless, since the concentration of this thesis will be on the Jordanian consumers perception of the quality, price and risk of the foreign and domestic product, it is believed that the imported product from these countries is more relevant than the exported Jordanian product.

## 1.8 ORGANIZATION OF THE THESIS

Chapter one provides an introduction to the thesis. It presents the statement of the research problem, research questions, research objectives and hypotheses, and finally it gives some brief information about Jordan with special emphasis on the economic dimension. (Figure 1.1 provides a summary of the organisation of the thesis.)

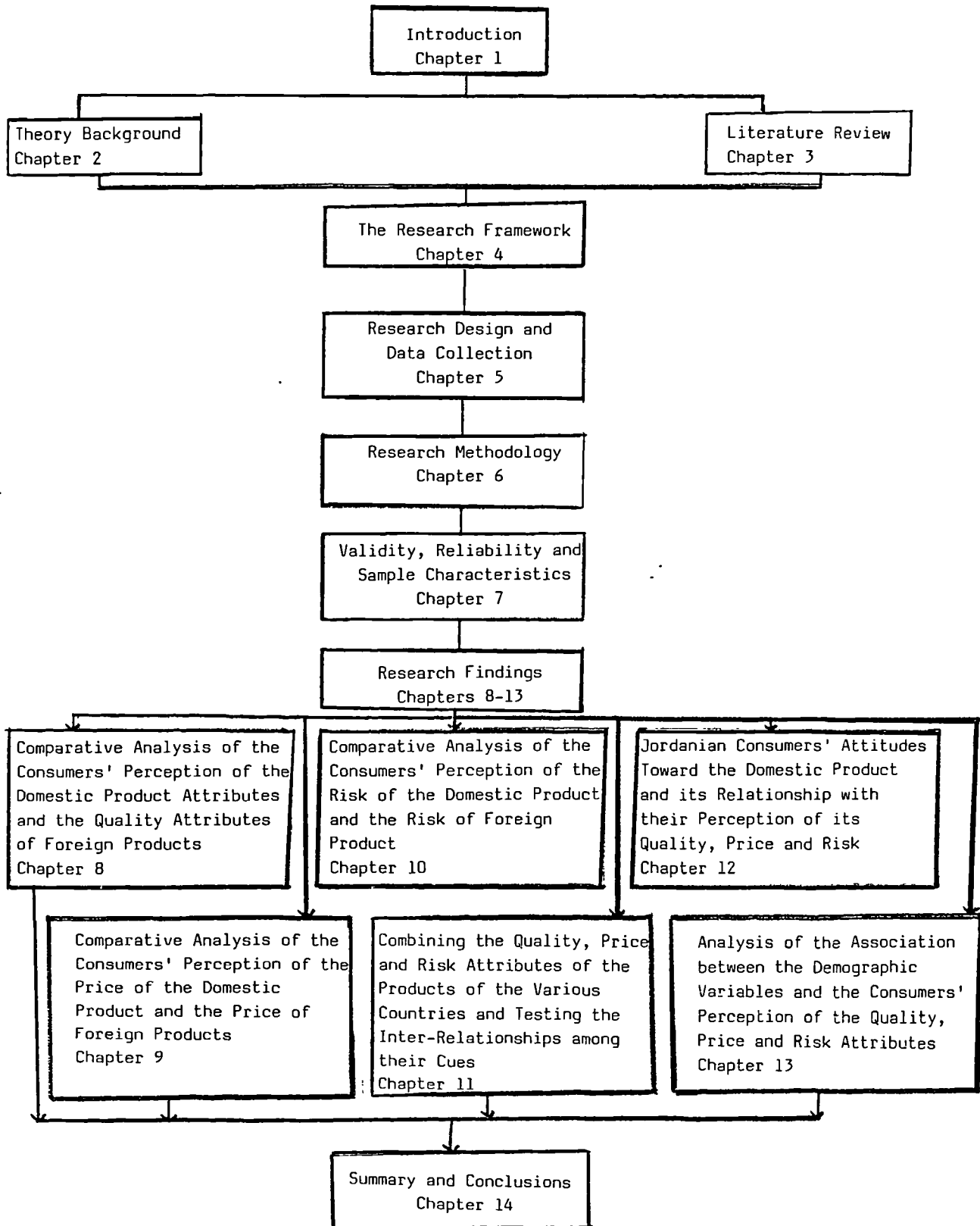
Chapter two focuses on the theory behind this research. It includes the definitions of the most important terms used in this study including: consumers, consumer behaviour, marketing, perception, attributes and quality. The discussion also includes the theoretical relationship between quality and price, quality assessment, types of risk and a brief discussion of the consumerism movement.

Chapter three comprises a review of the literature related to the source country impact on product evaluation. The chapter primarily focuses on the existing literature concerned with the three cues, quality, price and risk used in this research study. The main findings and limitations of the previous research are discussed.

Chapter four provides a discussion of the widely known comprehensive consumer behaviour models along with the more specified models relevant to

FIGURE 1.1

ORGANISATION OF THE THESIS



the research problem. A summary of each of these models is presented as well as their limitations. This chapter presents a suggested frame work which incorporates the impact of the source country on the evaluation of the quality, price and risk of that country.

Chapter five deals with the research design and data collection issues. The chapter starts with evaluating the alternative methods of data collection, provides the basis and rational for selecting the appropriate method suitable to the current research. The selection of the appropriate scale of measurement as well as the questionnaire developments are also presented. The chapter provides a brief discussion of sampling the population under investigation. The justification of the stratified random sampling method employed in this study is provided. The chapter provides the reasons behind the selection of the product class and the participating countries used in this research. The final section of chapter five presents the details of the field work including the questionnaire delivery and the response rate.

Chapter six presents the research methodology. The chapter starts with a revision of the alternative statistical techniques available, the assumption behind these methods and the basis for the selection of the appropriate techniques. The techniques employed in this research study include: chi-square, Kolomogrov-Smironov, t-test, the Spearman correlation coefficient, analysis of variance, factor analysis, discriminant analysis and cluster analysis. The chapter gives a description of these analysis techniques and the justification for their use in this research.

Chapter seven aims to assess the validity and reliability of the data used in this research. The chapter starts with a brief overview of the theoretical bases for the two concepts (validity and reliability). It refers to the growing emphasis on the marketing research, for the need of

reporting the validity and reliability of the research data. The chapter reports the statistical analysis employed to test the validity and reliability of the data along with the results of the test. Chapter seven also presents the descriptive statistics of the sample characteristics and compares these characteristics with the actual population.

Chapter eight is devoted to the research findings and interpretation related to the product quality. The domestic product quality attributes are compared to those of foreign, developed, developing and each of the participating countries. The cluster analysis is used to group the countries according to the consumers perceptions of the quality attributes of each country.

Chapter nine presents a comparative analysis of the consumers perception of the domestic product price attributes and the price attributes of the products of foreign, developed, developing and each of the participating countries. The first section of the chapter is devoted to the utilization of cluster analysis to group the countries according to the consumers' perception of the price attributes of each country. The second section presents the ratings of the countries as the consumers perceived the price of their products. The rest of the section is devoted to the comparison of the perceived price of the domestic product and that of the other countries.

Chapter ten presents the research findings related to the comparative analysis of the consumers' perception of the domestic product risk and their perception of the risk associated with the products of foreign, developed, developing and each of the participating countries. The same analysis applied in the previous two chapters is repeated in the risk chapter. That is, the cluster analysis is utilized first to investigate the possibility of grouping the countries according to the consumers'



perception of the risk associated with their products. Then countries are ranked according to the perceived risk of their products. Finally the perceived risk of the domestic product is compared to each of the participating countries.

Chapter eleven combined the three cues (quality, price and risk). The cluster analysis is employed first to see if the grouping of countries in the combination of the three cues will be different from that of each cue. Secondly, countries are ranked on the aggregate combination of the three groups for the same purpose. Thirdly, the inter-relationship between the three cues (price-quality, price-risk and risk-quality) is investigated for each country.

Chapter twelve is devoted to the investigation of the Jordanian consumers attitudes toward a set of variables, related to the consumers' patriotic feelings, attitudes toward quality control, government and business practices, attitudes toward Jordanian workers and toward foreign products. The relationship between the consumers' attitudes toward these variables and their perception of the domestic product quality, price and risk is investigated. Also, this chapter investigates the relationship between the consumers attitudes toward the above mentioned variables and their demographic variables.

Chapter thirteen investigates the relationship between the consumers socio-demographics and their perception to the product attributes of the various countries. The discriminant analysis is applied to find out which of the socio-demographic variables is effectively strong to discriminate among the Jordanian consumers. This chapter also tests the relationship between the importance the consumer attaches to the origin of the product on the purchase decision and their perception of the quality, price and risk attributes of the products of the various countries.

Chapter fourteen provides a review of the entire study. it starts with a summary of the main research findings, followed by its major implications for the local producers, the public policy, and for the international marketers. The main research contributions, including the theoretical, methodological and practical are presented. They key limitations of the research is specified. The chapter concludes by suggesting some areas for future research.

## CHAPTER 2

### THEORY BACKGROUND

- 2.1 Introduction
- 2.2 Definition of Terms
- 2.3 Price-Quality, Store Image-Quality, Manufacturer Image-Quality and Source Country Image-Quality Relationships
- 2.4 Assessment of Product Quality
- 2.5 Perceived Risk and Product Evaluation
  - 2.5.1 Types of Risks
  - 2.5.2 Perceived Risk and Country of Origin
- 2.6 The Role of Price in Product Evaluations
- 2.7 Consumerism
  - 2.7.1 Consumerism and Product Quality
  - 2.7.2 Consumerism and Price
  - 2.7.3 Consumerism and Perceived Risk
  - 2.7.4 The Use of Consumerism in the Present Research
- 2.8 Conclusions

## 2.1 INTRODUCTION

The aim of this chapter is to present the existing theory behind this study. According to Jacoby (1978) nothing is so practical as a good theory. The theory that backed this study is related to the terms constituting the title of the study. In particular the concepts related to the terms: Consumers and consumerism, perception, quality, price, risk, foreign products and domestic products. A good understanding of these concepts is a pre-requisite to understand the research problem. In this chapter the various concepts will be defined and briefly explained. The relationships among these concepts and its impact on product evaluation will be discussed as well (figure 2.1 presents the interaction among the concepts: quality, risk, price consumerism and their impact on product evaluation).

## 2.2 DEFINITION OF TERMS

In this section the terms: consumers, consumer behaviour, marketing, perception, attitudes and quality will be defined and briefly discussed.

1. Consumers. Consumers can be defined as those individuals or organizations who are involved in searching for, purchasing, using, evaluating and disposing of products and services. The term consumers involves two types of consuming entities: (1) the personal (end users) consumers and (2) the organized users. The first type can be described as those individuals who buy goods and services for their own use, for the use of the household, for a use of a member of the household, or for the use of another person (gift for a friend). The second type involves private business, government agencies and institutions, all of which must buy products, equipment and services in order to run their organizations. (Schiffman and Kanuk 1983).

The main concern of this research is the personal end users consumers.

2. Consumer Behaviour. The definition of consumers leads to the definition of consumer behaviour, which has been defined as 'Consumer behaviours are acts, process and social relationships exhibited by individuals, groups and organizations in the obtainment, use and consequent experience with products, services and other sources'. (Zaltman and Wallendorf 1979.) Another related definition of consumer behaviour is given by Jacoby (1978) "Consumer behaviour encompasses the acquisition, consumption and disposition of goods, services, time and ideas by decision-making units".

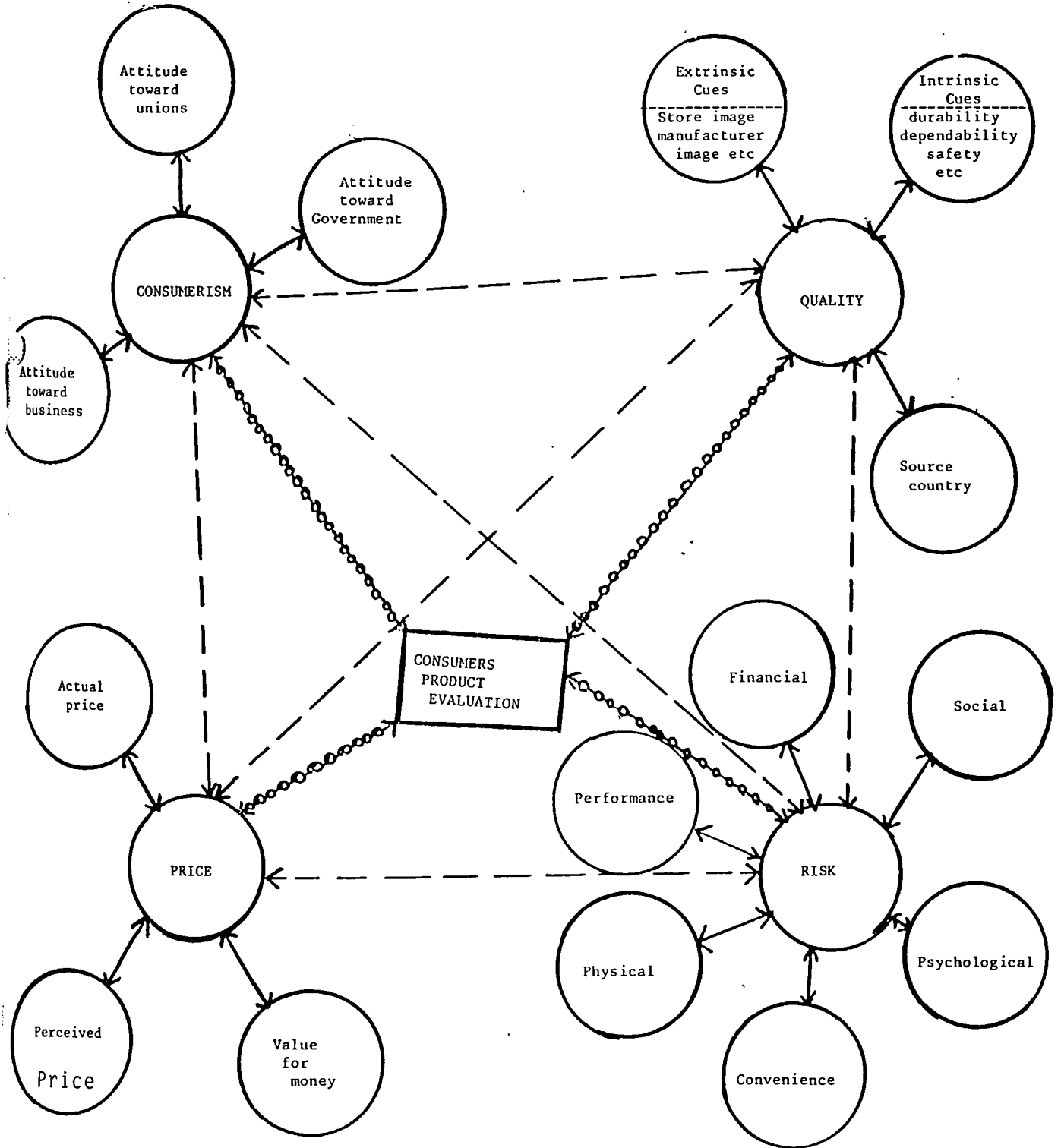
3. Marketing. Marketing on the other hand is defined as the 'process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchange that satisfy individual and organizational goals'. (The American marketing association definition, reported in Marketing News, March 1, 1985).

Thus, this definition of marketing relates to the exchange of goods and services etc. to the satisfaction of the consumers' needs and goals. In other words the achievement of the organized goals required the understanding of the consumer behaviour. According to Schiffman and Kanuk (1983) an understanding of consumer behaviour increases an organization's ability to explain and predict purchasing choice processes, thereby enabling an organization to develop strategies and tactics designed and controlled by the organization in order to achieve desirable outcome.

4. Perception. Perception can be defined as the process by which people select, integrate, organize and interpret stimuli from the environment into a meaningful picture of the world. (Hawkins et al 1983.) A stimulus is any unit of input to any of the senses (examples product, package, brand name...), sensory receptors are the human organs (ie. eyes, ears...) that receive sensory inputs. The study of perception is largely the study

FIGURE 2.1

PRODUCT EVALUATION\*



\* NOTES:

- The Interaction between the Main Cue and its Sub-cues
- The Interaction between the Main Cues
- oooooo The Impact of the Main Cues on Product Evaluation

of what we subconsciously add to or subtract from our raw sensory inputs to produce our private picture of the world (Schiffman and Kanuk 1983).

5. Attitudes. The behavioural sciences describe 'attitudes' in terms of stereotyping, ethnocentrism, prejudice, performance and job satisfaction, whereas researchers of consumer behaviour frequently refer to attitudes toward products, brand loyalty or discuss product attributes and brand images as part of attitude research (Diplom-Kaufman 1988). According to Fishbein and Ajzen (1975) 'attitudes can be defined as a learned pre-disposition to respond in a consistently favourable or unfavourable manner with respect to a given object'.

Attitudes have been variously defined by many other authors. Though it is not the intention of the present research to include all the attitudes suggested definitions, reporting another author's definition will give an idea of the disagreement among the consumer behaviour researchers on this issue. Hawkins et al (1983) reported that 'an attitude is an enduring organization or motivational, emotional, perceptual and cognitive processes with respect to some aspect of our environment'. However, there is more inclination among the consumer behaviour researchers to adopt Fishbein and Ajzen's definition reported above.

6. Quality. According to Holbrook and Corfman (1985), one finds almost as many definitions of quality as writers on the subject. It appears that in everyday marketing language 'quality' or 'high in quality' means 'good'. The authors developed a classification of the various quality definitions based on three dimensions: The first dimension related to implicit/explicit quality, the second dimension related to the mechanistic/humanistic quality and the third dimension related to

conceptual/operational quality. The various definitions presented by Holbrook and Corfman are summarized in figure 2.2 and will be briefly discussed in the following pages.

DIMENSION 1: Implicit/explicit quality - The first dimension distinguishes between definitions that regard quality as something present implicitly in an object as opposed to some explicit aspect or function.

DIMENSION 2: Mechanistic/humanistic quality - The mechanistic tends to view quality as an objective aspect or feature of a thing or event - something that is present whether or not any one notices it. The humanistic sees quality as a subjective response of people to objects.

The combination of the above two dimensions generates four broad types of quality definition (figure 2.2):

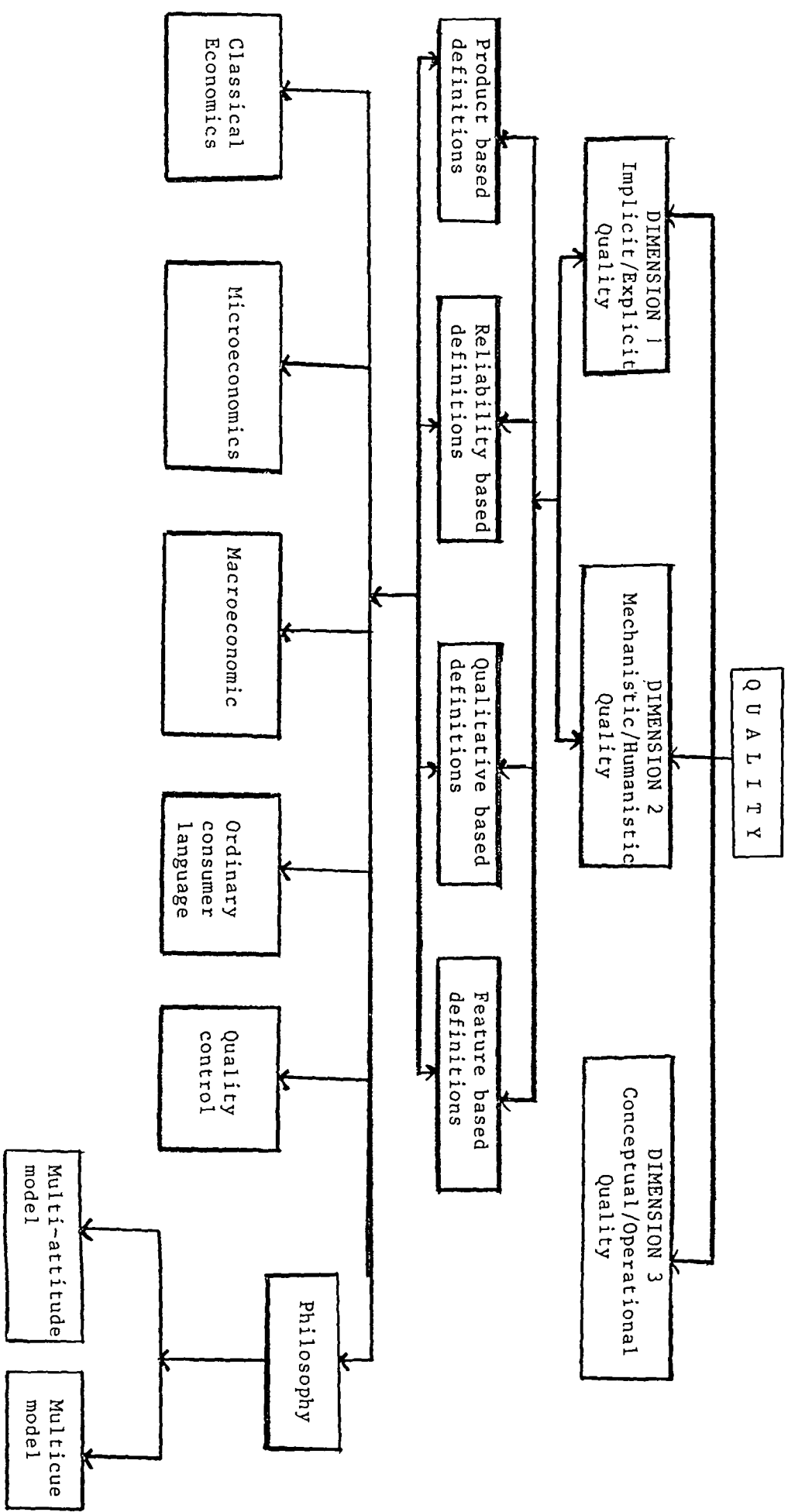
- (1) Production based definitions regard quality as an implicit characteristic that depends mechanistically on the inputs and processes used to create a thing or event.
- (2) Reliability based definitions remain mechanistic, but focus on such explicit aspects of an object as its durability, or freedom from defects.
- (3) Qualitative definitions generally recognize that quality depends on human responses but tend to treat such phenomena as implicit aspects not covered by the theory or technique of primary interest.
- (4) Feature based definition typically regard quality as a subjective response to various explicitly recognized properties or characteristics of an object.

DIMENSION 3: Conceptual/operational quality - The conceptual tends to emerge from purely theoretical discussions and to embody rules for the systematic use of language.



DEFINITIONS OF QUALITY

FIGURE 2.2



The operational generally arises in the context of making measurements intended to guide practical action and embody rules for repeatable, interpersonally valid observations via various instruments or procedures.

Combining all three dimensions generates eight different perspectives of quality (figure 2.2).

**Classical Economics:** Classical economics view value as stemming from the factors and techniques of production. Often this perspective focuses on the labour theory of value.

**Microeconomics:** Microeconomics has tended to consider quality as part of a quantitative-versus-qualitative distinction pertaining to aspects covered versus not covered by the theories and techniques of central interest. Qualitative analysis is what the microeconomist chooses to leave out as social rather than economic in nature. They exclude considerations of quality, ignore qualitative factors, and focus instead on such quantitative issues as price determination.

**Macroeconomics:** The typical treatment by macroeconomists of quality as an implicit qualitative aspect not covered by their primary theory has also found its way in to the work of those concerned with formulating operational measures of such macroeconomic entities as gross national product.

**Value Analysis:** Value analysis, value engineering, or value management involves a set of procedures for identifying the function of a product and providing that function at the lowest possible cost.

Writers on value analysis treat 'quality' as synonymous with performance of a product's essential function.

**Ordinary Consumer Language:** In the consumers language quality is often used as a rough synonym for reliability. They generally mean that a product is durable and will remain free of defects after continued usage.

Quality Control: Quality control may be regarded as a set of procedures for defining, measuring and improving reliability so as to reduce defects and lower rejection rates.

Philosophy: Philosophers tend to use the word quality to refer to explicit features (that is, properties or characteristics of an object as perceived by a subject).

Multi-attribute Models: Multi-attribute formulations use beliefs or perceptions to predict global evaluative judgments. Consumer researchers have borrowed extensively from this general tradition of multi-attribute model building.

Multi-cue Models: Most of multicue studies of quality judgments have relied on relatively straight forward rating scales to assess perceived quality as the dependent variable, thereby side stepping the need to define quality conceptually, even while measuring it operationally.

It appears from the previous definitions that the meaning of quality is a matter which differs among the various disciplines. However, for the purpose of this research, quality will be used as a multi-dimensional concept which can be evaluated through a series of intrinsic and extrinsic cues. The combination of all of these cues will constitute to the overall image of the product quality.

Perceived Quality. According to Olshavsky (1985) practitioners and academicians have long assumed that consumers' perception of the quality of the brand or store is related in an important way to the purchase of that brand or to the patronage of that store.

Consumers often judge the quality of a product on the basis of a variety of informational cues which they associate with the product. Some of these cues are intrinsic to the product and others are extrinsic (figure 2.1).

Intrinsic cues refer to attributes that cannot be changed or manipulated without also changing the physical characteristic of the product itself, such as taste, size, fibre and alike. Extrinsic cues on the other hand are related to attributes which are not part of the physical product, such as price, brand name, store image and alike (Gutman and Alden 1985). Empirical evidence suggests that intrinsic cues are more important to the consumer than extrinsic cues in assessing product quality (Szybillo and Jacoby 1974). However Olson and Jacoby (1972) reported that very little is known about which product attributes, from among the many available, are chosen by consumers as surrogate indicators of product quality, why these particular cues are chosen, how they are used for form quality judgment and why the cues are combined in that manner.

### 2.3 PRICE-QUALITY, STORE IMAGE-QUALITY, MANUFACTURER IMAGE-QUALITY AND SOURCE COUNTRY IMAGE-QUALITY RELATIONSHIPS

Price-Quality Relationship (figure 2.1). Several studies had found a positive relationship between the product price and the consumers' perception of its quality (Berman 1973, McConnel 1968). However, some other studies found no such support to such relationship (Sproles 1977). Other researchers found that consumers' use of price as a quality indicator was related to the availability of other information. If there was little information about the product, and if consumers lack the ability to evaluate the product based on their own experience, then they tended to perceive the price as an indicator of quality. On the other hand, when there was more information available, or when consumers had adequate experience to evaluate the product, then they tended not to associate price with quality (Peterson 1977).

Store Image-Quality Relationship. Kunkel and Berry (1968) defined image as 'discriminative stimuli for an action's expected reinforcement that a person associates with shopping at a particular store'.

The investigation of the price quality relationship, was criticised by Olson (1977) who indicated that single cue studies concerning price affects are over simplified with doubtful external validity and limited internal validity. Multicue studies manipulating other cues such as brand name, store image and other information in addition to price, may be more reliable in understanding the consumers' perception of quality (figure 2.1). In a study conducted by Enis and Stafford (1969) in regard of the consumer perceptions of product quality as a function of various informational inputs, the authors reported that products associated with prestige stores had a somewhat better perceived image than products associated with low-prestige stores. Similar results were reported by Chao (1989).

Manufacturer Image and Perceived Quality Relationship (figure 2.1). According to Schiffman and Kanuk (1983) manufacturers who enjoy a favourable image generally find that their new products are accepted more readily than those of manufacturers who have a less favourable or a 'neutral' image.

Source Country-Quality Relationship (figure 2.1). The relationship between the country of origin and the consumers' perception of the product quality was confirmed in many studies (Bilkey and Nes 1982). However, the intensity and the direction of the relationship was not completely resolved yet. While the majority of these studies confirmed the home-country product favourable bias, others reported a foreign product favourable bias. Also, while some studies reported a greater intensity of bias against products of developing countries, others reported little bias

for the products of such countries. Since this issue is one of the main concerns of this research a complete revision of these studies will be provided in the next chapter.

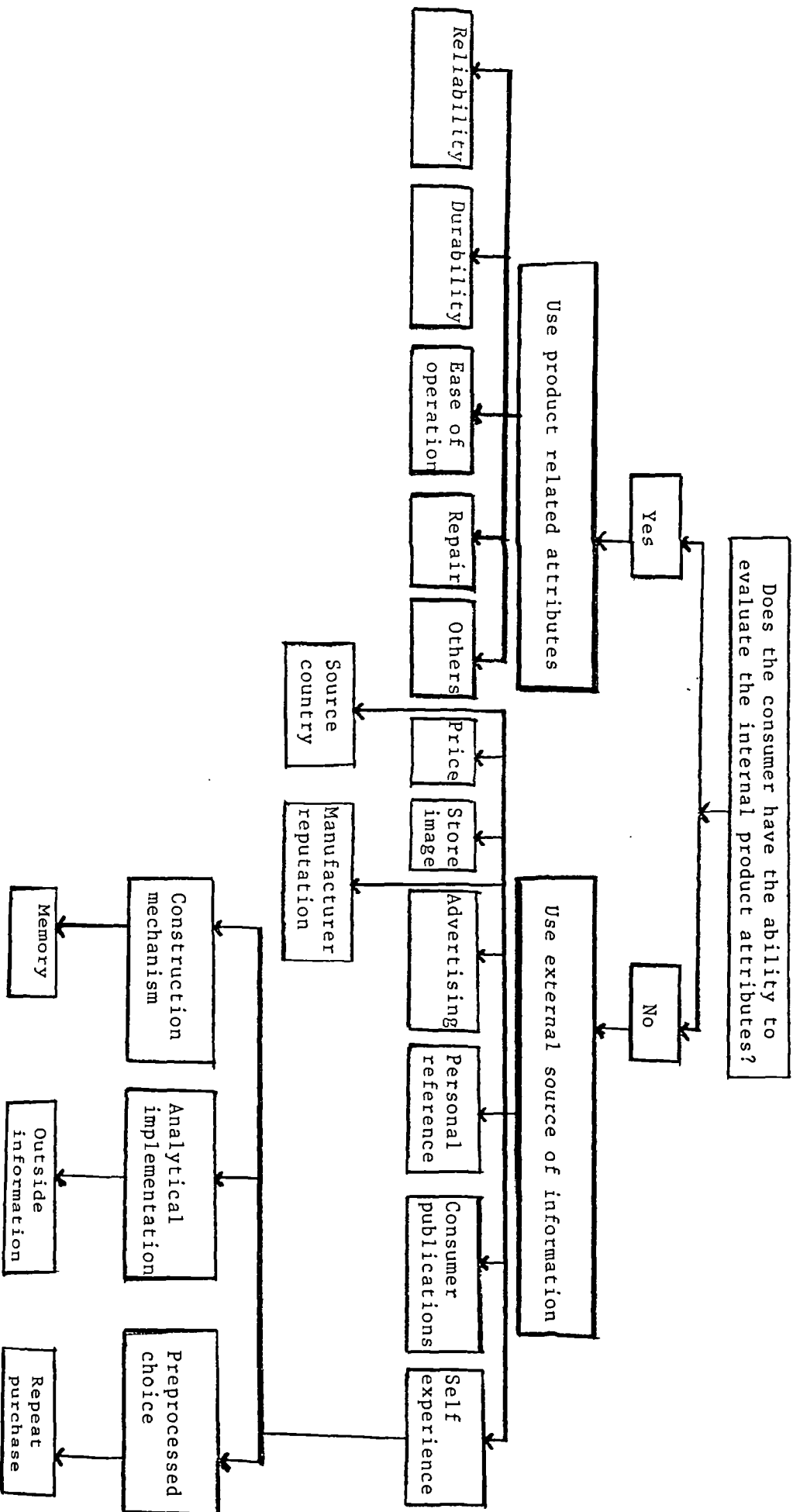
#### 2.4 ASSESSMENT OF PRODUCT QUALITY

The determination of the objective quality of the product by the average consumer is extremely difficult, if not impossible, for a majority of products (Olson and Jacoby 1972). For this reason consumers usually consider the perceived quality of a product. Thus, according to Kotler (1988), from a marketing point of view, the quality of a product should be measured in terms of buyers' perception of quality. There are variables associated with the product which a consumer believes to be related to objective product quality. Those variables are selected for product evaluation, because the consumers believe that they (the variables) are more easily perceived, distinguished and evaluated than the objective quality. In this sense, quality can be viewed as an overall measure reflecting the product's durability, reliability, precision, ease of operation, repair and other valued attributes (Kotler 1988).

However, there are a number of sources, besides the product related cues, which consumers can obtain more information about the quality of the product (figure 2.3). These sources can be used in combination with the product related cues, or independently in case of the absence of the internal product cues, and/or when consumers lack the ability to evaluate the relevant product attributes. Some of these additional sources as product price, store image, manufacturer reputation and source country evaluations were introduced in the preceding section and will not be repeated here. Others including advertising personal references and self experience will be briefly introduced.

ASSESSMENT OF PRODUCT QUALITY

FIGURE 2.3



1. Advertising (figure 2.3). The role of advertising on the quality perception of a product is clear in creating a brand name and to associate that brand name with quality standards that meet the consumers' needs and wants. Several studies found a significant relationship between the brand name and perceived quality (Kinnear and Taylor 1973 and Roa 1971). Advertising plays a major role in informing the consumers about the existence of new or alternative products, brands or models, and the possibility of different prices (Maynes 1976). Consumers frequently use advertising to gather information about the quality of products/brands. According to Purwar (1982) the main reasons for using advertising are: (1) the cost of seeking information from advertising is low, (2) little time is required to watch TV commercials and read magazine ads, (3) advertising may be perceived as a good source of performance information. Beyond providing information, the development and maintenance of a brand name is another function performed by advertising.

2. Personal References (figure 2.3). The role of personal reference in gathering information about the product quality is well acknowledged in the consumer behaviour. Most of the consumer behaviour models (reviewed in Chapter 4 have recognized that the personal oriented sources are to be considered in the information collection process about the product (Howard and Sheth 1969, Nicosia 1966). Consumers may find it much easier, and more trust worthy to consult friends, family members and relatives about the quality of the products rather than strangers (Cox 1967).

3. Consumer Publications. In their struggle to gather information about the product quality, consumers may consult the available published material, particularly those published by neutral agents. Those publications, such as the consumer reports, which provide a brand ratings of quality on the bases of laboratory tests, may be considered a valuable



source of information for consumers. According to Cox (1967) Dickson and Wilkie (1978) and Howard (1977) consumer publications are excellent sources of performance information. They provide general advice applicable to all consumers, and the information provided by such publications is trustworthy because they have been created for the specific purpose of serving consumers.

However, the consumer publications are not without limitations. The more relevant limitations can be summarized in the following: (1) they provide no information on product characteristics where no valid test can be devised, (2) they do not usually test and present information on all the models in a manufacturers line, (3) they do not provide advice on the suitability of the items for each consumers' particular case, (4) they do not use criteria that are adequate to the buyers' requirements, (5) they do not provide any psychological information (Cox 1967, Dickson and Wilkie 1978, Howard 1977 and Maynes 1976).

4. Consumer Self Experience (figure 2.3). The rate of the consumers' experience in quality evaluation is indicated in many studies related to the consumer behaviour (examples Valenzi and Eldridge 1973, Etgar and Malhotra 1978, Bilkey and Nes 1982).

Comprehensive models of buyer behaviour have conceptualized the consumers' experience as a problem solving task along a continuum of extensive problem solving, limited problem solving and routinized response behaviour. The extensive problem solving is related to the situations where a buyer has: (1) little or no experience with the product class, (2) has no adequate choice criteria and (3) does not have a product class concept (Howard and Sheth 1969). The situations of limited problem solving is encountered in the cases where the buyer has a well formed choice criteria and a well defined product concept. In the routinized response

behaviour situation, the buyer is not only very familiar with the product but with all the brands in his evoked set.\*

Bettman and Kakkar (1976) and Bettman and Zins (1977) classified information processing mechanism under varying degrees of experience into: (1) constructive mechanism, (2) analytic implementation and (3) preprocessed choice. In the constructive mechanism, case consumers develop rules for evaluating alternatives at the time of choice fragments or elements of rules stored in memory (Bettman and Zins 1977). In the case of the analytic implementation, consumers evaluate the available alternatives before their arrival to the specified store. They base their evaluations on the basis of advertisements, or out store information. The case of preprocessed choice implies that consumers have previously made a particular choice and they are planning to repeat the choice.

## 2.5 PERCEIVED RISK AND PRODUCT EVALUATION

'Consumer behaviour involves risk in the sense that any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty and some of which at least is likely to be unpleasant' (Bauer 1960).

---

\*Evoked set are related to the specific brands that a consumer will consider in making a purchase choice in a particular product category. A consumers' evoked set is distinguished from his or her inept set, consisting of brands that the consumer excludes from purchase consideration. The inert sets, consisting of brands that the consumer is indifferent toward because they are not perceived as having any particular advantages (Shiffman and Kanuk 1983, p.156).

According to Taylor and Roa (1982) marketers generally agree that the consumer function in a world of uncertainty, he faces a dilemma entailing a multitude of possible alternatives, including numerous stores, products and brands, which could lead to the maximization of his or her utility (Dunn 1982).

The idea of perceived risk implies that in any buying decision, consumers face the possibility that their purchases will not satisfy their buying goals and it might fail to maximize utility. Thus, the perceived risk approach assumes that consumers make buying decisions which they hope will reduce the unfavourable sequences. According to Bauer 'The unfortunate consumer decisions have cost men frustration and blisters their self-esteem and the esteem of others, their wives, their jobs and their lives... Consumers characteristically develop decision strategies and ways of reducing risks that enable them to act with relative confidence and ease in situations where their information is inadequate and the consequences of their actions are in some meaningful sense incalculable.

Cox (1967) suggested that the amount of perceived risk is construed to be a function of (1) the amount that would be lost (at stake) if the consequences of the act were not favourable and (2) the individuals subjective feeling of certainty that the consequences will be unfavourable. Given these two factors it then follows that risk might be reduced to a 'tolerable level' by either or both: (1) reducing the amount at stake and (2) increasing the degree of certainty that loss will not occur.

#### 2.5.1 TYPES OF RISKS

Jacoby and Kaplan (1972) identified five types of risk: (1) financial, (2) performance, (3) physical, (4) psychological and (5) social. Another type of risk that is time (convenience) risk was identified by Roselius

(1971) (figure 2.1). (1) Financial risk refers to the risk that the selection of the product or service will result in a monetary loss to the customer. (2) Performance risk can be defined as the risk that the product or service will not perform as expected. (3) Social risk is related to the risk associated with the selection of a product or service that may cause negative perception (embarrassment) of the other individuals about the consumer purchaser. (4) Physical (functional) risk is related to the risk that the performance of the product or service may result in a health hazard to the customer, or at least fail to function as expected. (5) psychological risk is related to the risk that the product or service will have a negative effect on how the consumer perceives himself or herself. (6) Convenience risk is related to the risk of wasting time, convenience and effort getting the product adjusted, repaired or replaced.

Bettman (1973) portioned the perceived risk into two types of risk, that is inherent risk and handled risk. He defined these two types of risk as follows: Inherent risk is the latent risk, a product class holds for consumer - the innate degree of conflict the product class is able to arouse. Handled risk is the amount of conflict the product class is able to arouse when the buyer chooses a brand from a product class in his usual buying situation. However, in this research, it is found that the five risk types suggested by Jacoby and Kaplan and the convenience risk suggested by Roselius are more suitable for the purpose of this research. This is because they are easier to operationalize and administer in the self reported questionnaire than the components suggested by Bettman.

### 2.5.2 PERCEIVED RISK AND COUNTRY OF ORIGIN

The concept of perceived risk in relation to the source country of the product did not receive the same level of attention as the related other concepts, such as brands, shopping mode, type of store and alike. However, Hampton (1977), Nes (1981), Baumgartner and Jolibert (1978) and Tolbret (1985) all indicated that there was a higher perceived risk associated with products of foreign origin either by the final consumer or the industrial buyer. Hoover and Associates (1978) indicated that there are several differences existing between the Mexican and U.S. samples, in both the extent to which consumers perceive risk in purchasing situation and the manner in which perceived risk is related to brand loyalty. Thus, risk perception may vary according to the nature of the consumers' culture. Schiffman and Kanuk (1983) suggested that marketers who do business in several countries would be well advised not to generalize the results of consumer behaviour studies done on one country to other countries without further research.

The present research will investigate the concept of perceived risk as it related to the country of origin in a new environment and will relate the consumers' risk perception of the products of the various countries, to their perception of the quality and prices of those countries.

### 2.6 THE ROLE OF PRICE IN PRODUCT EVALUATIONS

'Although price plays an important role in everyday economic activities, it remains an enigma to the decision made. For the marketing manager, price is a key decision variable affecting the profitability of individual product, as well as the firm. For buyers, price represents the value of something they have to give up to obtain something else of value' (Monroe and Krishnan 1985).

Several studies have investigated the role of price in product evaluation (examples Andrews and Valenzi 1970, Deering and Jacoby 1972, Lambert 1970, Wheatley and Chiu 1977, Purwar 1982, Monroe and Krishnan 1985).

It has been suggested that the consumers' reliance on the price as a criteria in evaluating the various products may be due to the following reasons: (1) the availability of the price information, (2) the unavailability or the non-completeness of other information, (3) the price is usually the least ambiguous stimuli and (4) price is frequently a concrete and measureable variable for the shopper (Purwar 1982, Monroe 1971 and Shapiro 1968).

However the differences in the price of the same product on different occasions or the difference among several brands of the same product, should be within the limits that the consumers can notice the difference in the prices. This concept is referred to in the consumer behaviour literature as the differential threshold. Above the threshold, a stimulus elicits response and below the threshold, no response is elicited. The development of the differential threshold was due to the German scientist named Ernst Weber, who discovered that the just noticeable difference between two stimuli was not an absolute amount, but an amount relative to the intensity of the first stimulus (Schiffman and Kanuk 1983). According to Weber's law, the stronger the initial stimulus, the greater the additional intensity needed for the second stimulus to be perceived as different. Purwar (1982) suggested that the acceptable price range is affected by all the pertinent stimuli present at a particular point of time and hence it is variable and flexible, instead of being a rigid one.

The acceptable range of prices has been a matter of investigation by many researchers (examples Gabor and Granger 1966, Monroe 1971, Monroe and Venkatesan 1970) They all reported positive results supporting Weber's law.

Gabor and Granger (1966) reported that brands having prices below or above the acceptable price range was perceived either as too cheap or too expensive. Similar results were reported by Deering and Jacoby (1972), Gardner (1974) and Raju (1977). They all reported that the effect of prices on quality perception differs between the prices within the acceptable range and outside that range.

## 2.7 CONSUMERISM

According to Day and Aaker (1970) the most common understanding of consumerism is in reference to the widening range of activities of government, business and independent organizations that are designed to protect individuals from practices (of both business and government) that infringe upon their rights as consumers.

Buskirk and Rothe (1970) defined consumerism as the organized efforts of consumers seeking redress, restitution and remedy for dissatisfaction they have accumulated in the acquisition of their standard of living. Buskirk and Rothe explained that consumerism means that the consumer looks upon the manufacturer as somebody who is interested but who really does not know what consumers' realities are. He regards the manufacturers, as somebody who has not made the effort to find out, who does not understand the world in which the consumer lives, and who expects the consumer to be able to make distinctions which the consumer is neither willing or able to make (Buskirk and Rothe 1970).

Day and Aaker (1970) summarized the main activities of consumerism in the following:

- (1) Protection against clear cut abuses. This encompasses outright fraud and deceit that are a part of the 'dark side of the market place', as well as dangers to health and safety from voluntary use of a product.
- (2) Provision of adequate information. The concern here is with the economic interests of the consumer. The question is whether the right to information goes beyond the right not to be deceived, to include the provision of performance information that will ensure a wise purchase.
- (3) The protection of consumers against themselves and other consumers. Some of the thrust behind consumerism comes from the growing acceptance of the position that paternalism is a legitimate policy. There is a sound basis in economic theory for such intervention whenever the action of a buyer serves only his own best interest and fails to take into account the effects on others (Day and Aaker 1970).

Figure 2.4 depicts the main concern of the consumerism movements. In brief the decline in one or more of these variables will lead to the consumers' dissatisfaction which in turn will increase the consumerism activities.

Hermann (1970) classified the consumerism groups according to the following typology:

- (1) The adaptationists, who emphasize educating the consumer to avoid fraud and deception and seek to prepare him to deal intelligently with the market as it is. This group sees little need for additional consumer protection legislation.
- (2) The protectionists, whose primary concern is with health and safety issues involving the possibility of physical harm to the individual.



(3) The reformers, who like the adaptationists, want to improve consumer education and who like protectionists, want to insure the individual's health and safety and who, moreover, seek to increase the consumers' voice in government and the amount of product information available to him.

#### 2.7.1 CONSUMERISM AND PRODUCT QUALITY

According to Buskirk and Rothe (1970) the rise in consumerism is largely due to the decline in the overall quality of the products. In a study by Barksdale and Darden (1972) a large segment of the American consumers indicated that products are not only less dependable but that this lack of dependability is being engineered into products by manufacturers. Swan and Longman (1972) attributed the rise of consumerism activities to the product quality deficiencies. Thus, the relationship between consumerism and product quality is evident and strongly documented. (Figure 2.4 shows the interaction between product quality and consumerism and their impact on product evaluation.

#### 2.7.2 CONSUMERISM AND PRICE

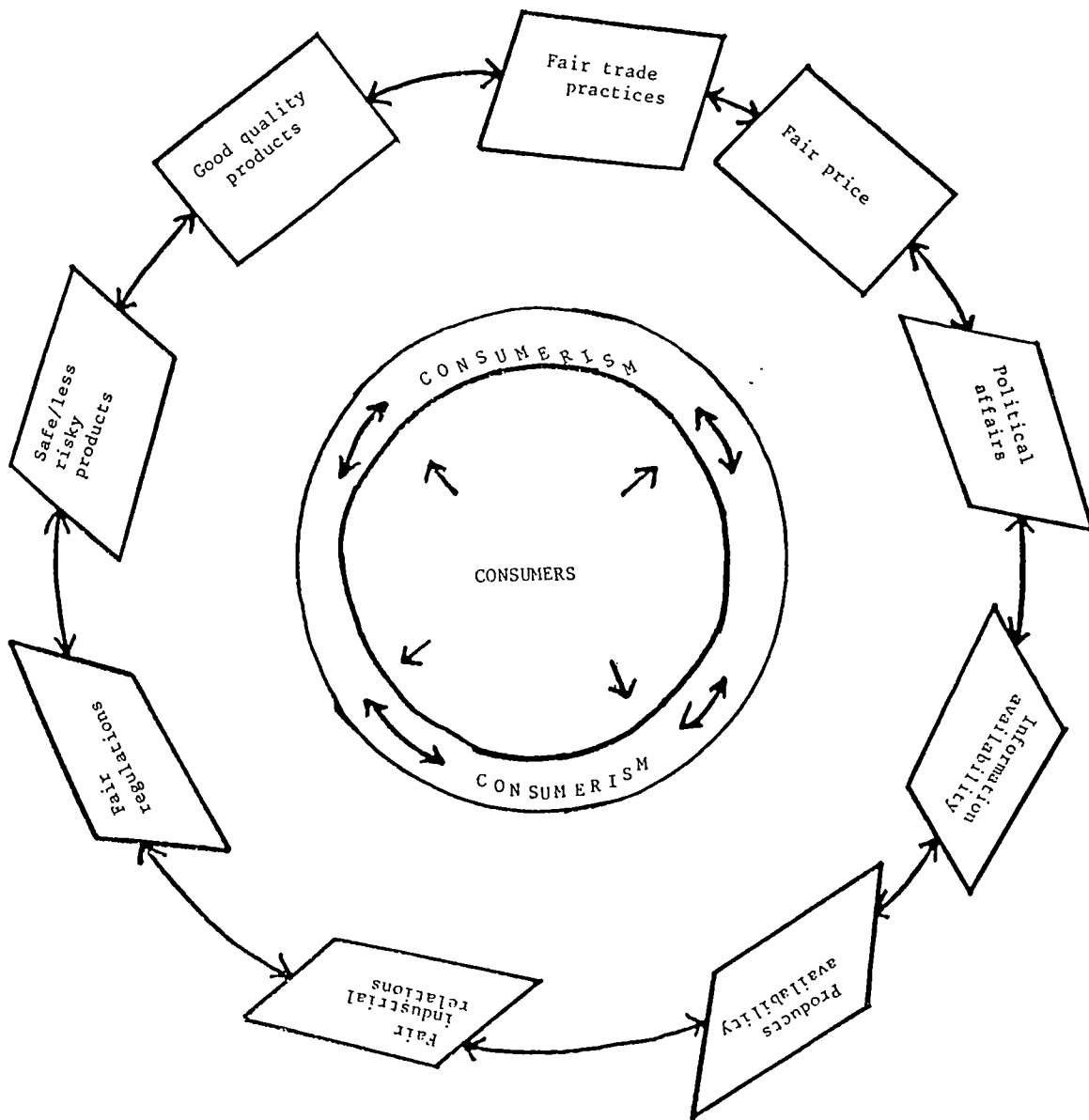
One of the most important objectives of the consumerism movement is to secure the right of consumers to have the products at fair prices. Consumers often complain about the increase of products' prices at the same time, while products are becoming more complex and less dependable (Barksdale and Darden 1972).

#### 2.7.3 CONSUMERISM AND PERCEIVED RISK

Consumerism activists stressed the right of consumers to have a safe product. This implies at least that consumerism is aimed to reduce the perceived physical risk associated with the usage of the products. The

FIGURE 2.4

THE MAIN CONCERNS OF THE CONSUMERISM MOVEMENT



demand for independent testing (especially from the government) to ensure the safety of the product, is one of the risk relievers suggested in the consumer behaviour literature (Roselius 1971, Jackson 1977, Arndt 1967 are just examples).

In this study the consumers' attitudes toward some statements which can reflect the consumerism movement concern, will be investigated with their perception of the risk associated with the domestic product.

#### 2.7.4 THE USE OF CONSUMERISM IN THE PRESENT RESEARCH

Consumerism is relatively a new concept even in the U.S.A. and Western Europe. The term consumerism was not put to wider use until 1963 or 1964 when a variety of commentators identified it with the very visible concerns triggered indirectly by Rachel Carson, and directly by Ralph Nader's auto-safety investigations and President Kennedy's efforts to establish the rights of consumers; to safety, to be informed, to choose and to be heard (Day and Aaker 1970).

According to Chisnall (1985), the consumer movement in Europe is not well established as is the case in the U.S. This is largely attributed to the nature of consumer activities, which are either concerned with information disclosure or the pressure on the government agencies to enforce the law against deceptive trading practices.

If this is the situation of the consumerism movement in Western Europe, it can be assumed that consumerism as defined above, is not yet existing in Jordan. However, it was noticed that in late 1988 and the beginning of 1989, that consumers started to demand some protection against the unfair trade practices. These activities can be summarized in the following:

- (1) The establishment of consumer protection agency with a purpose of representing the consumers in discussing any legislation which can affect the consumers' welfare.
- (2) Demanding the government to be involved in controlling the quality of the products produced by local manufacturers and to ensure the quality of the imported products.
- (3) Demanding the sellers to announce their prices clearly and to avoid the bargaining which always results in unfair prices to the consumer.
- (4) Providing more information about the products offered in the market place like the date of manufacturing, the expiry date, the ingredients and any expected health hazards.
- (5) Punishing the traders who cheat the consumers either by selling an expired product, or a poor and health hazard product.
- (6) To enforce the law against government agents who collaborate with the traders (i.e. taking bribes) in the account of the quality and price of the products.

All these activities can be classified under the term consumerism in its broad sense. According to Kotler's (1972) definition of consumerism which stated that 'consumerism is a social movement seeking to augment the rights and power of buyers in relation to sellers'.

In this research, consumers were asked about their attitudes toward the: domestic manufacturers' practices, the prospects of the domestic product quality, the role of government in protecting the domestic business, controlling product quality and restricting imports, the prospects of foreign products, and some other issues. The consumers' responses to such issues will be investigated in regard of their perception of the domestic product quality price and risk. In doing this, it is possible to assess the level of the consumers' awareness about such

issues and to see whether the consumers' concern about the above mentioned matters have a significant relationship with their evaluation of the domestically made product. This will be of immediate need for both the local producers and the government legislators to take correct action to respond to the consumers' demands at an early stage. This is due to the fact that the main objective of the consumerism movement is to take steps as an individual or a group to influence business and/or government to be more aware of and responsive to the needs and rights of consumers. The rights of consumers can be summarized in the following: (1) the right to have a safe product, (2) at a fair price and (3) to be promoted in an honest manner (Jackson 1977).

## 2.8 CONCLUSIONS

There is a significant complaint in the marketing literature in general, and the consumer behaviour literature in particular, with regard to the lack of concentration on the theory aspects of the research. According to Jacoby (1978) there is little reliance placed on theory, either to suggest which variables and aspects of consumer behaviour are of greatest importance and in need of research or as foundation around which to organize and integrate findings. It is still true that nothing is so practical as a good theory. Similar views were presented by Diplom-Kaufman (1988) and Purwar (1982) in regard of the need for integrating the relevant theory to the marketing research.

This chapter has introduced the theory behind the research problem. The three main concepts, quality, price and risk, were presented from the behaviouristic point of view. The relationship among these cues are

explained. The terms consumers, consumer behaviour, marketing, perception and attitudes were briefly defined, and how they are being used in this research is explained.

It has been observed that each of these concepts has more than one definition from different perspectives. However, it is suggested that the listing of all or at least most of the definitions will be a task which will take the researcher far away from the major research problem. So it was decided that it would be more sensible to concentrate on the more relevant explanations that can be of use in the present research.

The fact that this research is dealing with a problem that is of concern to the consumers, creates the need to introduce the concept of consumerism and to relate it to the quality, price and risk of the domestic product.

The chapter has strongly confirmed that the research has a sound theory background which will help in justifying the research hypotheses and explaining the research findings.

The next chapter (Chapter 3) will be devoted to reviewing the relevant literature related to the consumers' perception (attitude) of the quality, price and risk of domestic vs. foreign products. This chapter will also introduce more of the theory behind this research.

## CHAPTER THREE

### LITERATURE REVIEW

- 3.1 Introduction
- 3.2 Product quality
  - 3.2.1 The Final Consumer Research
    - 3.2.1.1 The Research within developed countries using students as Surrogates for the ordinary consumers
    - 3.2.1.2 Limitations of the research within developed countries using students as surrogates for ordinary consumers
    - 3.2.1.3 Research within developing countries using students as surrogates for ordinary consumers
    - 3.2.1.4 Limitations
    - 3.2.1.5 Research within developed countries using ordinary consumers
    - 3.2.1.6 Limitations
    - 3.2.1.7 Research within developed countries using both students and ordinary consumers
    - 3.2.1.8 Limitations
    - 3.2.1.9 Research within developing countries using both students and ordinary consumers
    - 3.2.1.10 Limitations
  - 3.2.2 The Industrial Consumer Research
    - 3.2.2.1 Industrial consumer research within developed countries
    - 3.2.2.2 Limitations
    - 3.2.2.3 Industrial consumer research within developing countries and the limitations of this research
  - 3.2.3 Research Within Developing Countries Addressing Both Industrial and Final Consumer and the Limitations of this Research
- 3.3 Price and Product Evaluation
  - 3.3.1 The Economic Model
  - 3.3.2 The Behavioural Model
- 3.4 Risk and Product Evaluation
  - 3.4.1 Risk and Consumer Behaviour
  - 3.4.2 Perceived Risk and Country of Origin
    - 3.4.2.1 Perceived risk - country of origin research addressed toward the final consumer in developed countries
    - 3.4.2.2 Perceived risk - country of origin research addressed toward the industrial buyer in developed countries
    - 3.4.2.3 Perceived risk research investigating the differences between the consumers of two countries in regard of the importance of perceived risk concept in the purchase decision
    - 3.4.2.4 Limitations of the perceived risk - country of origin research
- 3.5 A Comparison Between the Previous Research and the Present Study
- 3.6 Concluding Remarks in Regard of the Previous Literature
  - 3.6.1 General Limitations of the Previous Research
  - 3.6.2 General Findings

### 3.1 INTRODUCTION

This chapter provides a review of the previous studies dealing with the effects of country of origin in the product evaluation.

All the relevant research will be reviewed according to the product cue investigated (quality, price or risk), the stage of development of the test country (developed vs. developing); the focus of the research (final consumers vs. industrial consumers); and the respondents employed in the study (students vs. ordinary consumer). Figure 3.1 presents the criteria used in classifying the previous research as well as the number of studies in each category.

### 3.2 PRODUCT QUALITY

The existing research in product quality in regard of the country of origin can be classified into three categories: that which addressed the (1) final consumers, (2) the industrial consumers, and (3) both the final and industrial consumer.

#### 3.2.1 THE FINAL CONSUMER RESEARCH

This type of research can be categorized into two kind of research according to the test country stage of development. That is, the research which initiated in a developed country and used individuals from that country as respondents. The other kind of research is that which is initiated in a developing country and used individuals from that country as respondents. In both types of the final consumer research, the respondents were either students or ordinary consumers, or both (Figure 3.2).





### 3.2.1.1 The Research within Developed Countries using Students as Surrogates for the Ordinary Consumers

There are twelve studies orientated towards the investigation of the final consumers in the developed countries (mostly U.S.A.) which used students as respondents. (Figure 3.2) A brief summary of these studies will be presented on the following pages.

REIERSON (1966) tried to find an answer to the question: 'Are foreign products seen as national stereotypes?' The questionnaire asked the respondents to indicate their opinions of products from ten selected nations. Attitudes were sought toward a nation's product in general, toward classes of products and toward specific products.

The results of the study indicated that in every category the respondents ranked the American product in first place and the Japanese product last. The results also indicated that: very significant differences did exist in the distribution of opinions expressed toward the products of the selected nations involved in the study.

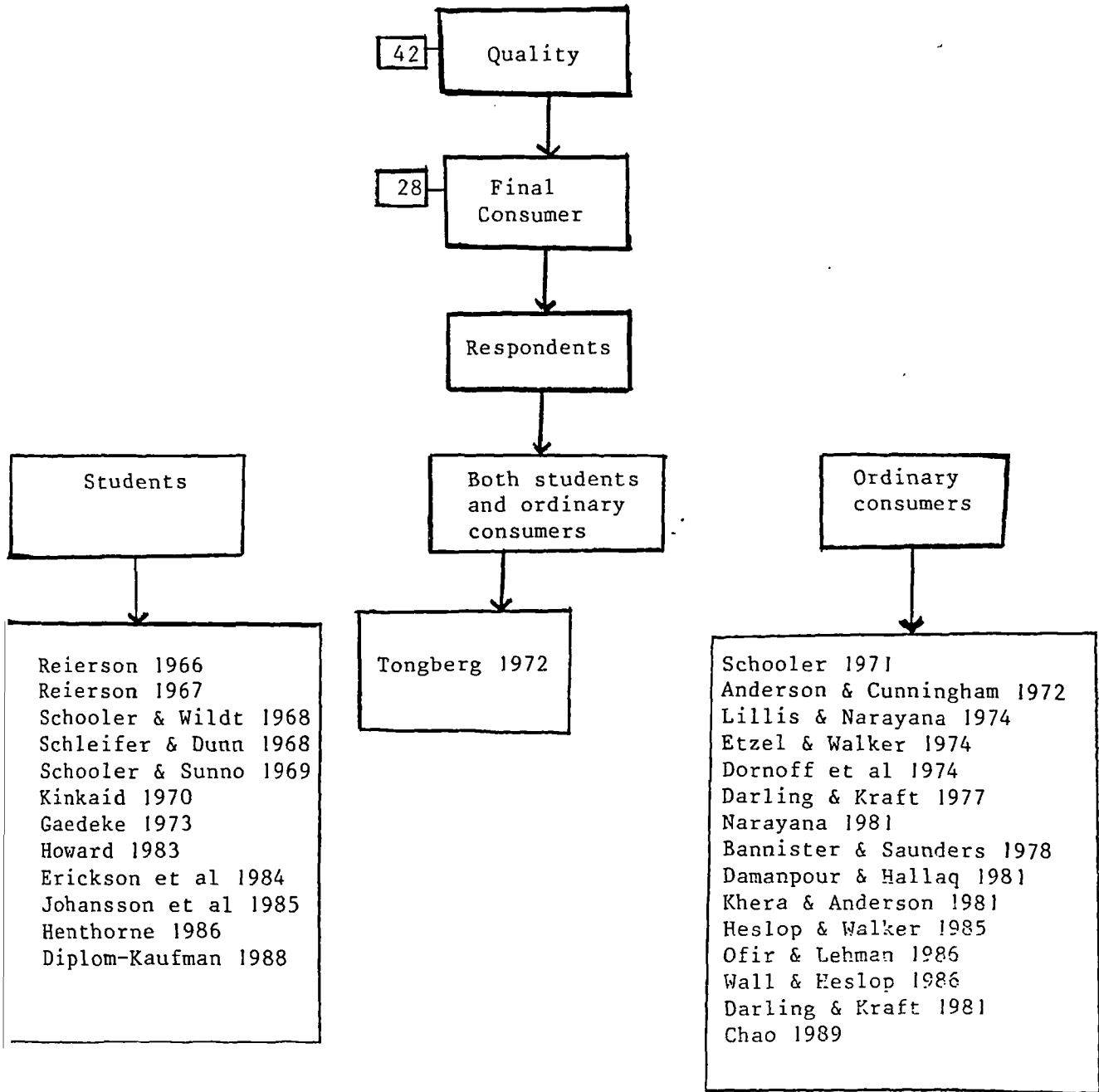
REIERSON (1967) continued his investigation of the American consumers' attitudes towards foreign products. The main purpose of his article on attitude changes toward foreign products, was to investigate the effects of various forms of communication media that possibly influence the American consumer's foreign product image.

Reierson's study concluded that:

- 1) The foreign product image held by American consumers exposed to specific communication media differs significantly from the foreign products image of American consumers not exposed to these media.
- 2) There is every indication, that if the prejudice of consumers toward a nation's product is not too intense, consumer attitudes may be made significantly more favourable by even slight exposure to communication and promotion devices.

FIGURE 3.2

THE FINAL CONSUMER RESEARCH RELATED  
TO PRODUCT QUALITY IN DEVELOPED COUNTRIES



3) The image of a nation's products can be made more favourable by associating these products with the names of prestige retailers in the United States.

SCHOOLER AND WILDT (1968) investigated the elasticity of product bias.

They were able to: (1) derive an elasticity of product bias curve for the test product, (2) demonstrate that the consumer bias of foreign products is also price elastic. Schooler and Wildt (1968) argued that some consumers biased against products manufactured by foreign countries may be of sufficient intensity to make all foreign products totally unacceptable. However, for other consumers, bias may simply result in a lowering of the perceived quality of foreign products. According to Schooler and Wildt suitable price concessions for the foreign product may help to overcome the bias based on product origin. They were able to demonstrate that, as the price differential between the domestic and foreign products increased, increasing numbers of consumers switched to the foreign goods against which they had showed negative bias before the price differential emerged.

The researchers concluded that the unfavourable image does not always mean that consumers will not be willing to buy the foreign products.

SCHLEIFER AND DUNN (1968) investigated the relative effectiveness of advertisements of foreign and domestic origin. The purpose of the study was to examine the relative effectiveness of advertising as a function of whether:

1) The advertising is associated with (comes from) a country whose inhabitants are a national reference group for those viewing the advertising, or from some other country whose inhabitants are not a reference group.

- 2) The advertised products have been manufactured in the national reference group country or in a non-reference group country.
- 3) The attitudes of the national reference group toward the advertised products are known or unknown to the potential consumer.

United States and Egypt were selected to be the test countries of the study. Four specifically prepared magazine advertisements for everyday consumer products normally advertised in Egyptian magazines were used in the study. Each advertisement was prepared in an American and an Egyptian version. The Egyptian version contained Egyptian models and Arabic copy. However, each Egyptian advertisement was accompanied by an English translation. The results indicate that advertisements associated with Americans were significantly more effective in changing attitudes towards a foreign product than those associated with a nationality not perceived as a national reference group - in this case Egypt.

SCHOOLER AND SUNOO (1969) investigated the consumer's perception of international products: regional vs. national labelling. The main objective was to find out how consumers would respond to the manufactured goods of developing areas if these were labeled regionally instead of nationally.

The results of the study indicated that no significant differences exist between areas. Respondents did not express bias against the manufactured goods of developing countries. Also there was no difference between age groups. Evaluations of college age consumers did not differ significantly from the evaluations of consumers 35 years of age and older. Schooler and Sunoo concluded that regional labeling may be rather effective in circumventing consumer bias on the basis of product origin.

KINKAID (1970) investigated the perception of selected brands of product as foreign or American and the consumers' attitudes toward such brands. The main findings of Kinkaid's dissertation were:

- 1) There was a significant difference between attitudes toward foreign brands and attitudes toward American brands when foreign brands are not perceived as foreign. However, he found that the difference was not significant in the case of male respondents only, but it was highly significant for the female respondents.
- 2) There was a significant difference in attitudes toward foreign brands perceived as foreign and when foreign brands are not perceived as foreign.
- 3) There was a significant difference in attitudes toward foreign brands when it is generally known only that the brands are foreign and when the country, product and advertising slogan are also identified with the brand.

GAEDEKE (1973) investigated the American consumer's attitude toward products 'made in' developing countries. The purpose of the study was to find answers to the following questions:

- 1) What are the opinions of consumers toward the quality of products 'made in' various developing countries?
- 2) To what extent are consumer's attitudes toward quality of products from developing countries changed when widely known United States brand names are used?

The results of the study indicated that products made in the United States are ranked in first place, for products in general as well as for the more homogeneous groups of food products, electronic items and textiles. Imports from the Philippines were ranked in second place while

those from Indonesia receive the lowest relative ranking. Opinions toward imported food, electronic and textile products, revealed that a particular country may rank higher for one product class and low for another.

The results showed that significant differences did occur in the distribution of opinions expressed toward products in general, food products, electronic items and textiles as well as towards selected product items. Findings of the study also indicate that country of origin information does not significantly affect opinions about the quality of branded products in general. Individually, however, there may be relatively large variations in the consumer's attitude towards well-known branded products when the consumer is made aware of the information input 'made in ...' country of origin.

HOWARD (1983) investigated the foreign product bias phenomenon in the United States and the implications for marketing strategies of imported products. The research aimed in measuring the U.S. consumers' attitudes towards both domestic and foreign products based on the knowledge of country of origin and to determine how these attitudes affect perceptions of product quality and value.

The research findings indicated that the country of origin information was an important determinant of product quality and value. American products were no longer viewed as superior to all others and the products from less developed countries were viewed as good value alternatives to products from developed countries.

The Japanese products were viewed to be significantly higher than the American products both in terms of product quality and product value. Additionally, West German products were viewed to be at least as good as

U.S. products in terms of both product quality and value. Other than these two countries the domestic products were found to be rated superior to foreign products in both quality and value.

With regard to the demographic and attitudinal variables association with foreign product bias, the research findings indicated that overall demographics were of limited value in identifying consumer groups who were consistently biased for or against foreign products. This finding was true for both quality ratings and value ratings. Attitudinal variables were useful in identifying consumers who were consistently biased for or against foreign products. Patriotism, attitudes toward unions, attitudes toward big business, opinions about the pride American workers take in their work and the amount union members are paid were strongly associated with the respondents' degree of foreign product bias.

ERICKSON et al (1984) investigated the image variables in multi-attribute product evaluations : Country of origin effects. The final list of stimulus objects (automobiles models) consisted of four U.S., two German and four Japanese models.

The research results indicated that a strong mutual relationship between attitudes and beliefs emerged. There appeared to be both a forward effect of beliefs on attitudes as well as a strong halo effect of attitude flowing back to beliefs. The effects of the image variable, country of origin, appeared to have direct effects on beliefs and not on attitudes.

The researchers conclude that the influence of image variables on the product evaluation process indicated that an image variable did not appear to be affective in nature; the empirical results showed that such variables influence belief information rather than attitude.



JOHANSSON et al (1985) attempted to adopt a multicue approach in investigating the impact of country of origin on product evaluation. The product class tested was automobiles and ten car models were used in the study. These automobiles are the products of Japan, U.S.A. and Germany.

The research findings indicated that the country of origin of an automobile did not affect the overall ratings but had some effect on the ratings on specific attributes. American cars were consistently rated low on gas mileage and somewhat low in reliability but over rated in horsepower. German automobiles in contrast were rated low on driving comfort and to some extent high on gas mileage. There appeared to be less bias in the evaluations of the Japanese cars.

Familiarity with models of different national origins appeared to affect evaluations, but did not necessarily result in more favourable perceptions. People who owned Japanese cars tended to give them a more negative overall rating than others. People who were more familiar with Japanese cars tended to rate them more highly on gas mileage and reliability and lower on driving comfort and to a lesser extent horsepower. Similarly, persons who were familiar with American cars tended to rate them more highly on driving comfort.

American respondents rated Japanese automobiles more positively than did Japanese respondents. However, they rated German automobiles more negatively.

The research findings indicated that sex appeared to have influenced ratings in certain instances. Male respondents tended to give more negative ratings to American cars than did female respondents and conversely rated Japanese cars more positively. There was relatively little difference between the two sexes in terms of their ratings of German cars. Age appeared to influence ratings, particularly for

handling. Older respondents tended to rate cars of all three national origins less favourably on handling. Income appeared to have little impact on the respondents ratings of all the national origins of the cars.

HENTHORNE (1986) investigated the factors which determine consumers' perceptions of quality as related to automobiles. The objectives of the research were to: (1) Determine the consumers' perceptions of automobile quality and, (2) Observe if the consumers' perceptions of quality vary across the automobile categories of Japanese, American and Ideal.

The results of the study indicated that the perceived American quality automobile appeared to be composed of three distinct components: well furnished dependability, the male need achiever factor and the individual factor. In comparison, the classification of the perceived Japanese quality automobile composed of four components: status, yuppie factor, solid/non-flashy construction and solid value. The consumers' perceived ideal quality automobile appeared to be a totally separate entity composed of attributes covering conservative appeal and snob appeal, extrinsic dimensions and elite factors. The findings suggested that neither automobiles of American nor Japanese origin were perceived by the consuming public as being of ideal quality.

Henthorne pointed to the issue of judging the quality based strictly on a price variable should be viewed with caution. Rather than acting as a dimension that solely described quality, price appeared to be more of an enhancing variable. Also, he pointed to the concept that quality appeared to be multi-dimensional in nature. It appeared that a collection of variables, acting in concept are more effective than a single variable in defining the construct of quality.

DIPLOM-KAUFMAN (1988) investigated the American consumers' attitudes toward the products of foreign origin. Three informational cues were

tested including country of origin, brand name and store image on one hand and the attitudinal response on the other hand. The country cues consisted of the U.S. as the domestic source, Taiwan as the major importer of textiles to the U.S. and Ghana as a representative of a developing country.

The main findings of Diplom-Kaufman's research is that:

- 1) There was a significant difference among the attitudes of consumers towards the act of buying a product based upon the information regarding the country in which the product was produced.
- 2) There was a significant difference among the attitudes of consumers towards the act of buying a product based upon the brand name of the product.
- 3) There was a significant difference among the attitudes of consumers towards the act of buying a product based upon the image of the store in which the product is purchased.
- 4) There was no significant combined affect of the
  - a) country of origin and brand name
  - b) country or origin and store image
  - c) brand name and store image
  - d) country of origin, brand name and store image on the attitude of consumers towards the purchase of a product.
- 5) The level of the individual's involvement with the act of purchasing a product was a significant covariate of the individual's attitude toward the act of purchasing the product.

#### 3.2.1.2 Limitations of the Final Consumer Research in Developed Countries using Students as a Surrogate of the Ordinary Consumer

1. The samples have been drawn from the student population, who in age, education and shopping experience and to some extent income and

occupation, are relatively similar, which cannot be used to represent the general public attitudes. This situation limited the researcher's ability to investigate the differences among the respondents on the basis of the socio-demographic variables, which were irrelevant - except perhaps, the sex of the respondent.

2. In most of this research, quality was measured as a single cue (except Henthorne 1986, Diplom-Kaufmann 1988, Johansson 1985), not through a variety of dimensions, which contribute to the overall rating of the product quality. According to Kottler (1988), quality could be viewed as an overall measure reflecting the products' durability, reliability and other valued attributes. Thus the: (1) use of quality as the only variable to be associated with the source country, (2) the absence of the other intrinsic and extrinsic attributes, which together contribute in formulating the quality of the product, will not be helpful in identifying which of these attributes need more attention for improvement, and which appeared to be more favourable and need enforcement.
3. In all of these studies, quality was the only dimension used in evaluating the product. Risk and price which are relatively as important as the quality in the purchase decision, were not included in these studies. However, price was used as one of the variables which was considered in the product quality evaluation in some of these studies (Howard 1983).
4. Since all of these studies were conducted in developed countries, mainly in the U.S.A., it makes their results of little value to the marketing researchers, who were interested in investigating the consumers of less developed countries. The diversity of consumers is evident even in the same country. According to Strengthal and Craig

(1982) the diversity of consumers is evident any time one goes into a supermarket or other retail establishment. This diversity will be more obvious, when one goes to a different country with a completely different culture.

#### 3.2.1.3 Research within Developing Countries using Students as Surrogates for the Ordinary Consumers

The first study investigated the relationship between the product origin and its perceived quality and was conducted within developing countries (Figure 3.3 presents the classification of the quality cue-country of origin research in developing countries).

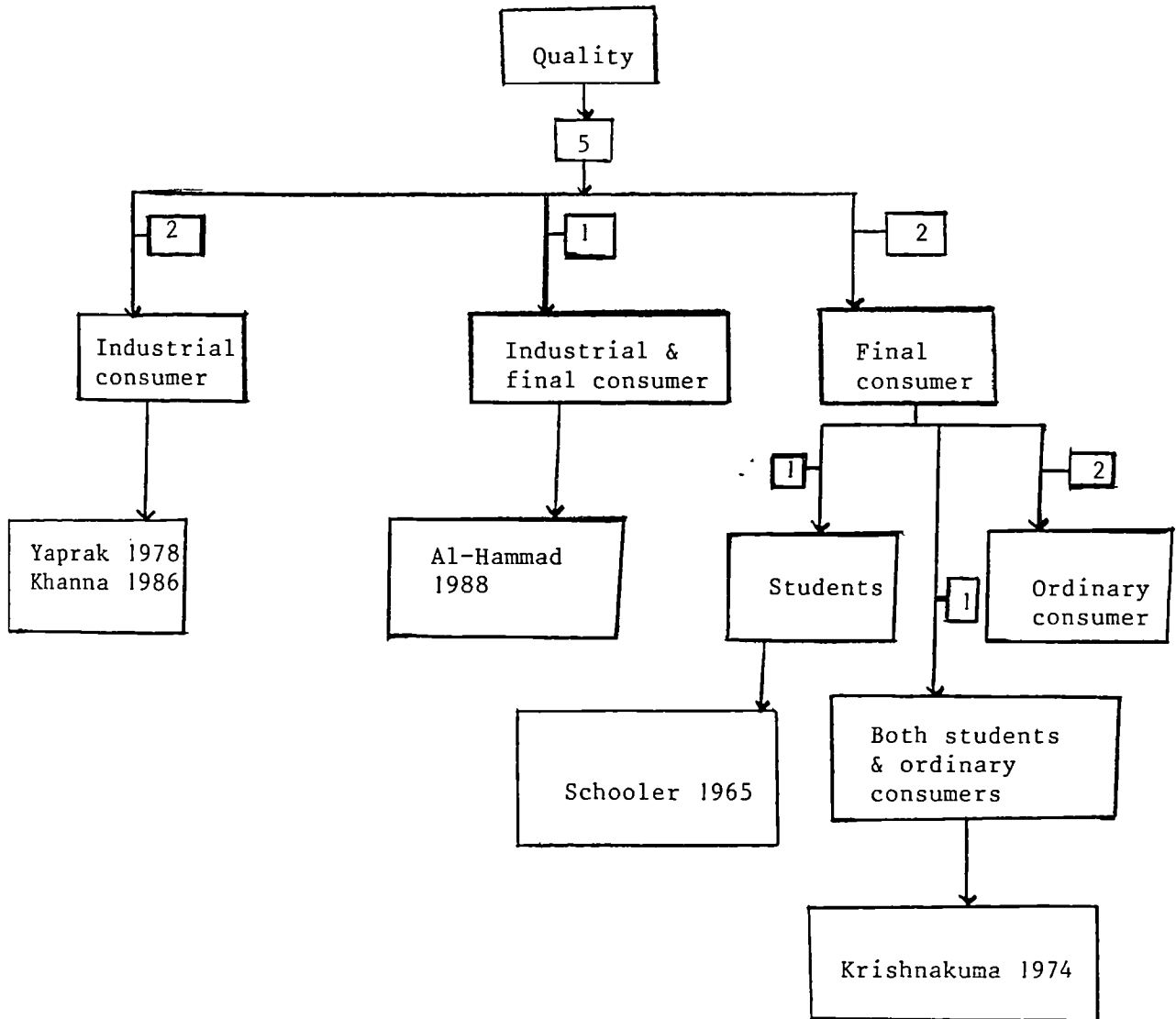
Schooler (1965) investigated the consumers' bias based on product origin in the Central American Common Market (CACM). Schooler's purpose was to find out whether or not invisible barriers to increase trade existed in the CACM due to the existence of consumer biases on the basis of the national origin of the product.

Schooler's results indicated that significant differences existed in the evaluation of the products on the basis of their country of origin. He found that products identified as made in Guatemala and Mexico were evaluated higher than products identified as made in El Salvador and Costa Rica. However, he found no significant differences between the products that were identified as made in Mexico or made in Guatemala.

Schooler's study indicated that regional fears, jealousies and animosities among CACM members may take part for this bias amongst products from other CACM countries. The results also pointed out that there was an inter-relationship between the attitude of the Guatemalan sample towards the product manufactured in the participant countries and their preconception towards the government, people, travel experiences, labour organizations and the business structure of these countries.

FIGURE 3.3

THE QUALITY CUE-COUNTRY OF ORIGIN  
RESEARCH IN DEVELOPING COUNTRIES



#### 3.2.1.4 Limitations

The main limitations of Schooler's study can be attributed to: (1) the use of students as respondents, (2) the use of countries with a relatively similar stage of development which can limit the ability of the investigator to relate the perceived differences in the products of the various countries to real differences in the actual quality of the products or to the source country, (3) the use of quality as a single cue measured directly, not through the attributes which together contribute to the overall quality evaluation of the product and (4) the exclusion of the price and risk cues from the analysis.

#### 3.2.1.5 Research within Developed Countries using Ordinary Consumers

There are fifteen studies investigating the final consumers in the developed countries using the ordinary consumers as respondents. (Figure 3.2) SCHOOLER 1971 studied the bias phenomena attendant to the marketing of foreign goods in the U.S.A. The purpose of the study was to test bias phenomena with a broadly-based, representative consumer sample to avoid the limitations of the previous studies which used college students as respondents.

The results of the study indicated that:

- 1) There are significant differences on the basis of country of origin.
- 2) In only two of the six regional national pairings was a significant difference shown.
- 3) The products of Germany were rated significantly better than those of Asia, India and Western Europe.

U.S products were rated significantly better than those of Western Europe and India. American consumers evidence significant different intensities of bias against different foreign origins. In regard of the

difference between the consumers' evaluation of tangible and abstract stimuli, the results indicated that in only two of twelve origins was there a significant difference. Also in only one of three products tested, was there a significant difference between the evaluation of tangible and abstract stimuli.

Schooler's findings revealed significant differences in the appeal of foreign products on a number of demographic factors, such as age, sex, education and race. It was observed that the older group evaluated the products of Africa, Asia, North America and West Germany significantly lower than younger respondents did. Females rated foreign products significantly higher than males. Educational level and intensity of bias appeared to be inversely related. Non-white respondents rated products from Nigeria, Latin America and India significantly better than white respondents, while white respondents rated the products of U.S. and North America significantly better than non-whites. No significant difference in evaluating foreign goods were shown by occupation or by place of residence (urban-rural residence).

ANDERSON AND CUNNINGHAM (1972) investigated the possibility of gauging foreign product promotion. Their main aim was to determine the extent to which consumers who differ in foreign product preference may be distinguished by selected objective demographic and personality attributes.

The findings of the research indicated that the objective factors (demographic variables) alone were not successful in distinguishing between the respondents group. The single exception to this general finding was educational level of the household head. The personality attributes analysed, however, did yield significant results of foreign product preference except in the case of attitudes toward big business. They conclude that the image of the consumer displaying high foreign



product preference emerging from the research, is that, of an individual of relatively low status concern, low conservatism and dogmatism with a college education, perhaps an advance degree. Alternatively, consumers exhibiting low foreign product preference may be characterized as relatively high in status concern, high conservatism and dogmatism, with less than a completed college education.

LILLIS AND NARAYANA (1974) compared the U.S. and Japanese consumers' attitudes toward aggregate images of products with 'made in' labels from five countries. The multivariate profile analysis was used to obtain the image profiles of the five test nations as perceived by U.S. and Japanese consumers.

The differences between profiles were found to be statistically significant with regard to every test nation. This finding implies significant perceptual differences between U.S. consumers and Japanese consumers regarding the 'made in' products of different countries.

With regard to the U.S.A., the U.S. consumers believed their country to be a prominent leader in heavy industry, mass production, inventiveness, advertising, recognizable brands and youthful appeal. Japanese consumers did not share this highly positive impression, although they still consider the U.S. as a mass producer, a mass distributor and as having a youthful appeal. They perceived U.S. products as generally less reliable.

A more realistic impression or agreement between the two groups was with respect to Japanese products, although the Japanese consumers were found to be more favourably disposed toward their own products, they were highly impressed with the economy gained from their country's products. The U.S. consumers found the Japanese products to be inexpensive, not luxurious, exclusive or made for upper class and lack of pride of ownership.

In addition, they did not perceive Japanese products as highly reliable.

ETZEL AND WALKER (1974) investigated the advertising strategy for foreign products. The study was designed to determine if national product stereotypes were congruent with attitudes toward specific types of products from the same country. The working hypothesis for the study was that consumer evaluations of all products from a country will differ significantly from the evaluations of specific products from that country.

The respondents of the study were 301 female respondents. The researchers justified the use of female respondents only because women regularly play at least a minor role in purchase decisions for the types of products studied.

The results of the study indicated that the comparison of consumer attitudes toward all products manufactured in the U.S. with U.S. autos, cameras and toys were significant. With regard to the German product, the comparison of the consumers' attitudes toward all products manufactured in Germany to German autos, cameras and toys were significant except in the case of all German products vs. German autos. The consumers' attitudes towards all Japanese products was found to be significantly different from their attitude toward Japanese autos, Japanese cameras and Japanese toys.

The researchers concluded that consumers did not perceive all foreign products from a particular country as being the same or very similar. Consumers were capable of distinguishing among foreign products on important characteristics.

DORNOFF et al (1974) investigated the consumers' perceptions of imports. The purpose of the research was to answer the following questions:

- 1) What were the consumers' perceptions of imports?
- 2) Did these perceptions differ for specific countries?

- 3) Did these perceptions differ among product classes?
- 4) Were these differences in perceptions based on socio-economic characteristics?

The research indicated that imports in general, were considered to be well constructed, of lasting quality and of good material but not necessarily superior to the United States products. Respondents were neutral toward French imports. Products from Japan were considered to be well made and good substitutes for U.S. products. Imports from Japan may not be of the best quality and, therefore, not totally superior to products from other countries.

In regard of product classes the U.S. products were not considered to have the highest quality in all product classes. While U.S. products were ranked highest in the food and fashion categories, Japan outranked the U.S. in electrical equipment and Germany was rated superior in mechanical products.

The research results indicated that no significant differences existed between the male and female perception of imports and the same results with regard to male and female rankings of countries for different product classes. Significant differences did exist in regard of the respondents age. Respondents in the 30-50 age category had more negative perceptions of imports. Similarly significant differences were also indicated between education categories. Perception of imports became more favourable as the educational level increased. Those with high school education felt that imports were to be avoided while those with a graduate degree were strongly in favour of imports.

DARLING AND KRAFT (1977) investigated the impact of the 'made in ...' label on Finnish consumers' attitudes toward the products of various selected countries.

Approximately three-quarters of the respondents were managers and employees randomly selected from local banks, retail wholesalers and manufacturing firms. The remaining quarter of the sample was composed of randomly selected faculty personnel, students and staff of various universities in the Helsinki area.

The results of the study supported the hypothesis that knowledge of country of origin affected consumer attitudes toward products. The Finnish product received the highest overall ratings. Sweden and West Germany followed second and third with relatively high ratings. For the products of the rest of the countries, the ratings were as follows: Fourth the English products, fifth the French, sixth the American, seventh the Japanese and in the last place came the Russian product.

A comparison of the demographic and socio-political characteristics of the two groups of respondents revealed no significant differences.

NARAYANA (1981) investigated the aggregate images of American and Japanese products. The purpose of the study was an attempt to find the specific nature and degree of such differences between 'U.S. made' and Japanese made' product offerings.

The results of the research indicated that U.S. consumers perceive U.S. made products to be generally of higher quality than Japanese made products. The quality factor reflected the perceived workmanship, reliability and exclusiveness of the products. The U.S. products were perceived by the U.S. consumers as more reliable, and of better workmanship than the Japanese products. Japanese and American products were perceived by the American consumers to be widely advertised and mass produced. The U.S. consumers perceived U.S. products to be more associated with large selection, more expensive and more prestigious than

they perceived the Japanese products.

The Japanese consumer perceived both U.S. and Japanese products as highly recognizable. The Japanese consumers considered the Japanese products to be of higher quality, i.e. of better workmanship, than U.S. made products. Furthermore, Japanese consumers viewed Japanese products as perhaps slightly less prestigious, more for the lower classes and more functional. The Japanese consumers perceived U.S. products to be more popular, more mass produced, more widely distributed and more for young persons, than Japanese products.

BANNISTER AND SAUNDERS (1978) investigated the U.K. consumers' attitudes towards imports. The aim of the research was to reveal the stereotype attitudes of U.K. consumers towards domestic products and the product offerings from a selection of foreign countries highly active in the U.K. domestic market.

The study was confined to durable goods originating from countries of advanced economic and technical status. Attitudes towards the products of seven countries, including the U.K., were sought. France, Italy, Japan, West Germany, U.S. and the U.S.S.R. were included in the study.

The results of the research indicated that, U.K. consumers rated products of domestic origins quite highly but, compared with the respondents' ratings in the various U.S. and Japanese studies, the U.K. consumers demonstrated relatively favourable inclinations toward imported products. The U.K. consumer rated West Germany higher than the United Kingdom on four of the five scaled attributes. Japan was rated higher than the U.K. in two attributes and France was rated higher than the U.K. in one attribute. Only on the availability attribute was the U.K. product rated the highest among the seven countries.

Of the seven countries included in the study, West Germany emerged as a

clear leader having achieved the most favourable ratings on the four attributes relevant to the intrinsic qualities of products. Individual ratings for consumer goods 'made in Japan' did not, for any attribute, achieve the first rank position.

Compared with the other countries, products made in France were favourably rated for appearance but performed poorly in value for money and availability. Products of Italy came in the seventh ranked positions for the performance attributes, reliability and workmanship, in the fourth position for the rest of the variables.

According to the Bannister and Saunders, in spite of a common language and the resulting advantages in communications, it was surprising that 'made in U.S.A.' was not highly regarded in the United Kingdom and consistently obtained below average rank positions. The United States was ranked fourth in reliability, fifth in value for money and workmanship and sixth in appearance and availability.

The least favoured of the seven countries analysed, was the U.S.S.R., it never rose above the sixth rank position for four of the five attributes. The U.S.S.R. products ranked the seventh in value for money, appearance and availability, the sixth in reliability and workmanship. The analysis of the socio-economic revealed that age and sex appeared to be particularly significant causes of variance in attitudes toward specific countries of origin.

DAMANPOUR AND HALLAQ (1981) investigated the 'made in' product images of industrial countries. In this research the authors compared the perceptions of U.S. and Danish consumers toward the products of the two countries and the products of Japan.

The results of the study indicated that the Danish consumers perceived the U.S. product to be more reliable, technically advanced, inventive and

to have a wider variety of selections. At the same time they perceived the American product to be more expensive and lower in workmanship than the products of Japan and Germany.

The American consumers considered their home product to be stronger in the variety of its offerings, the high brand recognition and the clever use of colours. At the same time the American consumers felt that the U.S. products came lower than the German product in terms of workmanship and lower than the Japanese products in terms of the technical advancement.

KHERA AND ANDERSON (1981) investigated the consumer perceptions of cross-national brand domiciles. The authors attempted to explore the degree of knowledge of the consumers about the actual manufacturing location of the well known brands with the assumption that foreign product bias did exist as is indicated by the various studies done in this area.

The results of the research indicated that the American consumers have great difficulty in correctly identifying the country of origin of the brands investigated. They tended to rely on other cues such as, sound, spelling or the word denoting the brand name as an indicator of the country of origin.

The authors conclude that the findings of the study can indicate that the incorrect information about the country of origin of the product may lead the consumers to purchase products from countries other than those they might have intended.

HESLOP AND WALL (1985) investigated the differences between men and women in the formation of country-of-origin product images. They found that Canadian products received the highest score from both men and women except for women's shoes where Canada came second to Italy. Men disagreed that Italian clothing was at all comparable to Canadian goods.

Romanian men's clothing was given a much lower rating than clothing from other countries in the group. The far eastern countries were given very low scores by both men and women, except for Hong Kong which received substantially higher scores for children's and men's clothing. In assessing the overall quality of consumer goods from various countries, women gave somewhat higher ratings to every country than did men, except for South Korea, Hong Kong and the Philippines.

OFIR AND LEHMANN (1986) investigated the benefit of measuring category related images in the context of the European market for ski-vacation as perceived by American skiers.

The study concentrated on three European countries, they were Switzerland, France and Austria. The objective of the study was to provide information for the design of marketing and advertising strategies in order to penetrate the U.S. market. The focus was at the country level and therefore images of resorts (in general) from a particular country were very important.

The research findings indicated that significant differences were obtained for the profile of Switzerland vs. France. The comparisons of the profiles of Switzerland vs. Austria and France vs. Austria were not significant. According to the authors these results demonstrate the low level of American skiers' familiarity with European ski resorts. The results indicated that, overall, potential customers did not perceive differences between resorts in Austria and Switzerland which were major competitors. Swiss resorts, however, were perceived to be different from French ski resorts. Specifically a more positive position was obtained on four attributes: challenging, friendly, honest and romantic. This



analysis suggested that the Swiss promotional efforts in the U.S. was not very successful in creating a differential advantage for their resorts over Austria.

WALL AND HESLOP 1986 investigated the consumer attitudes towards Canadian-made versus imported products. The main aim of the research was to study Canadian consumers' attitudes using a representative sample.

The results of the research indicated that the consumers' attitudes toward the Canadian product were positive, with 85.2% reporting that the quality of Canadian products had improved or stayed the same in the past five years. 93.6% stated products made in Canada will improve or stay the same. 78.5% of the sample considered Canadian made products to be better or the same quality as import. 94.8% of the consumers stated that they looked for Canadian made products at least occasionally when shopping, but cited price and availability as the reasons for not always following through and buying Canadian.

In regard of the demographics and attitudes toward Canadian-made products in general, the research results indicated that women in general and French speaking women in particular, were more positive toward Canadian-made quality "in the past, present and future" than were men. Younger consumers were more positive than middle aged and older consumers. Those with higher income and higher education were most negative toward Canadian products and least likely to buy Canadian products.

The ratings of the quality of products in general made-in Canada and 18 of her trading partners indicated that the product of Canada was ranked high along with other highly industrialized countries. No significant differences were found between Canada and Japan, West Germany or the United States. Sweden was rated significantly higher than Canada while the

remaining countries gained mean ratings significantly lower than Canada. France, Italy, Czechoslovakia and Spain formed an immediate quality group, while the remaining, including centrally planned and developing countries, obtained ratings at or below the mid-point on the seven point scale and thus were rated as having poor quality goods. The authors conclude that Canadians seemed supportive of Canadian-made products, were optimistic about future quality and intended to keep buying.

DARLING AND KRAFT (1981) examined the general attitudes of consumers in Finland towards the products of various countries and the consumers' attitudes toward various dimensions of the marketing strategies associated with these products.

The results of the study indicated that in terms of attitude change between 1975 and 1980 a positive shift in attitude was associated with the products of Finland, Japan and the United States. The products of England and U.S.S.R. were viewed less favourably, while the products of Sweden, France and West Germany showed little change in attitude.

In terms of the overall ratings of the product quality, the products of Finland, Sweden and West Germany continued to be rated significantly higher than the products of the other countries.

CHAO (1989) investigated consumer evaluations of product quality and purchase intent of two electronic products currently imported into the U.S. from a company in a newly industrialized country and one electronic product currently not manufactured by the same company.

The main objective was to investigate the effectiveness of price and distribution strategies in the framework of exports versus multi-national production decisions in terms of quality perception and purchase intent for a group of electronic products with a brand whose country of origin is still relatively unfamiliar to most American consumers. Three electronic

products; television, video cassette recorders and stereo component systems were selected for the study. Two of these products, TV and VCR were exported to the U.S. by the Korean Lucky-Gold Star Group. There were two levels of price - low, high, two levels of country of origin - U.S. versus Korea and two levels of distribution, speciality store vs. non-speciality store.

The results of the research showed that both the quality perception and the purchase intent were influenced by country, price and distribution. The precise effects appear to be product - specific even for products in the same general product category.

The country and the distribution main effects are significant on both the quality perception and the purchase intent, except for TV sets which the country effect on quality perception and the distribution effect on purchase intent were not significant. However, a more significant finding pertained to the country and distribution interaction. Except in the case of stereo component systems for which the main quality rating was not significantly affected by this interaction, such an effect appeared to be remarkably consistent across all three products on both the quality perception and the purchase intent.

#### 3.2.1.6 Limitations

1. Although this research was directed toward the final consumers, it was found that samples were chosen in most cases in a non-random basis (examples Anderson and Cunningham (1972), purchasers of specific kinds of products, Etzel and Walker (1974) female respondents only, Darling and Kraft (1977, 1980) managers and university staff, Chao (1989) shopping malls). In all cases, the samples were drawn from one or two cities, which can be argued that the residents of these cities may not be representative to the country overall population (the only exception

is Heslop and Wall (1985), Wall and Heslop (1986), where they used a nationally representative panel maintained by a marketing research firm in Canada).

2. None of these studies incorporate the concept of perceived risk, nor any of its components in the overall evaluation of the product. However, the concept of quality as a multi-dimensional rather than unidimensional was observed in some of these studies (Bannister and Saunders (1978), Narayana (1981)).
3. The fact that this research has been conducted in developed countries, mostly in the U.S.A., limited the applicability of the research findings into the consumers of the developing countries.

#### 3.2.1.7 Research with Developed Countries using both Students and Ordinary Consumers

Tongberg's (1972) dissertation was found to be the only study which used both students and adult respondent. He investigated the relationships between dogmatism and consumer attitudes toward foreign products. The primary objective of Tongberg's dissertation was to investigate the role of personality in determining consumer attitudes toward foreign products.

The results of the study indicated that:

- 1) The personality construct dogmatism was not related to consumers' attitudes toward foreign products when the type of country manufacturing the product was disregarded.
- 2) Dogmatism did not have a differential effect on the attitudes of consumers toward a foreign product depending upon the type of country manufacturing the product.
- 3) The more similar a country's cultural background was perceived to be with respect to the United States, the more favourable the attitudes of all subjects toward products manufactured by that country.

- 4) Low dogmatics were significantly more aware and knowledgeable about the manufacturing origin of selected brand name products.

#### 3.2.1.8 Limitations

1. The three products used in this study (namely the electrical radio, men's dress shirt and non-prescription drug) represent only a small portion of the total international trade. Although this might be true with any other research which selects a specific kind of product, caution should be taken in account, in generalizing the findings of the study to other more valuable products.
2. Given the main criteria taken in classifying the countries as similar to the U.S. or dissimilar, which is very subjective, the number of countries used in the study to represent the entire countries which engage in international trade, was relatively small.
3. The sample was limited to respondents who were either students of the state college, Pennsylvania or volunteers from the surrounding community. In such a case, the sample was based on a non-random basis, with all the limitations of the non-random sampling.
4. The applicability of personality variables in explaining buyer behaviour is a matter which should be taken with great caution (Cohen 1968).
5. As much as the present research is concerned, the findings of Tongberg's study are of little help. This is due to the wide gap between the Jordanian consumers and the American consumers.

#### 3.2.1.9 Research within Developing Countries using both Students and Ordinary Consumers

The only study within the developing countries which employed both students and ordinary consumers as respondents was found to be Krishnakumar's (1974) dissertation about the Indian and Chinese consumers.

KRISHNAKUMAR (1974) investigated the influence of country of origin on the product images of persons from selected countries. The study was conducted at the University of Florida among people from less-developed countries and Americans. The primary objectives of the study were to explore the nature of 'made in' images prevalent among people from less-developed countries and to investigate the effect of demographic variables on the 'made in' images among those consumers.

Product classes chosen for the study were mechanical products, food products and fashion products. Specific products chosen for evaluation in this study were automobiles, television sets, soft drinks and dress shirts.

The respondents were natives of less developed countries residing in the United States. Some of these respondents may have been in the U.S. for many years, whereas the others have been there for a much shorter period. The sample consisted of students, staff, faculty members and also their families.

The results of the study indicated that people from less developed countries have an unfavourable 'made in' image of their domestic products in terms of many of the characteristics of the products used in the research. Both Indians and Chinese have an unfavourable image of their own products. A comparison of the evaluation of their respective domestic labels by Indians and Chinese revealed that the Chinese respondents have given a higher rating to 'made in Taiwan' than the Indians did to 'made in India'.

A comparison of the 'made in' images among Indians and Americans brought out some important differences and similarities. Indians, on the average, have given a significantly lower rating to 'made in India' as compared to Americans' evaluation of 'made in U.S.A.'. However, in the

case of 'made in England' and 'made in Germany', the Indians' rating was significantly higher than that of Americans in several categories.

Also the results of the study showed that demographic characteristics had accounted for differences in 'made in' images among Indians, the test country group. Sex and travel experience in particular were seen to be significant as predictors of differences in 'made in' images among Indians.

#### 3.2.1.10 Limitations

1. The study was conducted among persons from less-developed countries who were residing in the U.S.A. and American respondents who were also drawn from the university community. Both samples were clearly not representative to the targeted population, this created a strong constraint on the generalization of the research findings. In Krishnakuma's words, the conclusions and generalizations drawn from the study must be considered only tentative and preliminary.
2. The classification of countries into less-developed and advanced nations was built on economic development only. No attempt was made in the study to classify the countries according to the consumers' perception of the products made in these countries, to test if the consumers perceive the products 'made in' countries, which were relatively in a similar stage of development (either developed or developing) to be similar.
3. The study was more orientated toward the investigation of the differences between the consumers of less developed countries, and the consumers of a more developed country, rather than the differences among the consumers of developed or developing countries. According to Krishnakumar (1974) "a comparative framework was used so that 'made in' images prevalent among persons from separate-less developed countries

can be compared. Also, the comparative framework enables the comparison of 'made in' images existing among persons from less-developed countries. A comparative approach such as this may point out similarities and differences in 'made in' images among people from different countries". However, the effect of demographic variables on the 'made in' images among consumers from less developed countries was also investigated, but the question of how much did the consumers of developing countries, residing in a developed country, represent the true population of the developing countries' consumers residing in the same country need to be resolved.

4. As in the example of the previous studies, the product quality was the only variable investigated, without the integration of the risk and price variables.
5. No attempts were made in the study to test the validity nor the reliability of the scale of measurement. This limitation restricts the ability to generalize the results of the study.

### 3.2.2 THE INDUSTRIAL CONSUMER RESEARCH

There were eleven studies which addressed the industrial consumers' attitudes toward the quality of the products of foreign origin. Nine of these studies were conducted within the developed countries and only two studies compared the industrial consumers in both developed and developing countries (Figure 3.4 presented the quality cue-country of origin research classification).

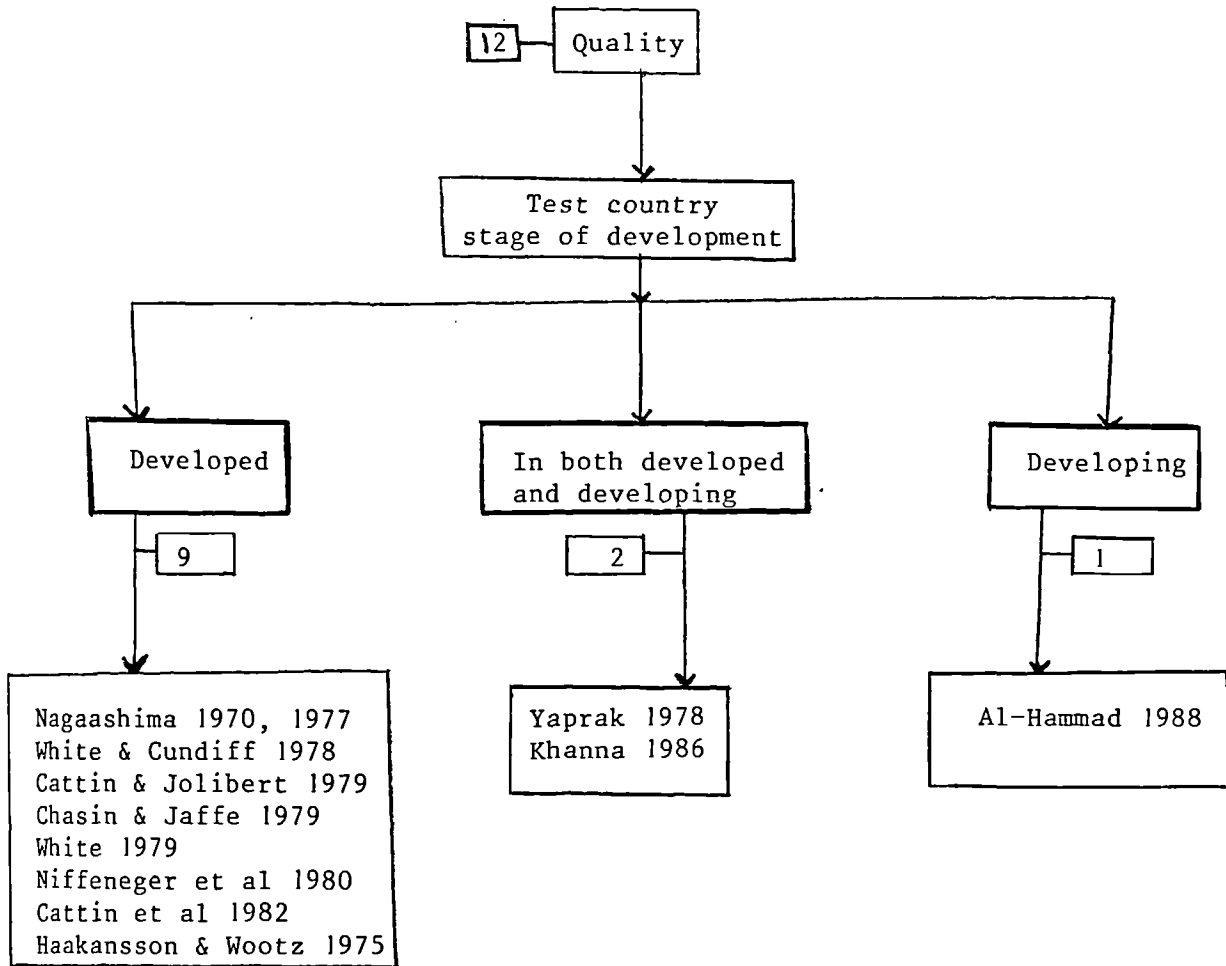
#### 3.2.2.1 The Industrial Consumer Research within Developed Countries

Figure 3.4 classified the relevant research according to the stage of development of the best country.



FIGURE 3.4

THE QUALITY CUE-COUNTRY OF ORIGIN  
INDUSTRIAL BUYER RESEARCH



NAGASHIMA (1970) compared the attitudes of Japanese and American businessmen towards foreign products. The Japanese businessmen did not regard 'made in Japan' as enthusiastically as U.S. businessmen regarded 'made in U.S.A.'. Only 57% chose their own Japanese goods over foreign products.

'Made in Germany' appeared to be appreciated most, out of all foreign labels. This label was chosen by 21% of the Tokyo respondents.

'Made in England' carried the traditional image of excellence and maintained a strong prestige value in Japan. This view was strongly held in the United States.

The image of 'made in France' was the poorest of the five countries. Nagashima concluded that the 'made in' image was naturally affected by the familiarity and availability of the country's product, and the stereotype of that country. Some representative products of the country influenced the total product image. Such products as Sony, Nikon, Toyota and Honda were driving force in changing the image of 'made in Japan' in the United States.

NAGASHIMA (1977) repeated his earlier 1970 study of the 'made in' product image among Japanese businessmen.

The results of the study indicated that the profile of the Japanese and German products had improved since 1970, which implied that the relative status of 'made in U.S.A.' had declined. With regard to reliability, the 'made in U.S.A.' image had fallen into a last place tie with the French products. The 'made in U.S.A.' was rated the lowest among the five countries in terms of careful and meticulous workmanship, while Japanese products moved to first place in this category. In Nagashima's words "in short, the U.S. image has declined considerably".

The image of products 'made in Germany' had improved to a great extent. The Japanese businessmen evaluated 'made in Germany' highest among the five countries in terms of careful and meticulous workmanship, technical advancement and inventiveness.

The Japanese businessmen perceived the English product as handmade, with a tradition of careful and meticulous workmanship. The reliability image of English products had declined significantly since Nagashima's first study in 1970. According to Nagashima's conclusions, the image of England as a modern and progressive industrial society was fading away.

The overall image of 'made in France' had moved in a positive direction, though the profile itself had not changed much. The Japanese businessmen felt that owning French products brought the highest prestige because they perceived them as handsome, unique, expensive and luxurious.

WHITE AND CUNDIFF (1978) investigated the issue of assessing the quality of industrial products. The products investigated were industrial lift trucks, dictation systems and metal working machine tools.

The findings of the study indicated that for all three products there was a statistically significant relationship between the country of manufacture and perceived quality.

CATTIN AND JOLIBERT (1979) reported a cross-cultural study of the 'made in (England, France, Germany, Japan and U.S.A.)'. The main objective of the study was to explore and compare the perception of the 'made in (England, France, Germany, Japan and U.S.A.)' concepts in two different cultures (American and French) on similar populations (Directors of Purchasing).

The researchers found that the 'made in' Germany, Japan and U.S.A. concepts tend to have more favourable images. However, there were

differences between American and French respondents. For instance, Japanese products seem to have a more favourable image among Americans than among French directors of purchasing. The perception of English products was more similar among Americans and French.

CHASIN AND JAFFE (1979) investigated the American industrial buyer's attitudes toward goods made in Eastern Europe. The results of the study indicated that the U.S.A. had a much more favourable rating on all the attributes, compared to Eastern European countries, scoring highest in perception of 'advanced technology' and doing least well on the attributes of 'on time delivery' and 'value for money'. The U.S.S.R. in turn, was rated as good or better than Czechoslovakia, the next best rated country. For Hungary, Poland and Romania, most of the attributes were rated somewhat below average.

The researchers concluded that the survey results indicated that the images of the several Eastern European countries were quite inferior to that of the U.S. This inferiority appeared to be part of a halo effect. This considerably negative perception defined a major image problem. If these countries would like to market their products successfully in the U.S., the image should first be improved. One way to achieve this improvement was to eliminate the halo effect by overwhelming it with appropriate information that will cause shifts in perceptions of the product's attributes and improve overall product image.

WHITE (1979) studied the attitudes of U.S. purchasing managers toward industrial products manufactured in selected Western European nations. The research question in this project was, what types of stereotypes, if any, existed in the minds of industrial buyers as they consider industrial products manufactured in the United States?

The countries used in the study were the United States, West Germany, France, Italy and England. The focus of the research was on determining the existence of stereotypes associated with industrial products manufactured in the five western industrialized nations.

The results of the study indicated that statistically significant differences were found in the ratings given by U.S. purchasing managers for industrial products from the five countries. In respect of the product quality dimension, these results indicate that West Germany received significantly higher ratings than those received by the other countries. No significant differences exist with respect to the product quality dimension among France, England and the United States. Both the United States and England received ratings on this variable that were significantly higher than Italy. No significant difference was found between France and Italy in regard of this variable. The U.S. product dominated those of the other countries in respect of the marketing characteristics. Further, among Italy, France, England and West Germany, no statistically significant differences were found in the same variables.

NIFFENEGGER et al (1980) investigated the British retail manager's view of the French and American products. The questionnaire was distributed to a quota sample of retail stores in Bristol, England. The quota was designed to represent a balanced cross-section of the major retail store types, such as food stores, automobile showrooms, variety stores as well as speciality stores.

British products were seen as relatively cheap, necessary goods in comparison with their French and American competitors. The French products appeared to be viewed as luxurious and somewhat more exclusive in comparison to British and American products.

American products were seen as widely advertised compared to French products, although there appeared to be a definite prestige perceived in the ownership of French products. British products were felt to be relatively well known and were widely advertised. French brand names were not found to be easy to recognise.

The French products were seen as more 'handmade' although no more technically advanced than British products. The one outstanding feature in regard of the British products was the severe condemnation of the workmanship characteristic. The American products were viewed as being of relatively technically advanced nature, produced by mass production methods.

U.K. ranked first in electrical appliances, textiles, food and pharmaceutical products, second in automobiles and in last place, in cosmetics. France ranked first in automobiles and cosmetics, second in textile and food and in last place in electrical appliances and pharmaceutical products. The U.S. product failed to be the first choice for the U.K. consumers in all of the product classes investigated. However, it ranked second in electrical appliances, cosmetics and pharmaceutical products and in last place in automobiles, textiles and foods.

In regard of the consumer profile, the American products were seen to be more attractive to the younger market and possessing a slight 'masculine' bias. The French products were more appealing to the 'feminine' market and the British products were more appealing to 'older people'.

CATTIN et al (1982) investigated the attitudes of American and French buyers toward products made in industrialized nations. The countries used in the study were the United States, France, Japan, England and West Germany.

The results of the study indicated that there was a strong home country bias. Both the American and the French respondents gave better evaluations for their own home countries' product. The German product was rated second by the two groups after their home country. The rating of the rest of the countries varied between the two groups.

HAAKANSSON AND WOOTZ (1975) investigated the supplier selection in an international environment. The products investigated were a standard screw and standard paint to represent the low need uncertainty products and a special screw and a pressing tool to represent the high need uncertainty products. The location choices of the suppliers were Sweden, England, Germany, France and Italy.

The findings of the research indicated that purchasers tended to use location and size in the same way as decision variables. Location was found to be more important. Purchasers on the average gave considerable advantages to Swedish firms over foreign ones and English/German firms over French/Italian ones. Purchasers very seldom react to higher quality when the minimum requirements are fulfilled and when they have to pay for the higher quality by going abroad.

#### 3.2.2.2 Limitations

1. The fact that this research is orientated towards the industrial buyer, who may have different views from the final consumer, and that it had been conducted in developed countries, make this research of little value to the current study under discussion.

2. The same limitation mentioned in discussing the final consumer research which related to the concentration of the research on the product quality attributes and ignoring the risk and price dimensions, is also relevant here.

### 3.2.2.3 Industrial Consumer Research within Developing Countries and the Limitations of this Research

The studies by Yaprak (1978) and Khanna (1986) were found to be the only two pieces of research conducted in this area. However, they were not confined to the developing countries' market only, they included the American market in Yaprak's (1978) dissertation and the Japanese market in the case of Khanna's (1986) article.

YAPRAK (1978) aimed to measure consumers' intentions to purchase a chosen source-country's product based on their attitudes towards that country. Two main questions were addressed in Yaprak's dissertation. The first one related to the effects of a person's attitude about a particular country on their evaluation of the quality of products in general from that country. The second question was in regard to the relationships of source-country and its interaction with certain attributes of the test products used in the study.

The countries used in the study were Turkey, U.S., West Germany, Japan and Italy. The products used in the study were cars, cameras and calculators. One brand per country, per product.

The data for the research was collected by a questionnaire. The respondents were American and Turkish businessmen. A total of 158 American executives and 202 Turkish executives filled the questionnaire.

The results of the research indicated that the source country of origin had a clearly significant effect on the purchase intentions and on the product evaluations for the American and Turkish executives.



Limitations of Yaprak's (1978) dissertation:

1. The main objective of the research was to investigate the American and Turkish businessmen's attitudes toward products of foreign origin. Thus, the focus of the research was clearly different from the current research, which restricted the relevancy of Yaprak's findings to the current study.
2. The design of the research itself which was orientated toward investigating the attitudes of industrial consumers in two countries in different stages of development towards products of developed countries' origin, might seem to be biased. It would be more neutral if it included products of the developing countries' origin in addition to that of developed countries.
3. The concentration on product quality only as the sole criteria in evaluating the product image was clearly a bias in the overall product assessment. Price and risk might be as relevant as quality in the overall evaluation of the product.

KHANNA (1986) investigated the issue of Asian companies and the country stereotype paradox. The main aim of the research was to discuss the efforts of Asian business firms to overcome the negative attitudes of foreign businessmen and consumers towards products produced in developing countries.

The national stereotypes chosen for comparison were four Asian competitors they were South Korea, Taiwan and India from the developing countries and Japan as the only developed country.

The sources of data included two samples. The first sample consisted of chief executives of 93 companies located in four markets in the following countries: Thailand, Singapore, the Philippines and Japan. The companies in this sample were a judgment sample of firms substantially

involved in the importation of new manufacturers particularly engineering products, leather manufacturers and apparel. The second sample consisted of top managers responsible for international/export operations drawn from 140 Indian business firms.

The findings of the research indicated that: (1) the country of origin image affects the business relationship of Indian firms with their foreign clients. However, the nature of the impact was dependent on the type of clients, (2) the Indian image was perceived as a detrimental factor in the dealings of these companies with new clients, (3) the country of origin image was a 'very important' factor only when import firms were dealing with new companies in the international market. The country stereotype was not so important when they were dealing with their usual or established sources of supply, (4) the very mild positive Indian product image was due to low ratings on non-price factors such as product promotion and services. Price competitiveness appeared to be a relatively favourable factor for the Indian products, (5) Indian export image was found to be very mildly negative as compared to a mild positive image for both South Korea and Taiwan and a very positive image of Japan. In an inter-market comparison it can be seen that Japan got consistently top ratings in each of the four markets - Asian markets of Thailand, Singapore, the Philippines as well as Japan. According to Khanna (1986) India stands a poor fourth in a comparative assessment and reflected the nature of market resistance which less developing country firms face in promoting exports of non-traditional products to new clients. It was found that the comparative status of country of origin image places Japan on top followed by Taiwan, South Korea and India.

The limitations of Khanna's (1986) study:

1. The study is based on a judgment sample of companies which were relatively heavily engaged in international business. These firms cannot be considered as representatives of the entire firms which engage in export and import in the international market, or those firms which were in direct contact with the consumers (ie. retail stores). The image of the foreign products revealed by these companies may be related to their own experience in dealing with some specific foreign firms. This image may be affected by other factors excluding the quality of the product, such as credit terms, delivery times, etc. Thus the generalization of the results of the study is strictly limited.
2. Since Japan was the only developed country employed in the study, a strong case can be established against the degree of the Japanese firms representativeness of the rest of the developed countries. This limitation appeared to be more relevant when one considered that the comparison is among Asian countries, where the Japanese products might have a distinguished image.
3. Nothing has been said in Khanna's study about the validity and reliability of the scale of measurement and the gathered data.
4. In Khanna's words, the methodology employed in the research hinged on the construction of a simple export image index which can measure the direction and intensity of the country stereotype. This scale is not more than a weighted average of responses on sixteen bipolar semantic differential scale. The hypothesis were rejected or accepted upon how far the countries performed on the scale without using any sort of statistical tests.

5. Khanna's research is of little relevance to the current research since it was directed to the industrial consumer, while the research under discussion is directed to the final consumer.

### 3.2.3 RESEARCH WITHIN DEVELOPING COUNTRIES ADDRESSING BOTH THE INDUSTRIAL AND THE FINAL CONSUMER AND THE LIMITATIONS OF THIS RESEARCH

Al-Hammad (1988) was found to be the only researcher who investigated both the industrial buyer and the final consumer in developing countries.

AL-HAMMAD (1988) investigated the Saudi Arabian market for selected imported goods with specific reference to U.K. suppliers at both country and brand levels; to Saudi Arabian economic and cultural factors and to the attitudes of the Saudi consumer and reseller to the product and its suppliers.

The findings of the research indicated that the majority of Saudi consumers considered price to be the most important factor in the case of products necessitating higher expenditure, either a single payment or frequent payments. In regard of the consumers' profile, he found that age and income tended to have a positive relationship with the attributes of price and quality in the case of carpets and air-conditioners, and a negative relationship with the attributes of quality and maintenance for cars and design of outwear and refrigerators. In the case of the educational level, it was found that the higher the level of education, the more the type of product attribute requirements conform to the requirements of self employed and managerial consumers.

With regard to the attitudes towards imported products, Al-Hammad found that the Saudi consumers did not have any strong negative bias against British goods. In Al-Hammad's words, in many cases, U.K. performance at country level did not match its performance at brand level.

The Saudi resellers considered price to be the most important factor when selecting suppliers, followed by quality. The findings indicated that the Saudi resellers' view of the British suppliers to have less favourable reputation with all market mix factors except quality.

Limitations of Al-Hammad's thesis:

1. The consumer sample used in the study was a quota sample drawn from the Riyadh City. This sort of non-random sampling motivates the observer to question the sample representation of the consumers' population even in Riyadh City where the sample is drawn from. When it comes to the entire consumers in the Saudi Arabian market, one can question the representativeness of the Riyadh City to the rest of the Saudi Arabian cities and towns.
2. The resellers sample investigated as representative of the industrial buyer, were only one segment of the industrial buyer. Other groups such as government purchasing departments, contractors and managers or private and public establishments were as relevant as the resellers in this field.
3. The constraint of the resellers sample to Riyadh, Jeddha and Damman only and excluding the other major cities such as Makkah, Al-Madina, Al-Taif and the rest of the Saudi provinces, will strongly limit the generalization of the study to those provinces.
4. The use of male respondents only in the study is clearly reflecting the attitudes of one segment of the Saudi population, at least as much as the sex of the consumers is concerned. Several studies confirmed the

differences between male and female in regard of their attitudes toward foreign products (example Dornoff et al (1974), Heslop and Wall (1985).

5. The study focused on the Saudi consumers' attitudes toward products manufactured in the more developed countries (U.S., U.K., Japan, W. Germany, France, Sweden, Belgium) and newly industrialized countries (Spain, Malaysia, Hong Kong, South Korea, Formosa, and China). However, the consumers' attitudes toward the Saudi Arabian products and the products of other countries, comparable to Saudi Arabia, are not included in the study. This limitation constraints the researcher's ability to compare the consumers' attitudes toward their home country product vis-a-vis with the products of other countries, relatively similar to Saudi Arabia.
6. Quality is used as a unidimensional cue, not through the intrinsic and extrinsic attributes which contribute together in formulating the overall quality image. However, parts and maintenance, design and service were used as independent cues not as dimensions of the quality cue.
7. Quality, price, parts and maintenance, design, credit availability, service before and after sale, were the only variables employed in the study and to be ranked in order of importance. The product risk dimension is not included in the study. The exclusion of the risk dimension from the investigation limited the researcher's ability to investigate the inter-relationship between quality, price and risk, as they related to the country of origin role in product evaluations.

### 3.3 PRICE AND PRODUCT EVALUATION

The role that price plays in the consumer decision process, especially in regard to the perception of quality, has not been adequately explained

in the past research. Economists and behaviourists have developed dissimilar paradigms to explain the influence of price on consumer behaviour (Dodds 1985).

### 3.3.1 THE ECONOMIC MODEL

Economists assumed that the determinants of a buyer's purchase decision were: the knowledge of the prices of all goods, buyer's level of income and buyer's taste and preference. Given those determinants, the buyer's duty was constrained to determine what products should be purchased and how much of each product, subjected to the price of that product, the prices of all other products, the income of the buyers and the buyer's tastes and preferences.

The theory of buyer behaviour based on the assumption of rational behaviour and utility maximization includes several additional assumptions about the buyer, that would then justify the economic model of the downward sloping demand curve (Monroe 1973). Shapiro (1973) points out that the classical (economic) theory assumes given wants and preferences and further assumes that these wants and preferences are independent of price. So, the change in quantity demanded is solely a function of the cost effect of price, not a function of perceptual changes in price (Dodds 1985).

Scitovsky (1945) noted the conventional demand theory was based on the assumption that all consumers possessed perfect knowledge concerning their assumption decisions which implied that the consumers were expert buyers, able to easily appraise product quality, had a well defined set of taste preferences, were aware of all product purchase alternatives, and were able to determine the appropriate marginal rate of substitution between different combinations of commodities to yield the highest possible level of utility. Scitovsky suggested that while these assumptions may be

recognized as simplifications to aid in economic study, in reality they could not be less representative of the truth (Bedeian 1971).

According to Bedeian the real-world consumers suffered from lack of information concerning both purchase alternatives and product quality. In many cases the acquisition of such information is either impossible or too costly to obtain.

Morgenroth (1964) criticized the economic demand and supply curve for pricing. He claimed that the economic model has been deficient in two vital areas: businessmen's knowledge and the nature of the markets. Classical economics assumes that the businessmen knew a series of important facts: the demand for their products at different prices, at different quality levels and with different advertising expenditures and campaigns. Other facts assumed known were who their customers are, the persistence of their buying habits, which media will reach them and which advertising will hold when pulling in new customers..... (Morgenroth 1964, p.17).

The other basic assumption includes the nature of the market: according to Morgenroth (1964) classical economics has principally concerned itself with either monopoly or perfect competition in essence, identifying these as the most important in the United States. He claimed that both assumptions were unrealistic.

Thus the economic model has been criticized from the two points of view: the consumers point of view and the business firms point of view.

### 3.3.2 THE BEHAVIOURAL MODEL

This model assumed that the buyers use the available information cues such as price to make inferences about the quality of the product and to justify their decisions.



Shapiro (1968) and Bedeian (1971) reviewed some of the early studies that contributed to the formulation of the price/quality relationship. These studies were done by Leavitt (1954), Tull, Boring and Gonsior (1964), The Gabor-Granger (1966), McConnel (1968) and the Stafford and Enis (1969). A quick revision of these studies might be useful in explaining the behavioural model as it related to the role of the price in product evaluation.

Leavitt (1954) and Gabor and Granger (1966) showed that customers use price as an indicator of quality. Leavitt's study was concerned with comparing the size of price differences among similar product as they related to consumer-perceived product stereotypes. Subjects were presented with a list containing fifteen home products. The subjects were asked to place five of the fifteen products in each of the following three categories: all brands pretty much alike, in between, and big quality differences from brand to brand. Leavitt found that a greater percentage of subjects chose the high priced alternative for the product categories with relatively high dissimilar brands than for products with more similar brands. Concerning the respondents' satisfaction of their choices, the findings indicated that psychological conflict increased with the respondent's perception of quality differences, subjects tended to have more doubts when they chose the lower-priced brands than when they chose the higher priced brands.

Levitt suggested that demand curves may not invariably be negatively sloped, that price itself may have more than one meaning to a consumer, and that a higher price may sometimes increase, rather than decrease the readiness to buy.

Tull et al. (1964) in their article 'a note on the relationship of price and imputed quality' attempted to duplicate Leavitt's study. The

purpose of their study was stated as to determine if Leavitt's findings on the imputation of quality based on price could be duplicated with an added assumption given the respondent, concerning the price of the brand of the product class 'you usually buy'.

Respondents were asked to indicate whether they felt the market brands of the listed products were 'essentially similar', 'varied substantially', or whether they were uncertain concerning brand similarities.

The results indicated that brands of liquid shampoo and floor wax were seen as the most dissimilar. Brands of table salt and aspirin were considered 'essentially similar'.

Gabor and Granger (1966) attempted to demonstrate that price serves as an indicator of quality with far greater frequency than is generally believed and that the recognition of this phenomenon can lead to a better understanding of consumers' market behaviour.

Gabor and Granger based their study on the proposition that the consumer intent on a purchase has two price limits in mind: an upper limit above which the article would be judged too expensive, and a lower limit below which the quality of the item would be suspect.

The authors found that price would act as an indicator of product quality for a wide range of commodities, such as textile products, simply because their quality cannot be ascertained by sight and, owing to constant changes in technology and fashion, past experience is of little use in this respect. Considerable proportions of the subjects trusted price rather more than the evidence of their senses.

According to Shapiro (1968) Gabor and Granger's study provided a base for marketers and market researchers to use the concept of price as an indication of quality.

McConnell (1968) investigated the effect of pricing on perception of product quality. The results of the study indicated that there was a significant price-quality relationship. The high and low priced brands were perceived to be of significantly different quality. The high and medium priced brands were perceived to have different quality as well. However, the medium-priced brand was not thought to have significantly higher quality than the low-priced brands.

McConnell concludes that subjects used price as an indicator of product quality. With a physically homogenous product and unknown brand names (having so little meaning that many subjects never used them), subjects perceived the highest priced brand to have better quality than the other two brands. The medium-priced brand was perceived to be marginally better than the lowest priced brand. There was a high correlation between ratings and preferred brands. According to McConnell, price without other cues, was an effective factor in determining how brands were perceived.

Stafford and Enis (1969) aimed to clarify further the product quality perception problem by extending research in this area to include an independent variable other than price.

The respondents were told that the samples were of similar colour, texture and weave but were from two different stores and were priced at two different levels. Thus the only objective differences among the four samples were the price/store data. All subjects received the four possible combinations of high-low price and high-low prestige carpet samples. They were asked to rate the quality of each on a five-point continuum from very high quality to very low quality.

The findings of the research suggested that product quality perception depends on multiple influences. The difference between mean quality

perceptions for high price and low price was greater than the difference in average perception for low prestige and high prestige stores. In both cases, use of the symbol 'high' before price and prestige resulted in higher mean quality ratings than did use of 'low'. According to the authors this indicated that a 'high' cue is perceived as relating directly to product quality.

Stafford and Enis summarized their findings by concluding that the most significant result of their research was that the experimental evidence tended to support the hypothesis that the judgment of quality by price can be confounded by non price information about the product. When respondents were given some knowledge about the store in which the product was purchased, in addition to price information, their perception of the product's quality was significantly added.

The research on the role of price on product evaluation continued with more attention being given to the product quality-price relationship. The following are examples of the researchers who devoted much attention to this phenomenon: Andrews and Valenzi (1970), Peterson (1970), Shapiro (1970, 1973), Roa (1971, 1972), Barker (1972), Monroe (1973), Pettinen (1976), Sproles (1977), Wheatley and Chiu (1977), Riesz (1978), Cox (1979), Sutton and Riesz (1979), Dardis and Geiser (1980), Geistfeld (1982), Leven and Johnson (1984), Yamada and Ackerman (1984), Curry (1985), Peterson and Wilson (1985), Monroe and Krishman (1985), Bodell et al (1986) and Curry and Riesz (1988). Price-brand name: Gardner (1974-1979), Jacoby et al (1971) and Dodds (1985). Price perception validity: Brown (1969), perception of price: Monroe (1971), price perception in relation to personality: Lambert (1972) Bettman (1973), price package design, brand familiarity and quality: Stokes (1985), price description: Kotzan and Brancher (1979), package size price: Granger and Billson (1972), price knowledge:

Goldman (1977), price-catalogue showroom: Sewall and Goldstein 1979, comparative price advertisements: Della Bitta et al (1981, used car prices: Snow-Barger and Dunkelberg (1970), price and risk: Hjorth-Anderson (1987).

However despite the large number of studies which addressed the price role in the product evaluation, in which the above are only examples of the diversity of issues investigated in this research, one can find that none of the studies were devoted in partially or entirely to investigate the price as it related to the source country of the product. Whenever the price of the product included in any of the country of origin studies, it was used only as a variable among other variables to evaluate the consumers' attitudes toward the quality of foreign products. It is often documented in most of the above studies, that consumers used the price of the product as an indicator of the product quality. However, the question of whether this situation is applied to the foreign products, has not been investigated yet. At the same time the relationship between price and risk has only been investigated in one study and for the overall risk only. The relationship between price and each of the risk components (ie. financial, performance, physical, social, convenience and psychological) is an issue which has not been studied neither for the domestic product, nor for the foreign product.

#### 3.4 RISK AND PRODUCT EVALUATION

Consumers must constantly make decisions regarding what products or services to buy and where to buy them. Because the outcome (or consequences) of such decisions are often uncertain, the consumers face some degree of risk in making a purchase decision (Schiffman and Kanuk 1983).

The theory of perceived risk was first studied by psychologists who were interested in the risk taking behaviour of the individuals. Their

main concern was related to the motivational determinant of risk taking behaviour (Atkinson 1957).

#### 3.4.1 RISK AND CONSUMER BEHAVIOUR

In regard of the consumer behaviour discipline the application of the perceived risk theory was first introduced by Bauer (1960) who investigated the impact of risk in the consumer behaviour. According to Bauer, consumer behaviour involved risk in the sense that any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty and some of which at least were likely to be unpleasant. Bauer suggested that the perceived risk concept could be used to help explain some other phenomena such as the brand loyalty, added value, personal influence, prepurchase deliberation, opinion leaders and reference groups.

Bauer suggested some devices for reducing risk such as reliance on some outside source for guidance, whether that outside source be the reputation of the manufacturer of the product, an opinion leader or a reference group and an additional mechanism of reducing perceived risk, namely to suppress the possible consequences from consciousness and rush through the process rapidly.

Bauer noted that he meant 'perceived risk' whenever he referred to risk reduction. This was because the individual can respond to and deal with risk only as they perceive it subjectively.

According to Cox (1967) the amount of perceived risk is a function of:

1. Amount that would be lost (amount at stake) if the consequences of the act were not favourable, which was a function of importance or magnitude of the goals to be attained, the seriousness of the penalties that might be imposed for non attainment of the goals and amount of means committed to achieving the goals.

2. Individuals' subjective feeling of certainty that the consequences will be unfavourable.

Cox suggested that risk can be reduced to a tolerable level by either or both:

1. Reducing the amount at stake which can be achieved by reducing that which the person hoped to gain, reducing the penalties for failure, and reducing the means by which the gains were to be made.
2. Increasing the degree of certainty that loss will not occur; that is, becoming more certain that action consequences would be favourable.

Cox concluded that consumers develop special styles for handling risk and these would be a function of the person's personality, cognitive needs and style, and the degree of buying maturity and experience.

According to Cunningham, (1967) the users of a product who were high in perceived risk would reduce risk through conversation and thus a greater proportion of the high risk perceivers would be classified as talkers.

Cunningham found that for the three product categories studied, each has a unique pattern of danger or losses perceived, and that consumers could be reasonably specific about the dangers involved.

The results of the data analysis indicated that the fabric softeners and the headache remedies supported his hypothesis regarding the high risk perceivers (talkers) but not for the dry spaghetti. Regarding the direction of flow of word of mouth as a function of perceived risk, there were product differences. In the case of headache remedies, high risk perceivers were more likely to have initiated their last conversation about the product than low risk perceivers. The relationship was in the opposite direction in regard of the fabric softener. Those higher in perceived risk for fabric softener and dry spaghetti were more likely to have requested

information than those lower in perceived risk and were more likely to claim that they had made a recommendation in their last conversation.

Arndt (1967) attempted to measure key properties of the word of mouth process and to relate these properties to acceptance of a new brand of coffee.

High perceived risk was associated with a high degree of brand loyalties which were negatively related to acceptance of the product. There appeared to be a flow of information from those low in perceived risk to the high risk perceivers. The high risk perceivers were more affected by both favourable and unfavourable word of mouth comments.

The researcher concluded that the degree of sociometric integration and the generalized self confidence had been shown to be positively related to exposure to word of mouth. Generalized self confidence, perceived risk, and information content were found to be related to the impact of word of mouth.

Following Arndt's research in regard of word of mouth and risk perception, several other studies supported his findings. For example Sheth and Venkatesan (1968) found that the experimentally created high-risk group sought personal sources of information significantly more than did the low-risk group.

Perry and Ham (1969) found that the higher the risk involved in a particular purchase decision, the greater the importance of personal influence. The same conclusion was reached by Lutz and Reilly (1973).

According to Ross (1974) the research on perceived risk, word of mouth and opinion leadership would seem to support the generalization that word-of-mouth function is an important risk reliever across most or all types of risks.



Perceived risk has been studied in relation to a variety of issues such as: risk acceptance and the willingness to buy new products (Popielarz 1967), risk reduction methods (Sheth and Vekatesan 1968, Roselius 1971, Deering and Jacoby 1972, Toh and Heeren 1982), perceived risk in mail order (Spence et al 1970), perceived risk and store choice (Dash et al 1976), perceived risk, brand and store reputation (Taylor and Roa 1982), risk in buying by mail (Festervad 1986), perceived risk and retail patronage mode (Haws and Lumpkin 1986), perceived risk in new product trial by elderly consumers (Schiffman 1972), informed group influence on risk taking (Woodside 1972), risk and information acquisition (Lutz and Reilly 1973), perceived risk and the amount of information and time needed to make the purchase decision (Ring et al 1980), risk and search for information (Garner and Garner 1985), perceived risk components (Jacoby and Kaplan 1973, Bettman 1973, Woodside 1974), risk and personality (Maziz and Sweeny 1973, Schaninger 1976), the multi-dimensionality of risk (Zikmund 1973), risk and consumer behaviour (Taylor 1974) the role of perceived risk in consumer services (Guseman 1977) warranty and perceived risk (Shimp and Bearden 1982) perceived risk at the brand level (Peter and Ryan 1976) type and level of risk associated with the purchase of the product (Prasad 1975) perceived risk in the purchase of automobiles (Jackson 1977) perceived risk in generically prescribed drugs (Bearden and Masson 1978) risk and demand levels (Dunn 1982) perceived risk and product origin (Hampton 1977, Baumgartner and Jolibert 1977, Cline 1979, Nes 1981, Tolbert 1985) perceived risk and brand loyalty, cross national study (Hoover et al 1978).

It is not the intention of the research under discussion to review all of the above studies, the only studies that will be reviewed here are those related to the perceived risk and product origin.

### 3.4.2 PERCEIVED RISK AND COUNTRY OF ORIGIN

Despite the increased number of studies devoted to investigate the impact of perceived risk in consumer behaviour, only a few studies concentrate on the impact of country of origin on the consumers' risk perception. Among these studies was the study by Hoover et al (1978) which was designed to investigate the difference between the consumers of two countries in regard of risk perceptions (Figure 3.5 presents the classification of the perceived risk cue-country of origin).

#### 3.4.2.1 Perceived Risk - Country of Origin Research Addressed toward the Final Consumer in Developed Countries

Baumgartner and Jolibert (1977) and Nes (1981) investigated the final consumer perception of risk as it related to the source country within the developed countries' market. (Figure 3.5)

Baumgartner and Jolibert (1977) studied the perception of foreign products in France. They used the theory of perceived risk to investigate the foreign product perception. Four product classes representing various components of risk were used in the study. Those products were : playing cards, life insurance, cough syrup and winter coat.

In addition to France, which was included as a control and as a basis of comparison, the foreign origins retained for study were American, English and German.

The results of the study indicated that the French consumers prefer French products to foreign products.

The researchers conclude that the results indicated that the theory of risk perception provided an interesting insight on the judgment of foreign products.

Nes (1981) attempted to investigate the country of origin cue and its impact on product evaluations of manufactured consumer goods. The study



examined the country of manufacture as a cue to perceived product risk and perceived product quality.

Eight products were used in the study and they were classified into two groups called: low risk products and high risk products. Three brand categories were used: no brand name, a new brand name which was unknown to the respondents and a well known brand name. Four country of origin categories were used: no country information available, made in a very poor nation, made in a medium income nation and made in an industrialized nation.

The findings of the research indicated that the well known brand names were perceived as having lower risk and higher quality than the two other brand name categories. The products with no brand name provided were perceived as slightly more risky than products with a new unknown brand name. The difference was not significant however. The analysis of the country and brand name factors for both the low-risk product class and the high risk product class revealed significant brand-country interactions for the low-risk product category. It was found that the categories low-income and medium-income nation gave higher risk scores for all models than the categories high-income and nation not available. Finally, it was found that all three factors (country, brand and risk class) were significant, while none of the interactions were significant.

#### 3.4.2.2 Perceived Risk - Country of Origin Research Addressed Toward the Industrial Buyer in Developed Countries

Hampton (1977) and Tolbert (1985) investigated the American industrial buyers' perceptions of the foreign products.

Hampton (1977) investigated the perceived risk in buying products made abroad by American firms.

Nine countries were selected for use in the study representing various level of risk. High risk countries include: Algeria, Pakistan and Turkey.

Moderate risk countries include: Philippines, Hong Kong and Brazil and finally low risk countries include: Canada, Japan and West Germany.

The findings of the research indicated that consumers' perceived more risk in the act of buying products made abroad by U.S. firms than in buying products made in the U.S.A. While these findings apply to all products and countries as a whole, a closer examination of the data revealed that there were seven products (hand calculator, colour TV, ladies blouse, instant coffee, tennis balls, child's play dress and toothpaste), manufactured in five countries (Hong Kong, Japan, West Germany, Brazil and Canada), that were judged to be lower in perceived risk than the same products manufactured in the U.S.

The results also indicated that differences in perceived risk expressed by consumers for products made abroad and in the U.S., vary significantly on the basis of product and country.

Tolbert (1985) investigated retail buyers' perceptions of quality, purchasing risk and handled risk associated with imported vs. domestic apparel.

The results of the study indicated that no significant differences were found among retail buyer types of the risk/quality dimensions. Significant differences were found among retail buyer types of the buy American Campaign after adjusting for the effects of the demographic variables. Salary had a significant effect on the potential promotion factor and age had a significant effect on the active promotions factor. Salary was inversely related to both buy American Campaign factors. High salary earners were less likely to be promoting or begin promoting buy American than low salary earners. Age has a direct relationship to both buy American Campaign factors. Older buyers were more likely to be promoting or to begin promoting buy American than younger buyers.

Of the reasons for purchasing imported apparel, two reasons were found to be significantly differentiated among retail buyer types: (1) higher mark-ups can be taken on imported merchandise and (2) exclusive merchandise/private branding. Discount stores buyers indicated the greatest agreement with the higher mark-up potential reason for purchasing imports, closely followed by department store buyers, and then speciality store buyers.

Tolbert's findings indicated that speciality store buyers had the highest level of agreement with buying the greatest proportion of national brands, buying fewer imports as compared to the previous year, buying imported apparel through the wholesaler and perceiving quality control for imports being as good or better than for U.S. made apparel. Discount store buyers were buying more imported apparel in the research year over the previous year, utilized wholesalers more, and were not heavy importers of nationally branded merchandise. Discount stores buyers indicated that consumers do not frequently ask for American products, they were the least likely to put imports on sale earlier than U.S. made apparel, and very likely to take higher mark-ups on imported apparel.

Department store buyers had the highest level of agreement with absorbing the losses (if something was wrong with imported merchandise) because they felt it was very expensive to return and taking higher mark-ups on imported apparel.

Tolbert concluded that the most important reasons among retail buyers for purchasing imported apparel were 'foreign products are better quality for the price'. 'Higher mark-ups could be taken on imported merchandise' was the second most important and the third reason was exclusive merchandise/private branding.

Cline (1979) in an article titled 'Imports and consumer prices: a survey analysis' suggested that higher product risk was associated with purchasing abroad because of no return options, additional travel, research costs and the uncertainty of product quality. Retailers may try to alleviate some of this risk in different ways. According to Cline one risk coping mechanism may be taking higher mark-ups on imports vs. domestic goods. In addition, retailers may practice different merchandising strategies for imported as compared to domestically made goods. Retailers may mark imports down quicker at the end of seasons, take larger mark down on imported vs. domestically made merchandise, or offer a wide unique merchandise selection of both domestic and imported merchandise.

#### 3.4.2.3 Perceived Risk Research Investigating the Differences between the Consumers of Two Countries in Regard of the Importance of Perceived Risk Concept in the Purchase Decision

Hoover et al (1978) investigated the international applicability of the concept of perceived risk, and the relationship between perceived risk and brand loyalty, in order to provide some indication of the extent to which this relationship can be assumed to exist by international marketers. In order to determine whether the concept of perceived risk was applicable outside of the U.S., the authors conducted a cross-national study in Mexico and the U.S.

Three consumer products were chosen for the study: bathsoap, toothpaste and instant coffee. These products were selected because they were purchased on a relatively frequent basis, and it was established that approximately the same number of brands of each product were available to both U.S. and Mexican consumers.

Samples of upper-middle and upper class females were selected from Houston, Texas and Monterrey, Mexico.

The findings of the research indicated that in all three cases - bath soap, toothpaste and instant coffee - significant differences were found to exist between the two samples. The pattern of response was consistent: in each case the Mexican sample indicated lower levels of perceived risk than the U.S. sample.

In regard of brand loyalty the findings indicated significant differences in the Mexican and U.S. samples brand loyalty scores for the three products. The Mexican sample had a higher mean brand loyalty for all three products. The Hoover et al results also indicated that there were differences in the perceived risk/brand loyalty relationship between the Mexican and U.S. samples for two of the three products - bath soap, and instant coffee but not for toothpaste. For all of the products the U.S. sample exhibited a strong though nonlinear positive relationship between perceived risk and brand loyalty. For the Mexican sample, however, the results showed a weak relationship for bath soap and instant coffee. Only toothpaste showed a notable positive relationship for the Mexican sample.

The researchers concluded that the findings of their study illustrated how marketers may have to question some of their assumptions about consumer behaviour when they venture outside of the United States. The differences - between American and Mexican consumers - were clear, and one can logically conclude that other ideas about consumer behaviour basic to marketing management could exhibit similar differences when applied internationally.

#### 3.4.2.4 Limitations of the Perceived Risk - Country of Origin Research

1. Among the several studies which investigated the concept of perceived risk in relation with various aspects of consumer behaviour, only five of them were found to be related to the relationship between perceived risk and the product source country. All of these studies were



conducted in developed countries, except the Hoover et al (1978) study which compared the American and Mexican consumers' perceptions of risk. In fact, Hoover and Associates did not address the perceived risk of foreign products in the two countries, their main concern related to the relationship between perceived risk and brand loyalty, in two different cultures (U.S.A. and Mexico). However, the findings of this study was of great importance, because it showed that significant differences were existing between the consumers of the two countries in regard of the level of perceived risk for each of the three products investigated.

In such a situation it is apparent that one should be very cautious in applying the results of the perceived risk-country of origin conducted in developed countries, to the consumers of developing countries. The lack of any research in respect of perceived risk-country of origin in developing countries is strongly constraining the knowledge in this field.

2. In most of these studies, perceived risk was treated as a single factor. No attempts were made to investigate the components of risk (ie. financial social, ...). The only two exceptions were Baumgartner and Jolibert (1978) in regard of the French consumers and Nes (1981) in regard of the American consumers. However, only four types of risk (financial, performance, physical and psychological risks) were used in the Baumgartner and Jolibert study. In both studies, no attempts were made to investigate the relationship between risk and quality, risk and price, quality and price as it related to the country of origin impact in product evaluation.

3. All of the previous studies were administered on samples limited to one geographic location, a city or a town of a specific country. This may suggest the limitations of the findings and generalizations to these locations, rather than to the entire country.

### 3.5 A COMPARISON BETWEEN THE PREVIOUS RESEARCH AND THE PRESENT STUDY

The main concern of this study and all of the previous studies is similar, this is, they all deal with the impact of country of origin on product evaluation. However, there are certain aspects which made this study unique among the various studies mentioned above. According to the classification of the previous research, it was found that the research reviewed was either directed toward the final consumer, the industrial consumer or both.

Since this study is directed toward the final consumers who are different in their needs and wants from the industrial consumer, this makes the industrial consumer research of little relevance to this study. Thus, the present study should be compared with the final consumer research. This type of research either used students or ordinary consumers as respondents. Since the use of students can limit the generalization of this research to the general public of consumers, and the use of ordinary consumers as respondents in the study under discussion, this excluded this type of research from being comparable to the present study.

The other part of the final consumer research is that which used ordinary consumers as respondents or that which used both students and ordinary consumers. The latter type of research can be eliminated as being irrelevant on the same basis that was used to eliminate the use of students as surrogates for the general consuming public. The more relevant research that could be compared with the present study is that

using ordinary consumers as respondents. This type of research can be classified according to the test country stage of development as: research conducted within developed countries and research conducted within developing countries. The differences between the consumers of the two categories (developed and developing) is well documented. In Kaynak's (1984) words 'there seems to be some doubt whether research methods elaborated in highly industrialized countries are suitable (in LDC) because of educational and socio-cultural differences'. A relatively similar argument was raised by Dickensheets (1963) who indicated that it was quite different to use existing information gathered from western culture and to try to adapt this to less developing countries for purposes of secondary analysis. With regard to the differences between the consumers of developed and developing countries as it related to the source country impact on product evaluation, the differences were also documented. Krishnakumar (1974) found significant differences between the American and Indian consumers' attitudes toward foreign and domestic products. Hoover et al (1978) found that the American and Mexican consumers had significant differences in regard of their perception of risk.

Thus the actual comparison should be between this study and the relevant studies conducted within developing countries. It was found that there were only three studies conducted in developing countries, in regard of the consumers' attitudes toward foreign products. Those studies were: Schooler (1965), Krishnakumar (1974) and Al-Hammad (1988). Schooler's study used college students as respondents, Krishnakumar's study used students and final consumers of developing countries residing in the U.S., and Al-Hammad's study used a convenience sample of male respondents only. On the sampling basis and the sample representativeness, these studies can be

excluded from being comparable with the present study which used a random sampling method of all the urban population in the main cities (in Jordan).

Furthermore, this study has a unique dimension which distinguished it from the rest of the previous research, whether it had been conducted in developed or developing countries. That is the incorporation of the three major cues, (quality, price and risk) in investigating the consumers' perception of domestic and foreign products, and the investigation of the inter-relationship among these three cues. According to the best of the researchers' knowledge, this had not been done in any of the previous research. Another main dimension of this study, is its attempt to develop a conceptual framework of the quality, price and risk, together with the consumers' demographic and personal cues, in addition to the source country cues.

### 3.6 CONCLUDING REMARKS IN REGARD OF THE PREVIOUS LITERATURE

The aim of this concluding section is to summarize the main limitations and the general findings of the previous research.

#### 3.6.1 GENERAL LIMITATIONS OF THE PREVIOUS RESEARCH

The investigation of the previous studies referred to earlier indicated that they have several limitations in regard of test country, participating countries, sampling, selection of products, validity and reliability, conceptual model (framework), and product cues.

##### 1 - TEST COUNTRY BIAS

In more than 90% of the studies, the test country was a developed country. The U.S.A. or U.S.A. with another country was used in more than 75% of the studies. This confirmed Hoover and Associates (1978) statements that 'for most, the part international marketer must rely on knowledge of

consumer behaviour, which has been developed within the United States'. It is confirmed in the consumer behaviour literature that consumers are not homogenous even in the same country. According to Nagashima (1970) people from different countries may have 'made in' images which are different. 'Made in' images are affected by many factors, including national characteristics, political and economic background, history and traditions.

In the few studies in which the test country was a developing country (less than 10%) the studies suffered from strong limitations; such as using college students in Schooler's (1965) study, students and adults of India and Taiwan residing in the U.S.A. in Krishnakumar's (1974) study and male respondents in Al-Hammad's 1988 study. On the other hand they may not be addressed toward the final consumers as was the case in Yaprak's (1978) study about the Turkish and American businessmen and Khanna (1986) in regard of the Indian chief executives and managers.

## 2 - PARTICIPATING COUNTRIES

The participating countries were, in most cases, capitalistic developed or developing countries. In less than 15% of the studies a product from Russia and the rest of socialist countries was used in the investigation. In these few studies, the consumers' resistance to the products of the eastern countries block was reported (example Chasin and Jaffe 1979). This phenomenon is worth more investigation in a more neutral environment.

## 3 - SAMPLING LIMITATIONS

In more than 70% of the previous studies which addressed the final consumer, the respondents, were either students or selected on a non-random basis. This is strictly limiting the generalization of the findings in such studies.

None of the previous studies which investigated the consumers of the developing countries used a random sampling method. This may be due to the difficulties of establishing a sampling frame in developing countries (see for example Douglas and Craig 1983).

#### 4 - VALIDITY AND RELIABILITY

No attempt has been made in most of the previous studies in regard of the source country impact on product evaluation to test or report the validity and reliability of the data and the results of the research (Bilkey and Nes 1982). The only three studies that referred to the validity and reliability of their research were Diplom-Kaufman (1988), Al-Hammad (1988) and Nes (1981). Diplom-Kaufman reported the reliability of the scale of measurement, but nothing about the more important issue, that is, the validity of the research. Al-Hammad explained the concepts of the validity and reliability, but reported nothing about testing it. He stated that 'the process of editing and checking was conducted to ensure maximum reliability and validity of the data gathered'. Nes (1981) was the only study which reported enough information about the validity and reliability concepts as it related to his dissertation.

#### 5 - CONCEPTUAL FRAMEWORK

No attempt was made in all of the previous studies (except Diplom-Kaufman (1988), Nes (1981) and Tolbert (1985)) to conceptualize a framework which integrates the country cue on the product quality evaluation. Diplom-Kaufman's model related to the quality cue only. Nes and Tolbert's models related to the risk cue.

#### 6 - PRODUCT CUE BIAS

The focus of most of the previous research was on the product quality. Only in few cases, was the product risk used. In none of these studies, was the foreign country product price used as an independent variable,

except when it was used as a quality variable. Only in Nes's (1981) study, the product risk was used in combination with quality. In no study were the three cues (quality, price and risk) used together.

It is the aim of this research to overcome the preceding limitations of the previous research and to improve the understanding of the country of origin impact on product evaluation.

### 3.6.2 GENERAL FINDINGS

Despite the limitations of the existing literature discussed, the following general findings can be observed:

- 1) Products made in highly developed countries were not evaluated equally. This was true for products in general (Anderson and Cunningham 1972, White 1979), product class (Nagashima 1970, 1977) and specific products (Tongberg 1972).
- 2) A positive correlation existed between a country's degree of economic development and the evaluation of its products (Schooler 1971).
- 3) The perceived similarity between the test country and the source countries beliefs, cultural and political system appeared to influence the magnitude of bias (Tongberg 1972, Bannister and Saunders 1978).
- 4) The perception/attitudes of the respondents of various countries toward the product of the specific country varied according to their nationality (Krishnakumar 1974, Yaprak 1978).
- 5) The direction and intensity of the bias against the foreign product was not on the same level nor in the same direction. While the domestic product of developed countries was perceived to have a more favourable image than the foreign product (Lillis and Narayana 1974), the intensity of bias was stronger against the developing countries product (Gaedek 1973). On the other hand, the consumers of the

developing countries have more positive attitudes towards the products of the developed countries even more than their own country product (Khanna 1986).

- 5) Certain relationships existed between the consumers demographic variables and their evaluation of the foreign product. Age was found to be relevant in some studies, in that older people tended to have more positive attitudes toward foreign products than younger people (Tongberg 1972). Also sex was found to have some impact in that female respondents gave higher ratings to the foreign products than males (Heslop and wall 1985). In regard of education it was found that people with more education tended to rate foreign products more highly than did people with limited education (Dornoff et all 1974). It was also found that the higher the income of the respondents, the better their evaluation of the foreign product origin (Al-Hammad 1988).
- 7) Variations seem also to influence significantly the country of origin biases. An inverse relationship was found between the level of dogmatism and preference of foreign products and the level of conservatism and attitude toward foreign products (Anderson and Cunningham 1972).
- 8) There were significant differences between general country attitudes and specific product attitudes of a given country (Etzel and Walker 1974, Nagashima 1970, 1977). This indicated that attitudes toward products of a specified nation vary by the specific product, or product class evaluated.
- 9) Promotion of products could improve the attitude toward a foreign made product when a favourable national reference group rating was given in the form of a consumer test and/or if prejudice was not too stong (Schooler and Dunn 1968, and Reiersen 1967).



After this revision of the related literature and the summary of the main limitations, and the general findings, the research framework in the next chapter (Chapter Four) will be discussed.

## CHAPTER FOUR

### THE RESEARCH FRAMEWORK

- 4.1 Introduction
- 4.2 The Comprehensive Models
  - 4.2.1 The Decision Process Model or the Problem Solving Model
  - 4.2.2 The Howard Model
  - 4.2.3 The Howard-Sheth Model
  - 4.2.4 The Engel, Blackwell and Kollat Model
  - 4.2.5 The Andreason Model
  - 4.2.6 The Nicosia Model
  - 4.2.7 The Howard-Ostlund Model
- 4.3 Quality, Price and Risk Models
  - 4.3.1 A Framework of Cue Impact on Perceived Purchasing Risk and Handled Risk
  - 4.3.2 Model of Possible Price Effects
  - 4.3.3 A Model of the Cognitive Process of Quality Perception
  - 4.3.4 The Price Reliance Model
  - 4.3.5 The Means End Model Relating Price, Quality and Value
- 4.4 The Country Cue Models
  - 4.4.1 An Integrated Model of the Country Cue and Perceived Risk
  - 4.4.2 Foreign Product Attitude Model of Stimuli-Response
- 4.5 The Research Framework
- 4.6 Summary of the Chapter

#### 4.1 INTRODUCTION

The consumer decision process has been one of the major concerns of the researchers in the fields of psychology and marketing. According to Sternthal and Craig (1982), the approach to understanding the processes involved in decision making is based on human information processing theory. This theory interprets consumers' choices as a function of three processes that occur in memory: information acquisition, information organization and information utilization.

Consumer behaviour theory has accepted the basic premise of psychology that a person is motivated by basic internal needs that cause a person to act in certain ways (Howard 1983). Markin (1974) explained that the theories of consumer behaviour fall into two classes: the simple economic theory of consumption and the self-actualizing theory. The economic theory stressed that consumption is a function of income and the individuals goal-striving. The self-actualizing behaviour theory emphasised that consumption or consumer behaviour is a part of individuals goal-striving or self-actualizing behaviour.

"A wide variety of theories have been offered to explain consumers' behaviour. Some theories account for consumers' behaviour in terms of risk reduction, others in terms of utility maximization and still others in terms of achieving consistency" (Sternthal and Craig 1983).

Hawkins et al (1983) indicate that consumers make purchase decisions that enhance their present or desired lifestyles. Marketers are interested in influencing consumers to purchase their particular product or brand and to do this, they must have to understand the decision process that consumers go through. Many models have been developed to explain the consumer decision process. Mostly those models are comprehensive models or frameworks, designed by their creators for the purpose of enabling them

to think more rationally about the consumer behaviour process, to convey information and to observe and hypothesise about the structure and function of consumer decision processes (Markin 1974). The discussion of these models is detailed in the consumer behaviour tests (examples Markin 1974, Sternthal and Craig 1982, Hawkins et al 1983, Walters 1978, Williams 1982, Engel, Blackwell and Miniard 1986 and Schiffman and Kanuk 1983) and will not be repeated here. However, some of the most common comprehensive models, and some of the more specific models, will be briefly reviewed. The purpose of this revision is to find out if any of these models can be used to help in understanding the research problem and if not do use the main concepts of these models to develop the research framework.

## 4.2 THE COMPREHENSIVE MODELS

### 4.2.1 THE DECISION PROCESSES MODEL OR THE PROBLEM SOLVING MODEL

The major assumption behind this model is the idea that consumer behaviour and consumption is a problem solving process (Howard 1983). A day rarely passes in which a consumer does not recognize a consumption problem (Hawkins et al 1983).

The first step in the model (figure 4.1) is the problem recognition which exist as the result of the discrepancy between the desired state and the existing state that was sufficient to arouse and activate the decision process. After the problem has been recognized the second step is to be defined. The definition of the problem will facilitate the search for adequate information to solve the problem, if it was found to be sufficiently important, or otherwise, to discard and return to memory for future solutions. Naturally not all the consumers problems are strong enough to motivate the consumers to engage in information search, because, by definition any discrepancy between the desired state and the existing

FIGURE 4.1

THE PROBLEM SOLVING MODEL

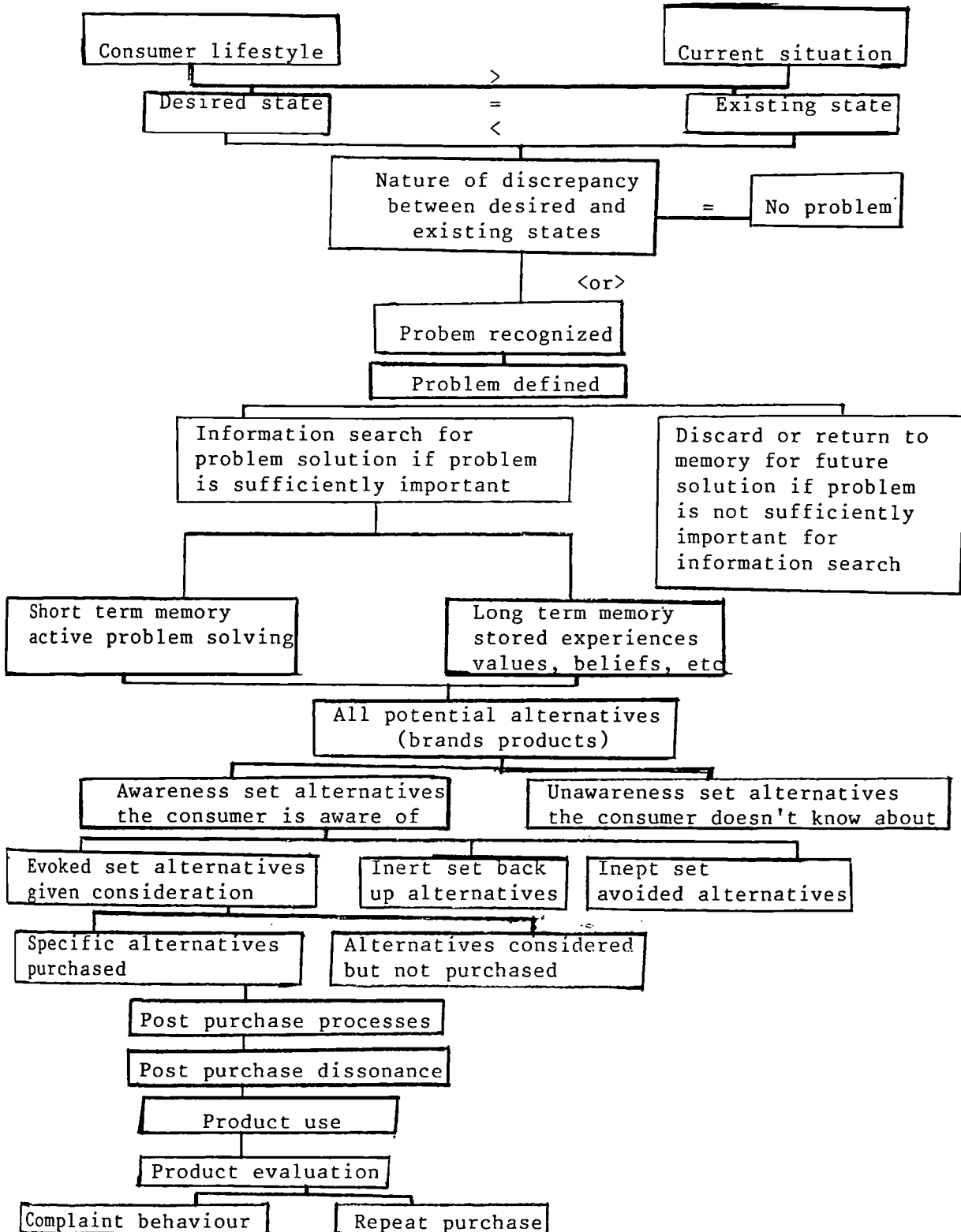


Figure 4.1 Decision Making Process. "Consumer Behaviour, Implications to Marketing Strategy", Business Publications, Inc. Plano, Texas, adapted from Del J Hawkins, Roger J. Best and Kenneth A. Coney (1983)

state is a problem. However, consumers may not have either the time or the money or both to achieve the balance between the existing and desired states.

Once the problem is defined and found to be worth the search for information, the relevant information from the short term memory and long term memory will be used to determine if a satisfactory solution is known. If the memory does not have enough information to solve the problem, then external searching will be justified. External information may be acquired from the opinions and attitudes of friends, neighbours and relatives, professional information provided by pamphlets, articles, books, direct experience with the product through inspection or trial and from marketer-generated information presented in advertisements and displays.

The consumer decision requires information on the appropriate evaluative criteria for the solution of a problem (ie the product characteristics, the existence of the entire alternative solutions, and the performance level or characteristics of each alternative solution on each evaluative criteria).

Depending on the importance of the problem the consumer will use the awareness set and the unawareness set to consider all of the potential alternatives. All what the consumer knows about the potential alternatives is known as an awareness set; the consumer may decide to drop some of the alternatives in the initial investigation and will only investigate a limited number of the available alternatives, this is known as the evoked set. The brands or products which are found to be unworthy of investigation called the inept set. Information about these brands or products is not likely to be processed even if it is readily available. The inert set refer to the brands/products where the consumer may be aware of them, but is indifferent toward them. Positive information about these

brands/products will be generally accepted by the consumers.

Finally the consumer will come to the final stage in the decision process with one of three possibilities to purchase a certain brand/product and ignore the rest of the alternatives, to postpone the decision or to abandon the purchase. If the consumer decides to take one of the last two alternatives, then the process will stop there and the consumer will start from the top again. If the first choice was the decision, then the post purchase process will start which includes the possibility of post purchase dissonance, product usage and evaluation and to be ended either by complaint/dissatisfaction or repeat purchase which mostly indicate satisfaction.

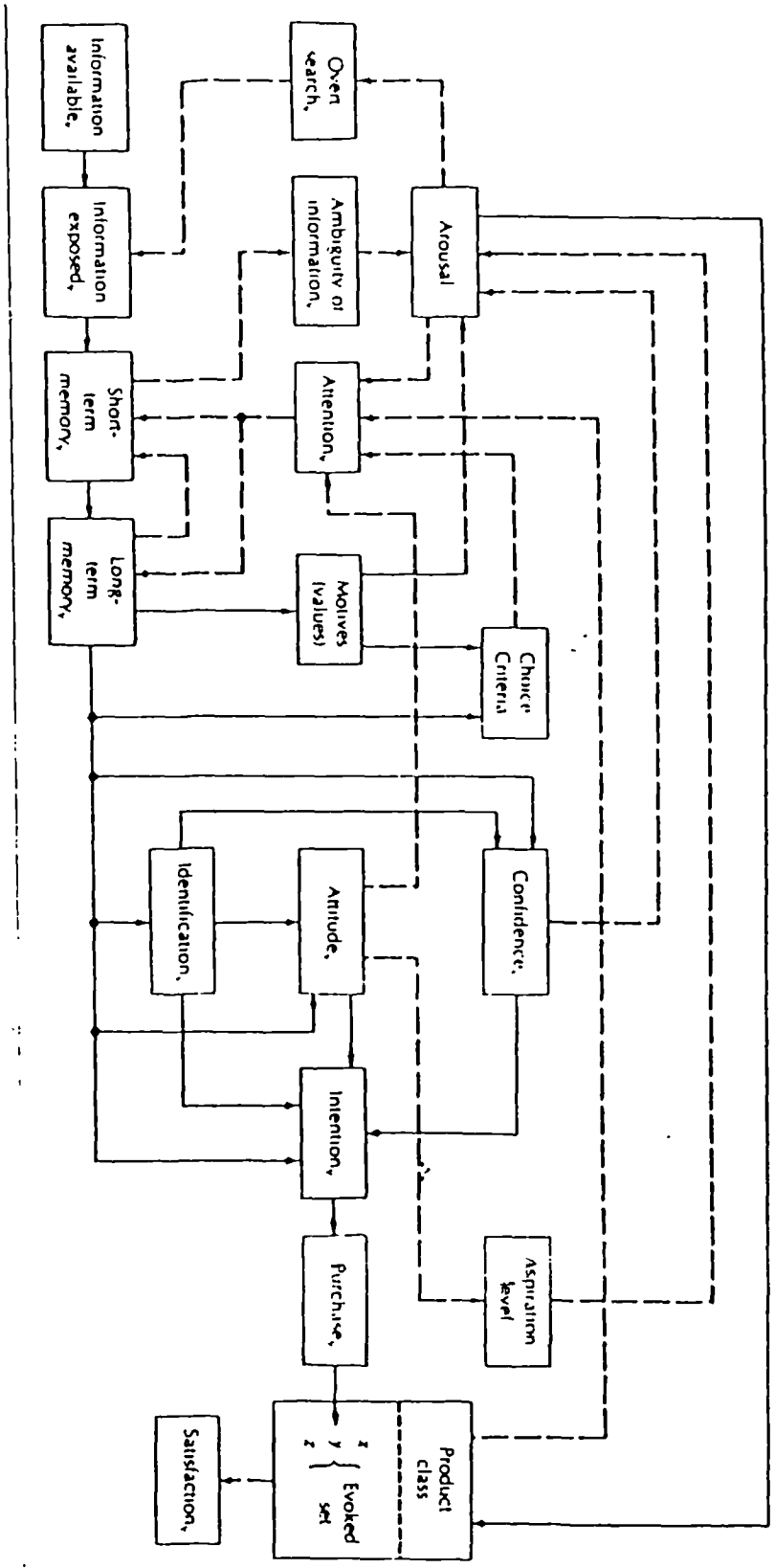
Recognizing the fact that consumption is one form of problem solving behaviour, this model provided a basic understanding to the consumer decision process and facilitated the understanding of more complex models such as the Howard model, the Howard-Sheth model, the Engel, Blackwell and Kollat model, the Nicosia model, Howard-Ostlund model and the Anderson model. However, it was found that the problem solving model is not completely appropriate to investigate the research problems. This is because it does not take into account the main factors/process that should be considered in evaluating the product origin.

#### 4.2.2 THE HOWARD MODEL

This model was been developed in 1963 by John Howard (figure 4.2). The model is the first integrated model of consumer behaviour and it helped to bridge the gap between psychological theories and their application to the consumer behaviour problems (Howard 1983).

The Howard model incorporated the basic structure of the decision process model (problem recognition - search - alternative evaluation -

FIGURE 4.2  
THE HOWARD MODEL



Source: Howard, John A. (1977)  
Consumer Behaviour : Application of Theory, p.138, McGraw Hill, Inc.



choice - outcomes) with the effects of information, attitudes and consumer confidence on the determination of the actual purchase behaviour of the consumer.

While this model can be useful in understanding the factors affecting the consumer decision making, it might not be very helpful in explaining the research problem under investigation because it does not incorporate the cross cultural situation in the model.

#### 4.2.3 THE HOWARD-SHETH MODEL

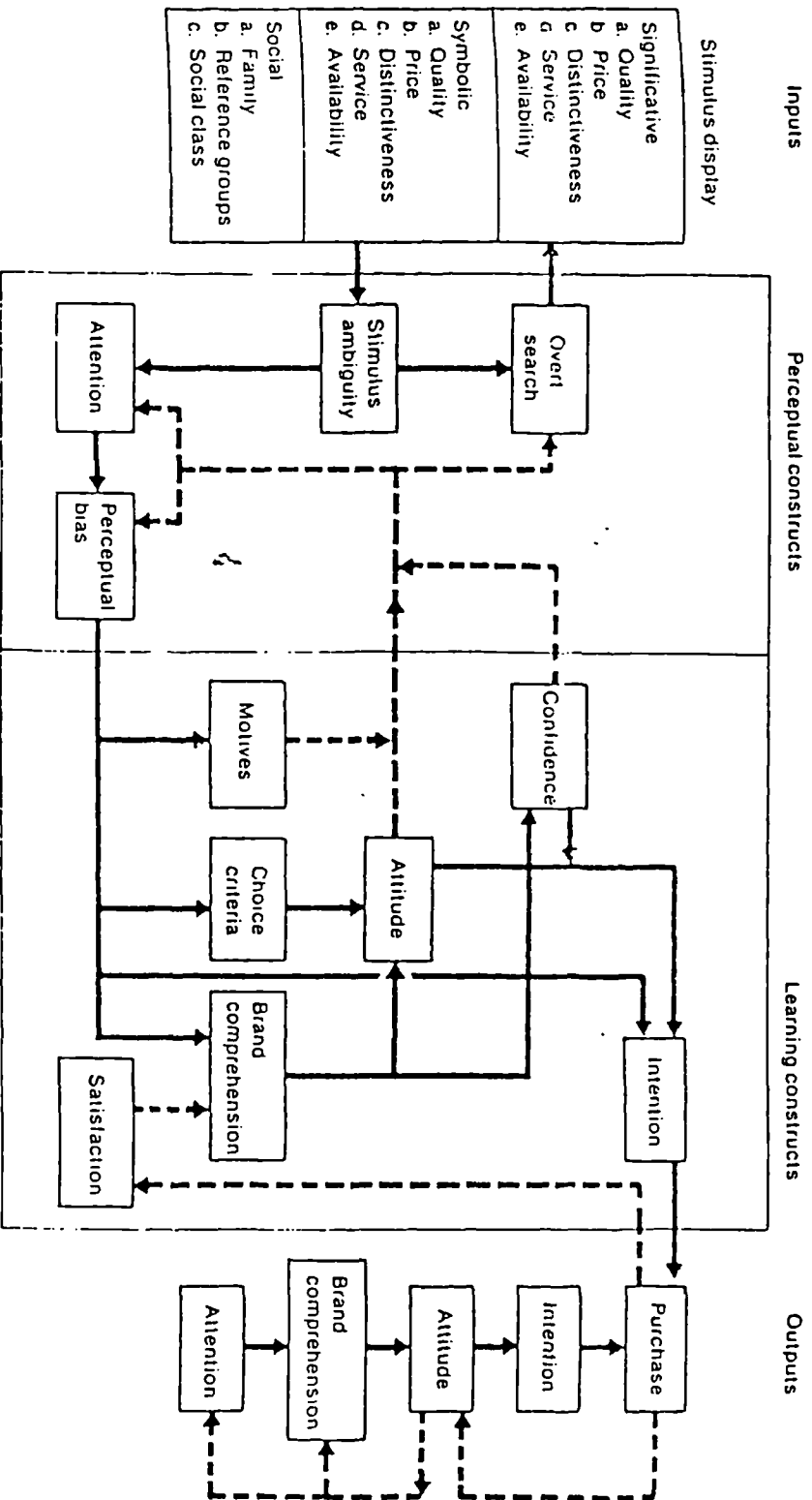
This model was developed in the 1960's by John Howard and Jagdish Sheth (figure 4.3). The Howard-Sheth model basically consists of four sets of abstractions which are called constructs. These constructs are inputs, perceptual, learning, and outputs. The inputs constructs are divided into three main sets of variables which are called significative, symbolic and social. Each of these sets are subdivided into another set of variables. The perceptual constructs are subdivided to overt search, stimulus ambiguity and attention. The learning constructs are: motives, brand comprehension, attitude, intention and purchase.

The Howard-sheth model can be used in relating the theory of consumer behaviour to the real world daily problems facing the consumers. It explains that consumers have in general a set of motives in one hand and another set of alternatives in the other hand and they need to match a specific motive with a specific alternative to come to the final decision.

The main deficiency of the Howard-Sheth model is related to its inability to specify how independent variables interact with dependent ones and what nature of the interaction process is (Markin 1974).

Although this model has incorporated the quality and price as subvariables of the inputs construct, it cannot be used in this research

FIGURE 4.3  
THE HOWARD-SHETH MODEL



Source: Howard, John A, and Jagdish, Sheth N. (1969)  
The Theory of Buyer Behaviour, p.30 (New York: John Wiley & Sons)

because it does not take the product risk as a variable as well as the origin of the product.

#### 4.2.4 THE ENGEL, BLACKWELL AND KOLLAT MODEL (EBK)

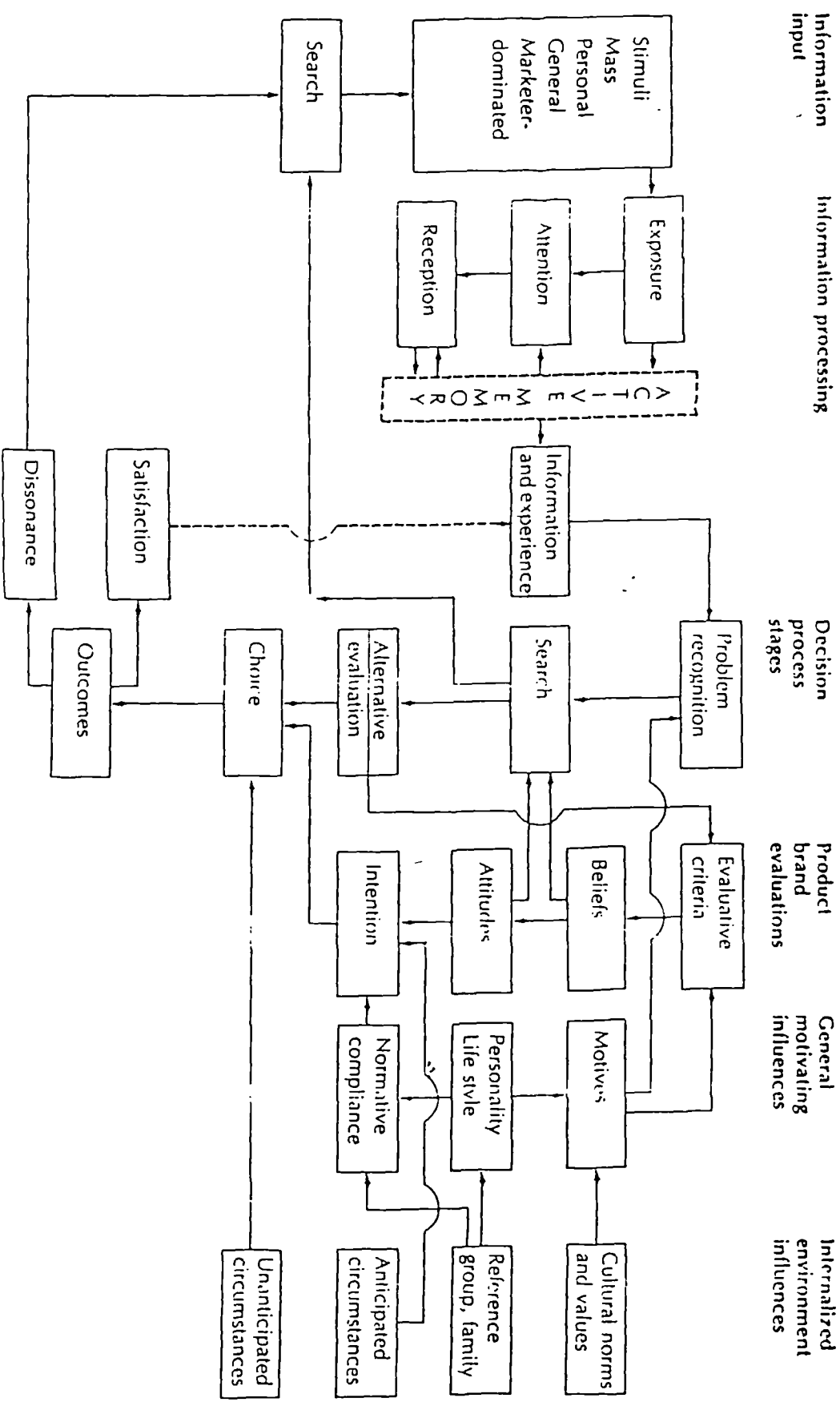
This model integrates the decision process model, psychological theories related to individuals motivations and actions, and the information processing model (figure 4.4).

According to the decision process model, the problem must be recognized then defined by the consumer. After that the search for possible solutions will start, to be ended, by the list of all the available solutions. Since the consumer is interested in the best solution according to a pre-specified criteria, then the evaluation of all possible solutions will take place according to these criteria. Using all the available information, from short and long term memory and perhaps external information the consumer will choose one of the alternatives available and reject temporarily or permanently the rest of the alternatives. Finally, the alternative chosen leads to an outcome which is judged by the consumer to be either satisfactory, which leads to solve the problem or unsatisfactory which fails to solve the problem and the consumer will start again the search for a satisfactory solution.

The EBK model consists of seven major categories. These are information arousal, information processing, decision process stages, product, brand evaluations, general motivating influences and internalized environmental influences. Each of these main categories has been subdivided to a set of variables.

The inclusion of all of the above major variables with their subvariables give this model more power in explaining the consumer behaviour, more than all of the previous three models. With the inclusion

FIGURE 4.4  
THE ENGEL, BLACKWELL AND KOLLAT MODEL



Source: Engel, James F.; Blackwell, Roger D. and Kollat, David T. Consumer Behaviour (1978), third edition, p.492.

of the environmental influences in this model, it might be helpful, in explaining the consumer behaviour in the field of international marketing (Howard 1983).

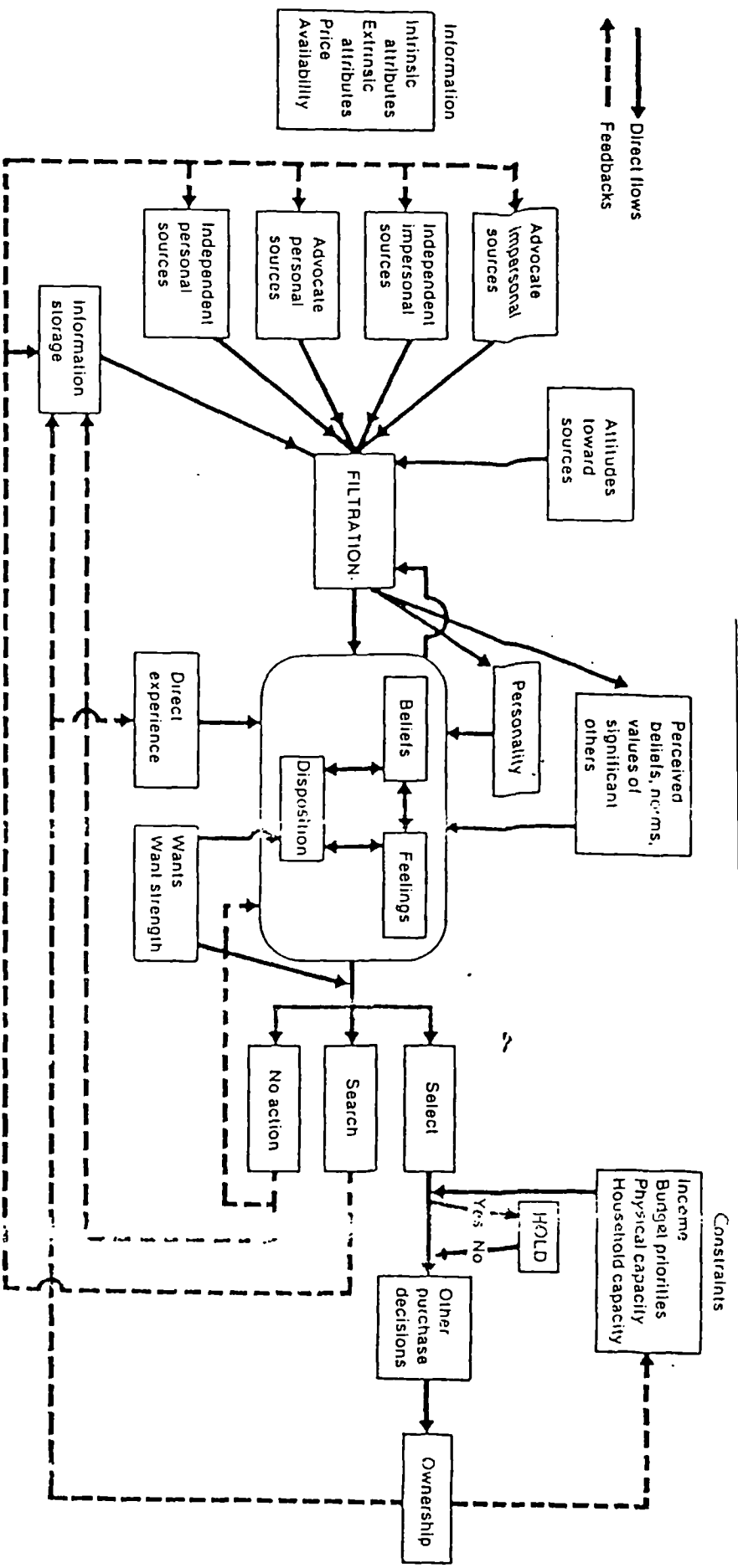
Since this model does not clearly incorporate the variation of product quality, price and risk in account as well as the impact of the country of origin in the product evaluation, this model will not be very helpful in understanding the present research problem.

#### 4.2.5 THE ANDREASON MODEL

The main idea of this model is that consumers formulate attitudes about products and that these attitudes then pre-dispose consumers favourably or unfavourably towards products in a given purchase situation. The model shows (figure 4.5) the independent variables (information and attitudes) and the dependent variable (behaviour ie select, search or no action). According to the model, the information about intrinsic attributes, extrinsic attributes and price availability comes from four sources: advocate impersonal sources, independent impersonal sources, advocate personal sources and independent personal sources. The information is then processed through the filtration mechanism. The filtered information interacts with other factors such as personality, beliefs, feelings, disposition, direct experiences. Those factors in addition to the attitudes toward sources perceived beliefs or values, attitude toward product substitutes or complements and some other constraints like income, budget priorities, physical capacity and household capacity, will shape the behaviour of the consumer towards the decision to select, search or no action.

The Andreason model also is not very helpful in understanding the research problem for two reasons: first the model focuses only upon one

FIGURE 4.5  
THE ANDREASON MODEL



Source: Andreason, Alan R. (1965)  
Attitudes and Consumer Behaviour : A Decision Model, New Research  
in Marketing, p.8, ed. Preston E. Lee (Berkeley : University of California,  
Institute of Economic Research.

central determinant of behaviour, that is attitude. Attitude is not the only determinant factor of the consumer behaviour, many other factors such as perception, motivation and learning are as important as that of attitude. Secondly, although the model considered the intrinsic attributes, extrinsic attributes and price as part of the information needed, it did not explicitly count for the product quality, risk and origin as factors to be taken into account. For these two main reasons one cannot depend on the Andreason model to investigate this research problem.

#### 4.2.6 THE NICOSIA MODEL

The Nicosia model (figure 4.6) attempts to describe a consumer decision process over a multi-dimensional space around a sophisticated, complex, interactive network of relationship (Markin 1974).

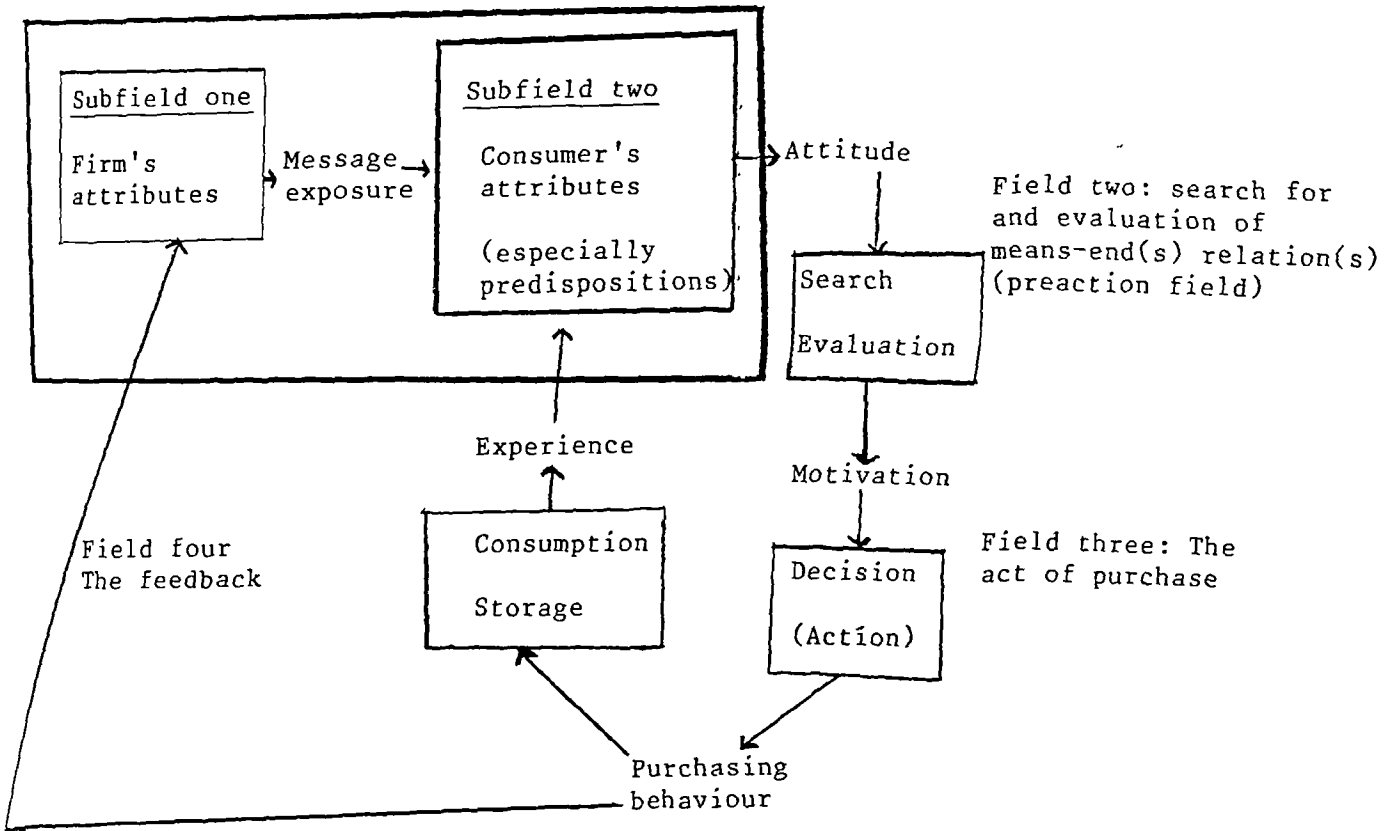
Nicosia used in his model the computer flow chart to describe the structure of consumer behaviour. The model is composed of fields, each of which serve as output from the preceding field and input to the succeeding one. Field one which he called "from the source of a message to the consumers' attitude", consists of two subfields: the firms' attributes and the consumers' attributes, the second field is the search and evaluation, field three is what he called the act of purchase, the feed back is the fourth field.

Although the Nicosia model is somehow complete and less confusing than the previous models, it is not without some pitfalls like the assumption that consumers have not previously known of the product is limiting, and attitudes, motivation and experience do not actually occur in precise sequence (Moutinho 1982).

In relation to this research, the Nicosia model was insufficient to

FIGURE 4.6

NICOSIA'S CONSUMER BEHAVIOUR DECISION MODEL



Source: Francesco, Nicosia M. (1966)  
Consumer Decision Processes, p.156  
(Englewood Cliffs, N. J. Prentice Hall, Inc)



help in explaining and analysing the problem, because it lacked the product attributes under examination, that is quality, price and risk as they related to the origin of the product.

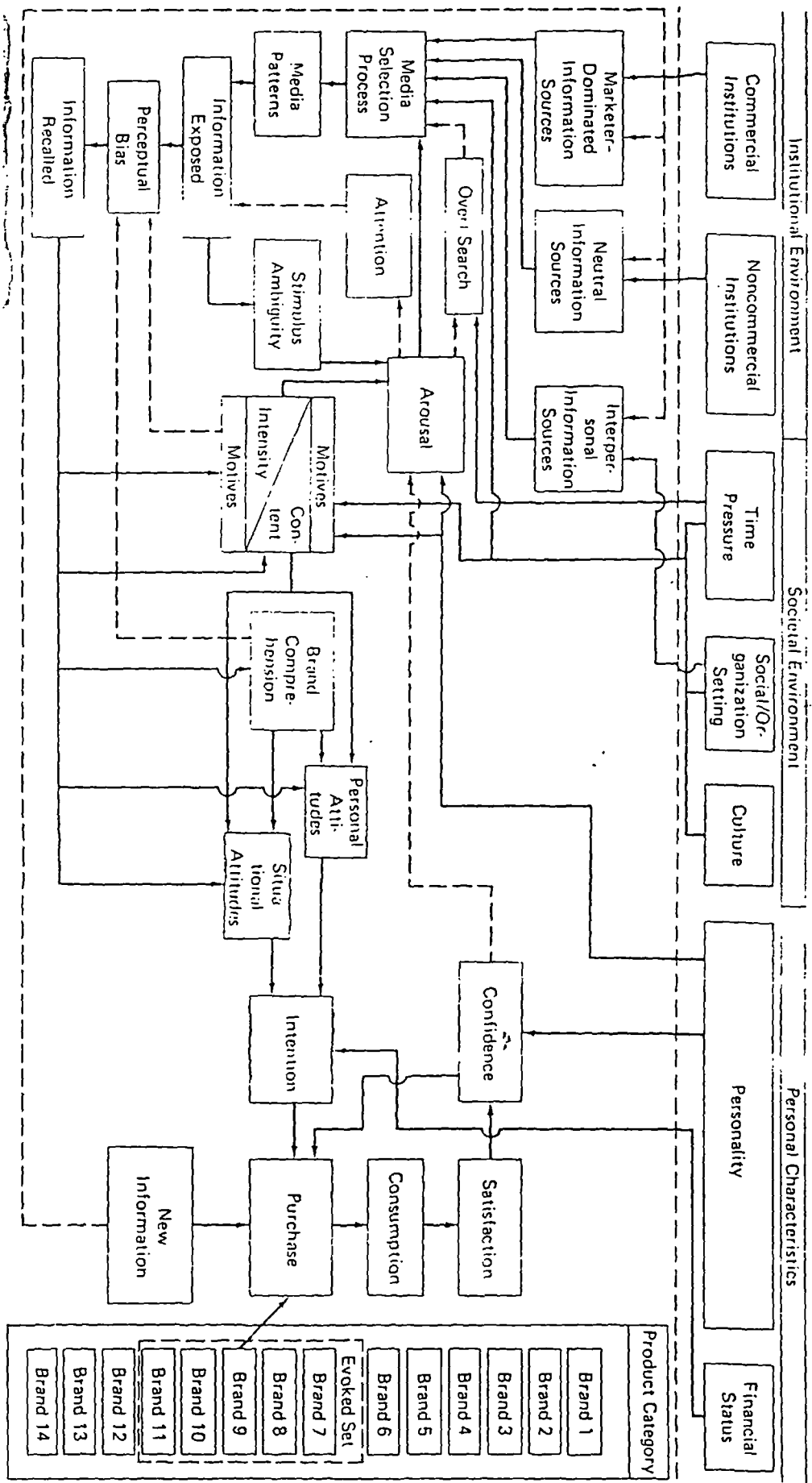
#### 4.2.7 THE HOWARD-OSTLUND MODEL

This model was developed by Howard and Ostlund in 1973 and it can be viewed as a refinery to the previous models developed by Howard (1963) and Howard and Sheth (1969) which were introduced in the previous pages.

The Howard-Ostlund model (figure 4.7) represents an effort to provide the theory of consumer behaviour with a framework that can be used by theoreticians, researchers and practitioners. In the first stage of the model, the consumer is faced with the institutional environment, societal environment and personal characteristics. The institutional environment consists of commercial and non commercial institutions. The societal environment consists of time pressure, social organization setting and culture. These are called interpersonal information sources. The personal characteristics are personality and financial status. The second stage is the information processing stage. This starts from the information sources (marketers, neutral and interpersonal information).

In addition to the overt research, the consumer will start to select the appropriate source of media. Over a certain length of time, an individuals' media selection behaviour yields a stable media pattern. Through the media patterns consumers will be exposed to information. The information received will be shaped by the consumers perceptual bias which might have some impact on the original appeal. Bias is due to buyers motives and brand comprehension. The relevant information, will be recalled to aid in solving the problem under consideration.

THE HOWARD - OSTLUND MODEL



Source: Howard, J. and Ostlund, L. (1973) Buyer Behaviour: Theoretical and Empirical Foundations (New York: Knopf)

### 4.3 QUALITY, PRICE AND RISK MODELS

#### 4.3.1 A FRAMEWORK OF CUE IMPACT ON PERCEIVED PURCHASING RISK AND HANDLED RISK

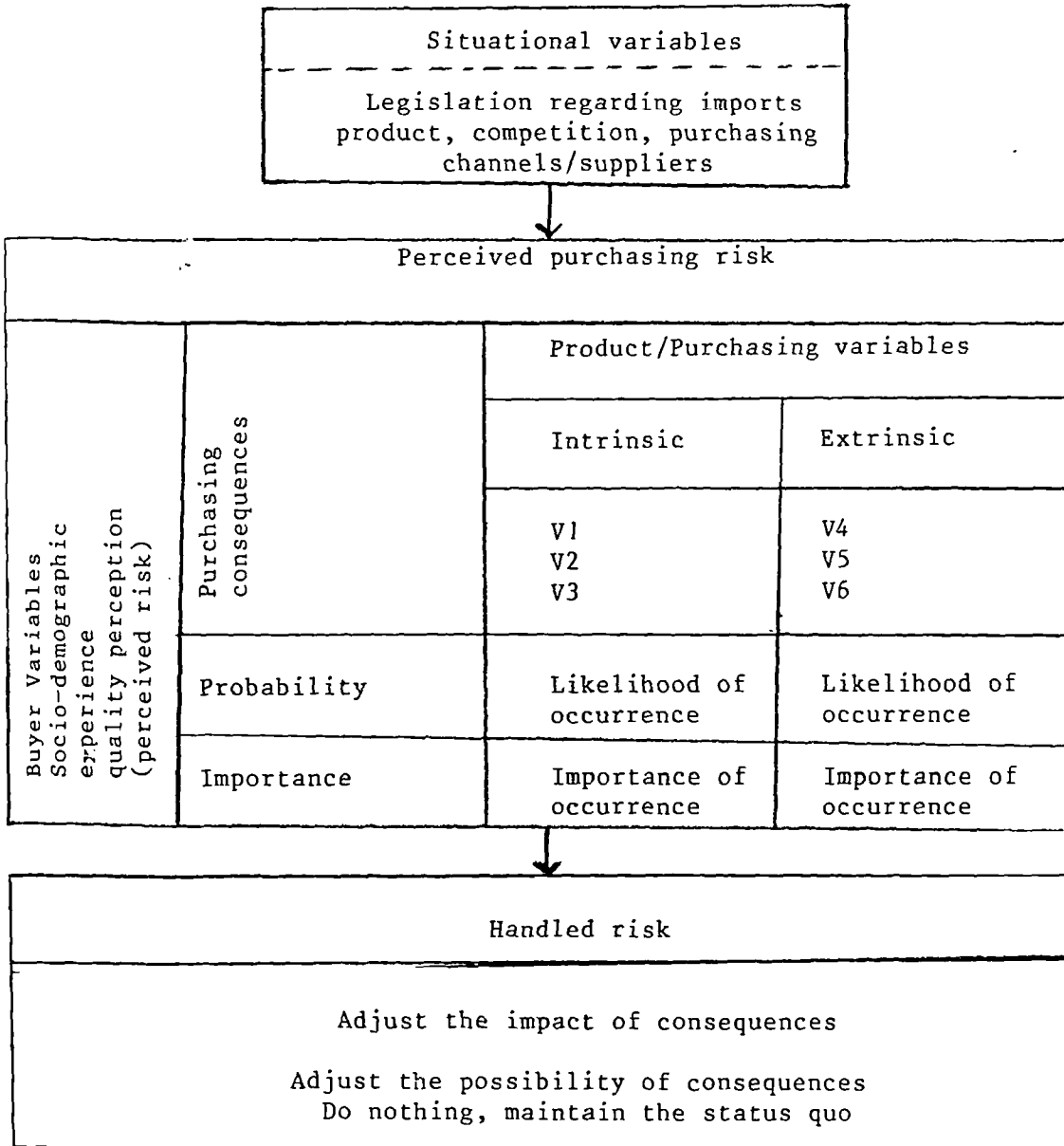
The Tolbert (1985) model addressed three main factors: the situational variables, perceived purchasing risk and handled risk. Each of these main factors were subdivided to a group of variables. For example, the situational variables were measured through the following variables: legislation regulating imported product, competition, purchasing channels and suppliers. (Figure 4.8)

It is clear that the main concern of the model was the concept of perceived risk as it related to the retail buyers' behaviour. The model did not indicate how the perceived country risk could be incorporated in the model, at the same time, the model concentrated only on the perceived risk (inherent risk and handled risk). The main components of perceived risk (i.e. financial, social, ..... etc.) were not considered in the risk measurement. The socio-demographic, experience and quality perception, were the only buyer variables considered. It could be argued that while the socio-demographic variables were of significant importance in the individual buyer case, it could be of little importance in the industrial buyer situation. Other variables, such as size of business, type of store and import orientation in addition to the experience, could be more relevant than the socio-demographic variables. Quality perception was attached to the buyer variables, through the intrinsic and extrinsic attributes, which together contribute in formulating the product quality.

Given the above limitations and the purpose of the present research, the model was found to be inadequate to be used in this research.

FIGURE 4.8

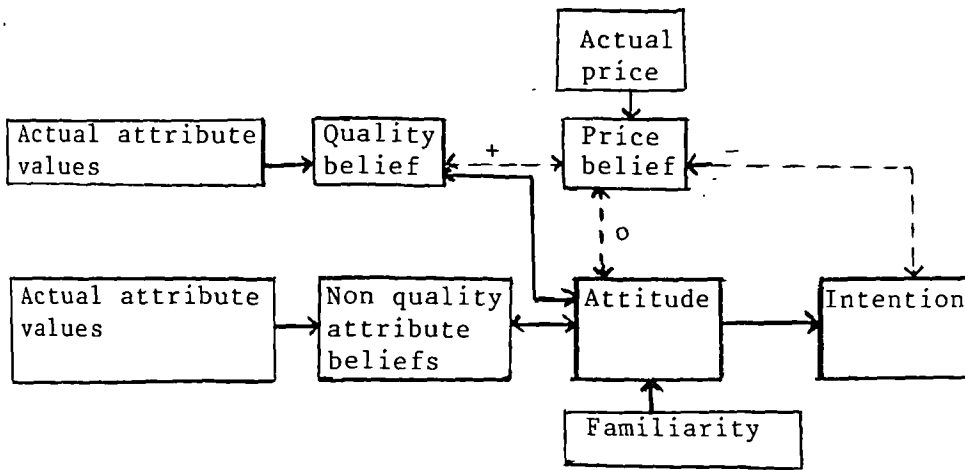
A FRAMEWORK OF CUE IMPACT ON PERCEIVED PURCHASING RISK  
AND HANDLED RISK OF APPAREL RETAIL BUYER



Source: Tolbert, Shella Varga (1985).  
Retail Buyers Perceptions of Imported vs. U.S.-made Apparel and the  
Buy American Campaign  
MA Thesis, Michigan State University, U.S.A.

FIGURE 4.9

MODEL OF POSSIBLE PRICE EFFECTS



Source: Erickson, Gary M. & Johansson, Johny K. (1985)  
 The Role of Price of Multi-attribute Product Evaluations  
 Journal of Consumer Research, Vol. 12, p.196

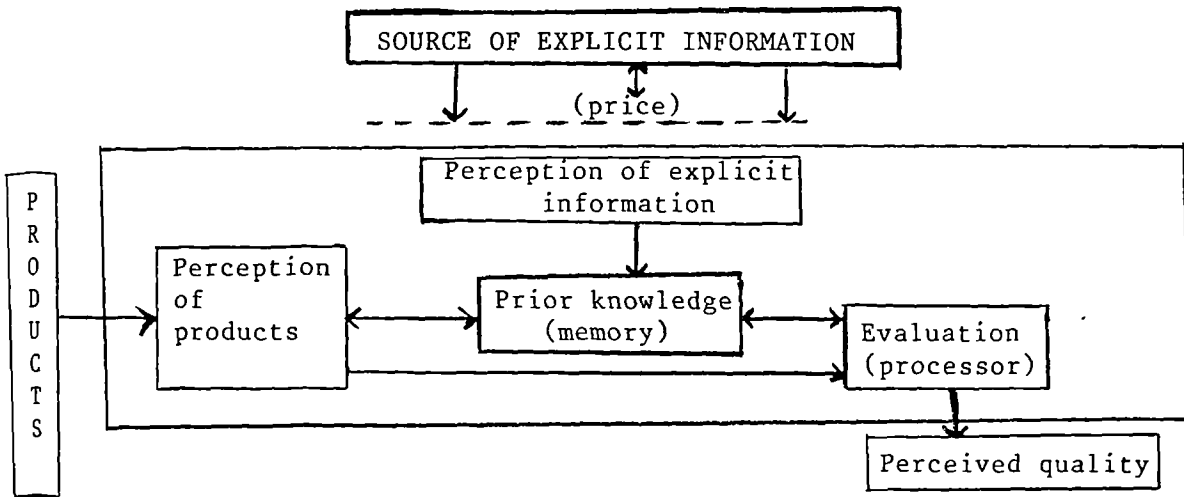
4.3.2 THE MODEL OF POSSIBLE PRICE EFFECTS

This model (figure 4.9) was developed by Erickson and Johansson (1985). The model incorporated attitude as well as beliefs and intention to investigate their impact on the role of price in product evaluation. The actual attribute values, actual price and familiarity were assumed to have appropriate effects and to act as identifiers in the simultaneous system. The dashed lines indicate the theorized relationships involving price. The '+' anticipates that price and quality beliefs possibly influence each other in a credible manner, the 'o', that the direct relationship between attitude and price is likely to be weak and the '-', that price probably plays a budget constraint role in intention.

The main limitations of the model, where this research is concerned, related to the absence of risk, risk components, quality attributes and country of origin of being incorporated in the model.

FIGURE 4.10

A MODEL OF THE COGNITIVE PROCESS OF QUALITY PERCEPTION



Source: Penttinen, Jyrki T, (1976)  
 The Role of Price in Perception of Product Quality  
 Ph.D. Dissertation, The University of Michigan, U.S.A.

4.3.3 A MODEL OF THE COGNITIVE PROCESS OF QUALITY PERCEPTION

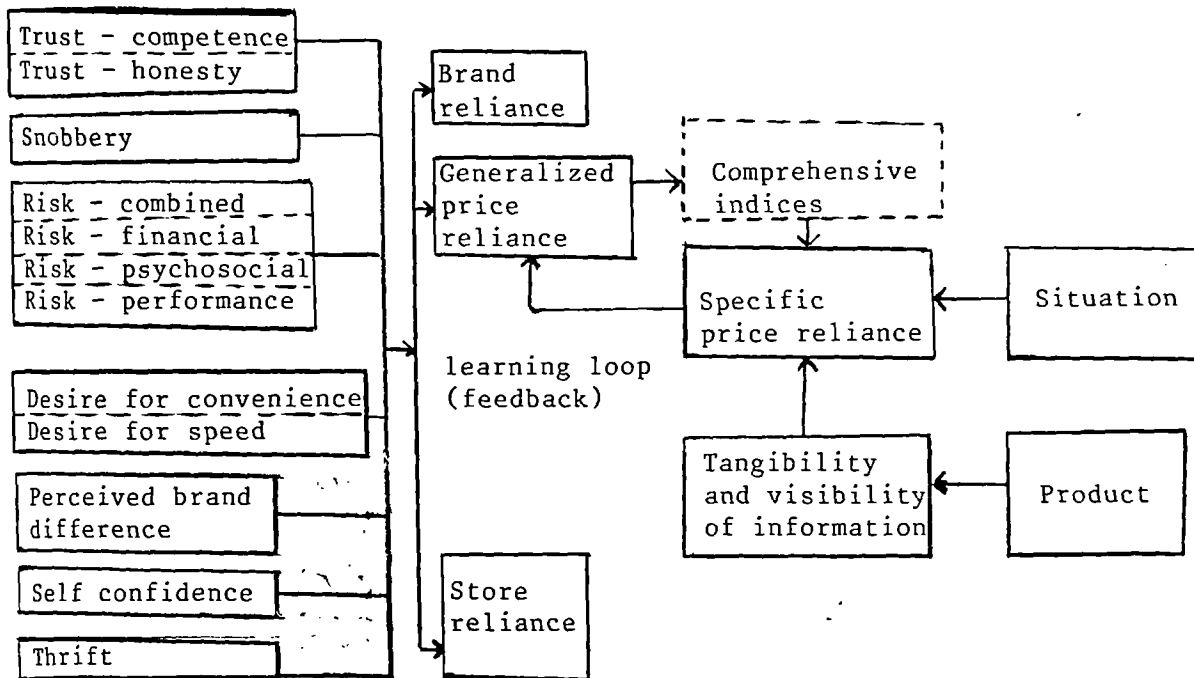
This model (Figure 4.10) was developed by Penttinen (1976). The model suggested that all external information that enters the cognitive process is first encoded. That is, the consumer has perceptual functions which screen and interpret the information from the external sources. These functions are governed by memory, which in the case of quality judgment consists of acquired rules about how to select and interpret explicit information. The information is then submitted, together with the prior product knowledge to an evaluative processing from which a quality judgment emerges.

Although the model addressed one of the present research issues, that of the product price, it was found to be of little help to solve the current research problem. This is because the model did not account for the impact of source country on product evaluation. Moreover, the model

considered only the process of the explicit source of information (ie price) without considering the other related sources such as brand, store, situational variables, personal variables, etc.

FIGURE 4.11

PRICE RELIANCE MODEL



Source: Shapiro, Benson P. (1973)  
 Price Reliance : Existence and Sources  
 Journal of Marketing Research, Vol X, p.292

4.3.4 THE PRICE RELIANCE MODEL

This model (Figure 4.11) was developed by Shapiro (1973). Shapiro suggested that price should be looked at as a communication form from price maker to consumer. The consumers' view of price makers' credibility was divided into two dimensions. One dimension was concerned with the honesty of the source of information, and the other with the competence (trust) of the source. After considering the makers' credibility, the next source to be considered was snobbery. A snob was defined as one who judges others by their material possessions and expects to be judged on

the same basis. Risk combined and risk components were the third source of information. These measures covered financial risk, psychological risk, performance risk and a broader concept of risk involving the general importance of the items to the respondent.

According to Shapiro, since price is an easy way to judge quality, it was reasoned that those respondents, interested in convenience and speed, would be strongly price-reliant. If consumers believe that there are no quality differences among brands, there will be no need to judge the quality (by price or any other means) of the brands. If the consumers have confidence in their ability to evaluate the product on its merits, then there will be less reliance on price as an indicator of quality. If they lack this confidence, then price could play an important role as a quality indicator. Also, it was assumed that people to whom money is dear would be unlikely to use price as a communicator of quality.

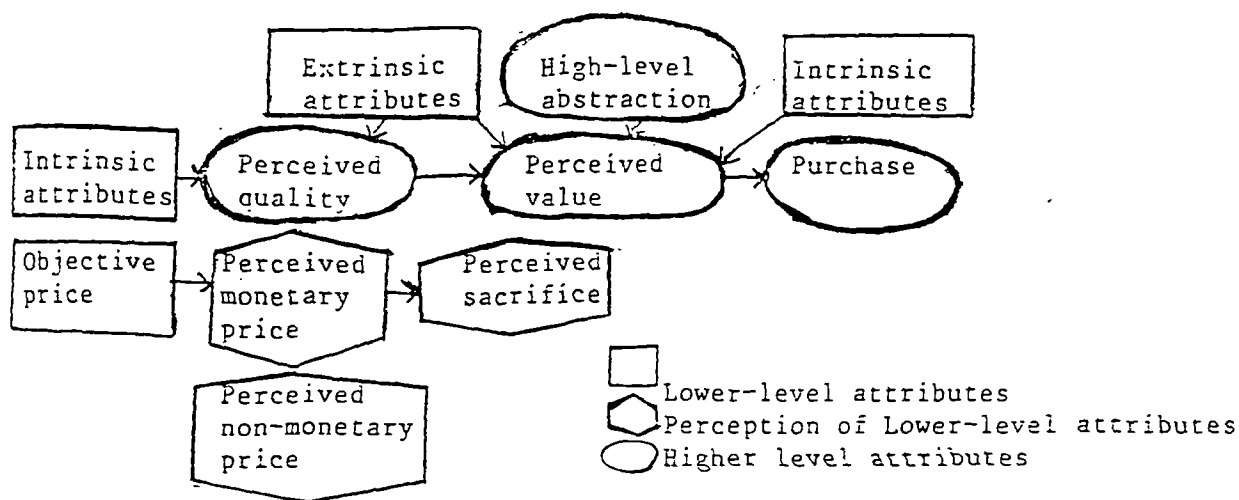
In addition to price reliance, the model incorporated the brand and store reliance. They appeared to be similar to price and could be used as an indicator of quality. Brand and store reliance, together with the other source of information, as well as the product and the situation, constitutes the generalized price reliance which led to the comprehensive indices. The comprehensive indices, situation, product and tangibility, and visibility of information, led to specific price reliance. The specific price reliance will again feedback to the generalized price reliance.

The price reliance model presented an excellent attempt to explain the sources of price reliance and the situations in which price could be more reasonably used as quality indicator. However, the model did not explicitly incorporate the intrinsic product cues and the source country cue in the price evaluator process.



FIGURE 4.12

THE MEANS-END MODEL RELATING PRICE, QUALITY AND VALUE



Sources: Zeithaml, Valarie A. (1988)  
 Consumer Perceptions of Price, Quality and Value : A Means-End  
 Model and Synthesis of Evidence  
 Journal of Marketing, Vol. 52, (July 1988), p.4

4.3.4 THE MEANS-END MODEL RELATING PRICE, QUALITY AND VALUE

The model adapted by Zeithaml (1988) is an attempt to overview the relationship between the concepts of price, perceived quality and perceived value (figure 4.12). The perceived quality was performed as the result of the extrinsic attributes, the intrinsic attributes and price. The objective price, perceived monetary price and perceived non-monetary price contribute to formulate the sacrifice price. Perceived quality and sacrifice price together with intrinsic attributes, extrinsic attributes and the high-level abstractions contribute to formulate the perceived value, which in turn leads to the purchase decision.

Although the model incorporates the quality, price and value as they relate to the purchase decision, it does not account for the perceived risk

and source country as another component of the purchase decision. Also, the model did not account for the individual difference (the personal variables) as they relate to the perception of the product value.

#### 4.4 COUNTRY CUE MODELS

##### 4.4.1 AN INTEGRATED MODEL OF THE COUNTRY CUE AND PERCEIVED RISK

This model was developed by NES (1981). The model is a combination of two processes, the country cue process and the perceived risk process (figure 4.13). Nes suggested that the country cue was acquired and processed together with other information as a means for reducing the uncertainty dimension of perceived risk. The evaluation of the country cue may depend on several factors (X1 to X5), three specific factors were extracted (Z1 to Z3), the remaining factors were kept constant. The evaluation of the country cue was used as one of the inputs to "adjusted perceived risk" which was one of the factors influencing the purchase decision.

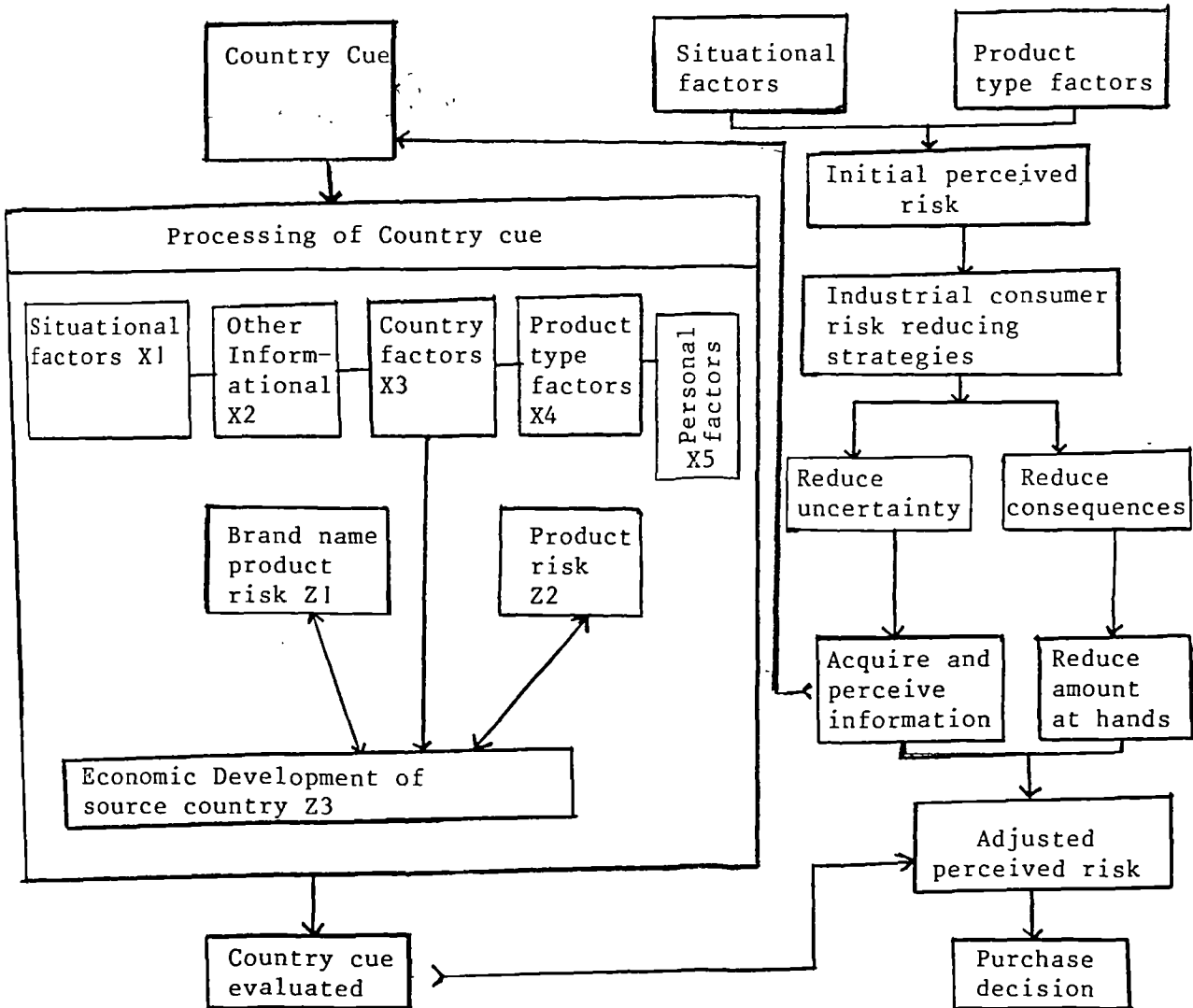
The main advantage of this model related to its attempt to integrate the country cues with the concept of perceived risk. The model also integrated the situational and personal variables as major determinants of the product's evaluation process.

The main limitations of the model can be summarized as follows:

1. The model only limits the impact of the country cue to the perceived risk concept. The impact of the country of origin on the perceived quality and perceived price were not incorporated in the model.
2. Risk was treated as a single factor. No attempt was made to measure the components of risk such as financial, performance, social, etc, in the model. According to Hampton (1977), there was considerable merit in the examination of the components of perceived risk.

FIGURE 4.13

AN INTEGRATED MODEL OF THE COUNTRY CUE AND PERCEIVED RISK



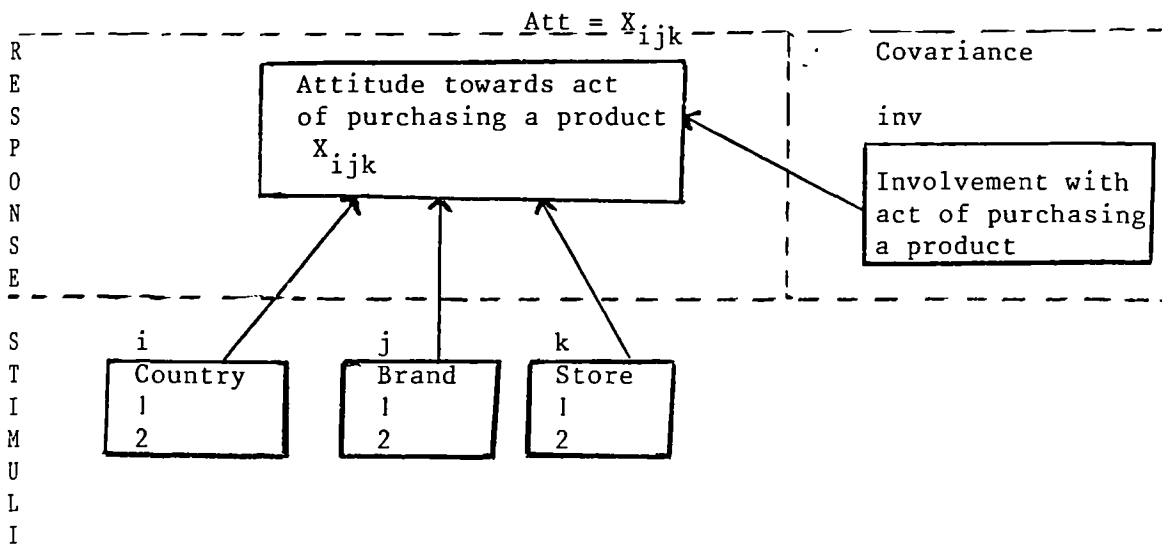
Source: Nes, Erik B. (1981)  
 Consumer Perceptions of Product Risk and Quality for Goods  
 Manufactured in Developing vs. Industrial Nations  
 Ph.D. Dissertation, University of Wisconsin-Madison, U.S.A.

3. Among the several country factors, the model only considered the stage of the economic development of the country. Although, the economic development of the source country might be an important factor, other factors such as culture, reputation, similarity to home country, etc, could be as important as the stage of the development.

Thus, this model was found to be inadequate to be used in this study. However, some of its basic concepts will be used in developing the research framework.

FIGURE 4.14

FOREIGN PRODUCT ATTITUDE MODEL OF STIMULI-RESPONSE (FPAM S-R)



Source: Diplom-Kaufman (1988)  
Toward a Theory of Consumer Attitudes Regarding Products of Foreign Origin : A Multivariate Expectant-Value Approach  
Ph.D. Dissertation, North Texas State University, U.S.A.

#### 4.4.2 THE FPAM S-R MODEL

This model (figure 4.14) was developed by Diplom-Kaufman (1988). According to Diplom-Kaufman (1988) the model can be classified as an explanatory model of attitudes' formation toward products of foreign origin.

The main components of the model are: stimuli, response and covariant.

##### A) Stimuli

i = index specifying country of origin of the product

j = index of the product's brand name

k = index of store retailing the product

##### B) Response

$Att_{Xijk}$  = Attitude towards the act of purchasing a product x made in country i, bearing a brand name j, which is retailed in store k

##### C) Covariant

inv = level of individual's involvement with the act of purchasing product x

The main advantage of this model is that it addressed the source country cue as one of three cues considered in the attitude formulation process.

However, the three cues (country, brand and store) can be classified as extrinsic cues, none of the intrinsic cues were considered in the model. According to some authorities, the intrinsic cues were more relevant in the product quality evaluation than the extrinsic cues (Jacoby and Olson 1985). More than that, none of the main cues (quality, price and risk) were addressed directly in the model. At the same time, the model did not

take into account the country variables nor the individual consumer personality variables.

Thus, this model is also inadequate for the present research purpose.

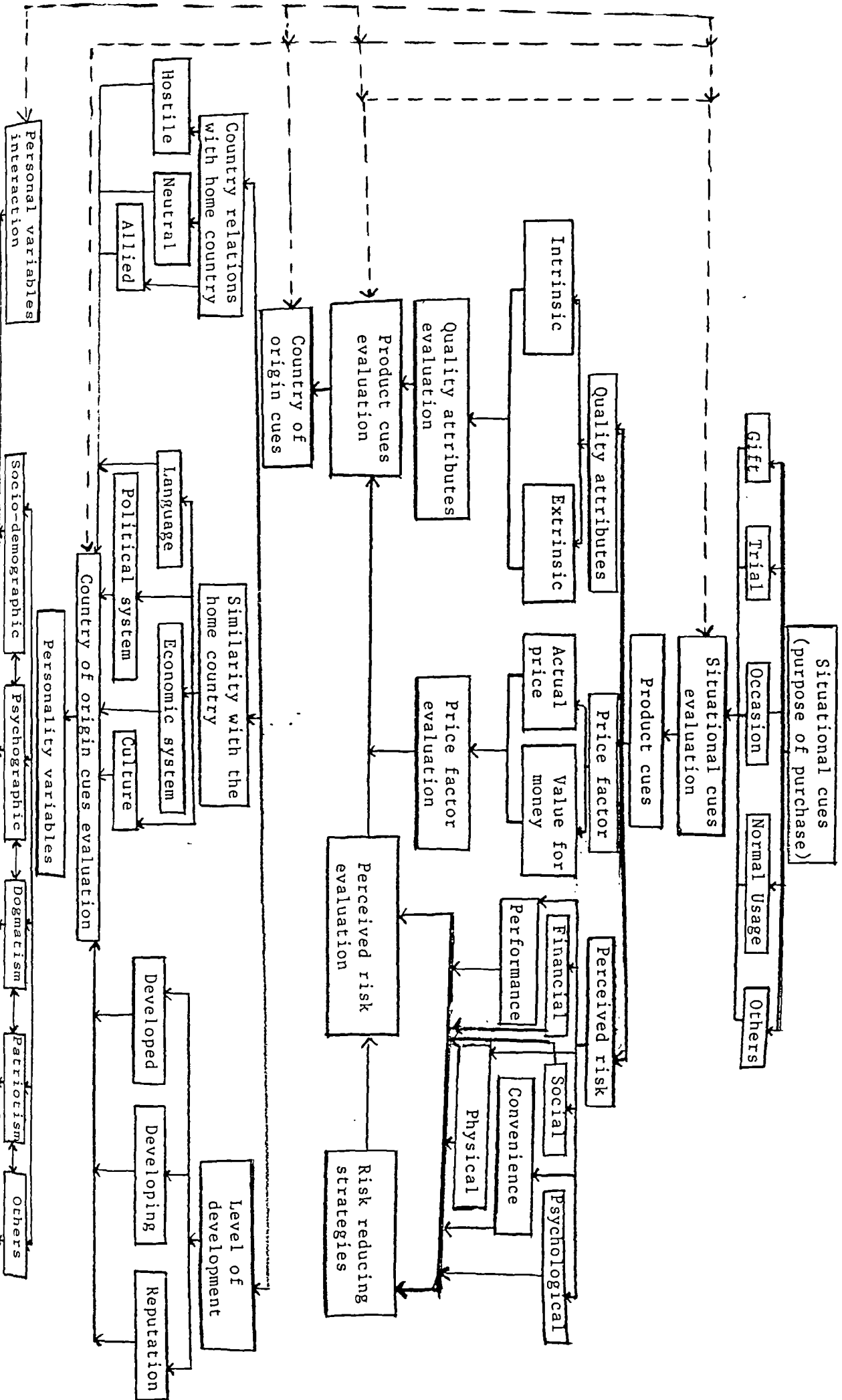
#### 4.5 THE RESEARCH FRAMEWORK

Since none of the previous models are directly helpful in explaining the research problem, and one cannot find in the existing literature a suitable model for this purpose, it was necessary to make an attempt to develop a framework which could be useful to help in understanding, explaining and investigating the research problem. This framework could be used as a model for the concept of foreign and domestic product if it can be tested and proved to be useful. However, the framework will not be tested in this research due to the concentration of the research on only one aspect of the framework related to the stage of development of the source country. The other information situational cues, the source country similarity with the home country and the other factors are not available. Thus it is a point suggested for future research to test the performance of the research framework and to prove it can be used as a model to explain such concepts.

The framework consists of four major phases which interact together to determine the consumers' perception of the product. These four phases (steps) are: the situation cues, the product cues, country of origin cues and the personality variable cues (figure 4.15). Each step ended with an evaluation of that step which is an output of the interaction between the various variables at that stage. This output will also be used as an input for the following stage and a feedback for the previous steps. This

FIGURE 4.15

THE RESEARCH FRAMEWORK



explains the consumer evaluation for all of the phases as an integrated process which all interact together to be the determinant of his/her decision.

#### HOW IT WORKS

**Situational Cues.** In the first stage, which was named as the situational cue or the purpose for buying a certain product. Consumers enter the market with several reasons to buy a certain product. As an example, four cases were suggested and each case represented a different evaluation criteria, which would affect the search behaviour of the consumer. The decision to buy a gift has a different criteria to the decision of buying the product for normal usage. Depending on the recipient of the gift, this could affect the consumer decision, for example, the consumers decision to buy the product for normal usage could mean there are more rational variables to consider, like how much money they are willing to pay for certain products, how long they intended to keep the product, how much impact the product would have on their social status and so on. Different criteria might be applied in buying a product for a special occasion or as a gift.

**Product Cues.** When the situation cues have been evaluated, the result of the evaluation will be used in the second stage which are the product cues. In this stage, the consumer will try to match the purpose of purchase (stage one) with the product cues. The product cues consist of product quality cues, product price cues and product risk cues. Each of the three main cues consists of a set of attributes. The product quality cues can be subdivided into intrinsic and extrinsic cues. The intrinsic cues refer to the product characteristics which are inherited in the product itself and which cannot be changed unless changing the



product. Some examples are: appearance, size, durability and colour. The extrinsic cues are the result of perception/attitudes of the consumer which could be reshaped without actually changing the product itself. These characteristics could include warranty, brands, service and spare parts availability.

Considering the physical characteristics of the product and the consumers attitudes/perception toward the product, the product quality will be evaluated. The consumer will consider another main cue in the process of product evaluation, that is the price. In this case two major factors will be considered in evaluating the product price; the actual price, and the value for money. The actual price refers to the price label of the product which the consumer will compare with other brands of the same product to see how much the price differs from other brands. The other criteria in price evaluation is, weighing the price of the product to the perceived quality of that product to arrive at the value for money for that product. The result of comparing the product to another brand of the same product and to the perceived quality result in the price evaluation.

Having evaluated the product quality and price, the consumer will consider evaluating the product risk cues. In this case six major types of risk where the consumer may consider them as a whole or in part depending on the situational variables, or the personal variables were suggested. The six major types of product risk are: financial, performance, social, convenience, physical and psychological risks. The interaction between the whole or parts of these types of risk will lead to the product risk evaluation.

The product quality evaluation, the product price evaluation and the product risk evaluation, all together will constitute the basis for product cues evaluation. This will be matched again with the situational variables

and will be used as a input for the coming stage which is the country of origin cues.

The Country of Origin Cues. Having considered the situational variables, the product quality, price and risk cues, consumers may use in the evaluation process the country of origin cues, either to justify or to destroy their initial evaluations.

Many variables are candidates to be considered in the country of origin evaluation. Three major factors are suggested, these are hostile/friend country, degree of similarity to the home country and level of economic development. It is more likely that consumers could have an adverse image about the products of a country which they perceive as an enemy country. Although they might prefer the product of a friend country than the product of an enemy country, that might not suggest a guaranteed good image for the friend country over the neutral country. After the country friendship evaluation, consumers might consider another set of cues, that is, the degree of similarity to the home country which includes language, political and economical systems and culture. The result of these cues will be evaluated to see how much this country is similar to the home country. Depending on the situational and personal variables the degree of similarity might have a positive or negative impact on the consumer's decision. The final stage in the country of origin evaluation is the level of economic development, which can be subdivided to developed or industrialized nation, developing less industrialized nation, and finally good/bad reputations as a producer of certain products (some countries have a good reputation in producing certain products for example English textiles, Japanese small cars, French wine, American luxury cars. They might not have the same reputation in

producing other products or even adverse reputation in some other products).

After considering all these variables which relate to the state of the development of the country, the consumer will be able to evaluate the level of development of the source country of the product. The evaluation of the source country friendship, the degree of similarity to the home country and the level of development will lead to the country of origin cues evaluation which will be used as feedback to the situational and product cue evaluation. Which then leads to the final step of the evaluation which is the personality cues variables.

The Personality Cues Variables. In this phase the consumers individual variables will enter in the decision process to shape their final decision. It is natural to assume that the personality variables can affect the consumers evaluation in any of the previous stages, but it was preferred to discuss them in the final stage. However, this situation was taken into consideration by connecting the personality cues evaluation to all of the previous stages.

In an effort to develop a better understanding of the personality variables, they were subdivided into four main sub-categories. These are socio-demographic variables, consumers psychographic variables, dogmatism variables and patriotism variables. There are many other ways to subdivide the personality variables which can be part or independent from the above groups.

All of the above groups can be subdivided to sets of subvariables. since the main concern in this research was to investigate the socio-demographic variables, it was decided not to further complicate the model by adding the other personality groups subvariables.

From the interaction between all of the personality variables, the consumer personality will be shaped. This personality does not reflect only one or two of these variables, but it is the complete mix of all of the above variables. The personality variables together with the situational variables will shape the final evaluation of the country of origin cue as it related to the product quality, price and risk. Depending on the situation and the consumer personality, a certain product from a certain country might be evaluated as highly suitable for purchase. While the same product from another country might be evaluated to be far less suitable for purchase.

#### *The Advantages and Limitations of the Research Framework.*

##### *Advantages*

1. This framework is the first attempt to integrate the three product cues (quality, price and risk), the personal cues, the situational cues and the country cues, as they relate to the purchase decision.
2. The framework treated these cues systematically as they appeared to the consumer. It started with the situational factors (the reasons for the purchase of the product). The product cues (extrinsic and intrinsic) were then evaluated. Having evaluated the situational cues, the product cues, then the country cues will be evaluated. The evaluation of the country cues will be affected by the situational, product cues and personal variables. However, while it could not be ascertained that these processes would be followed in the same order, the framework considered that these steps would be taken collectively.

##### *Limitations*

1. The framework did not specify the weights to be given for each of the main cues (ie the situational, the product, the country and the personal cues). Also the framework did not specify the weights given

to each of the subcues in the evaluation of the main cue (example the weight given to each type of risk in the evaluation of the perceived risk).

2. The country cue could be considered as one of the product extrinsic cues variables. However, it has been treated as an independent cue. This was done because the main purpose of the research is to investigate the country cue impact on product evaluation.

#### 4.6 SUMMARY OF THE CHAPTER

In an effort to relate the present research to the existing theory, several models in the consumer behaviour were reviewed. The models were divided into two groups. The comprehensive models and the specific purpose models including the country cue models. Neither the comprehensive models nor the specific purpose models were adequate to explain the problem of the research under discussion.

The need to develop a research framework was unavoidable. The framework incorporated the main elements which contributed to the evaluation of country cue. These elements were the situational variables, the product related variables, the personality variables and the country related variables. The main strengths of the research framework related to its incorporation of the three main cues in product evaluation (quality, price and risk) and the subattributes which are normally used to evaluate these cues. Furthermore, as far as the researcher can ascertain, this framework is the most integrated and comprehensive attempt in respect of the source country impact on product evaluation. However, the main limitation of the model is related to its inability to specify the weights attached to each of the main phases as well as the sub cues. This

matter together with the test of the model is an issue which is left for future research.

Chapter five will be devoted to the discussion of the research design and data collection issues. This will include the basis of selecting the participating countries for investigations in this study as well as the basis of selecting the major appliances to be the product class chosen for investigation. This will be in addition to the discussion of data collection, sampling and questionnaire design issues.

## CHAPTER FIVE

### RESEARCH DESIGN AND DATA COLLECTION

- 5.1 Introduction
- 5.2 Evaluating the Alternative Methods for Data Collection
  - 5.2.1 Choosing the Most Appropriate Questioning Method
  - 5.2.2 The Structure of the Questionnaire
- 5.3 Scale of Measurement
- 5.4 Questionnaire Development
- 5.5 Sampling Procedures and the Selection of the Appropriate Sampling Method
  - 5.5.1 Sampling Procedures
  - 5.5.2 Selecting the Appropriate Sampling Method
- 5.6 The Countries and Products Selected for the Study
  - 5.6.1 The Selection of the Participating Countries
  - 5.6.2 The Selection of the Product to be Tested in the Study
- 5.7 Delivering the Questionnaire and Field Work
  - 5.7.1 The Response Rate
  - 5.7.2 Preparing for the Data Analysis
- 5.8 Summary of the Chapter

## 5.1 INTRODUCTION

This chapter presents research design and data collection methods. The chapter is of vital importance because it presents the main components of the research. The discussion is divided into eight steps, presented in Figure 5.1.

## 5.2 EVALUATING THE ALTERNATIVE METHODS FOR DATA COLLECTION

The data needed for this research can be classified into two types: secondary data and primary data (figure 5.2).

Secondary data can be defined as "data already collected and published for purposes other than the specific research needs at hand" (Kinnear and Taylor 1987). The term secondary data involves two types of data: internal data (which refers to any material which can be obtained from the records or files of the firm sponsoring the particular study) and external data (which refers to all information obtained from sources other than one's own company) (Ferber et al 1964 and Kinnear and Taylor 1987). In addition to the saving in cost and time advantage over primary data (Parasuraman 1986), the secondary data has other advantages which include: (1) aid in the formulation of the decision problem, (2) it suggests better methods to tackle the problem, and (3) provides comparative data by which primary data can be more usefully interpreted.

The secondary data used in this research is related to the Government Census and publications. The distribution of the population in the various regions and the socio-demographic distribution of the Jordanian population, in addition to the use of the municipalities records. This type of data was used to develop a representative sample and/or to compare its representativeness.



FIGURE 5.1

RESEARCH DESIGN PROCESS

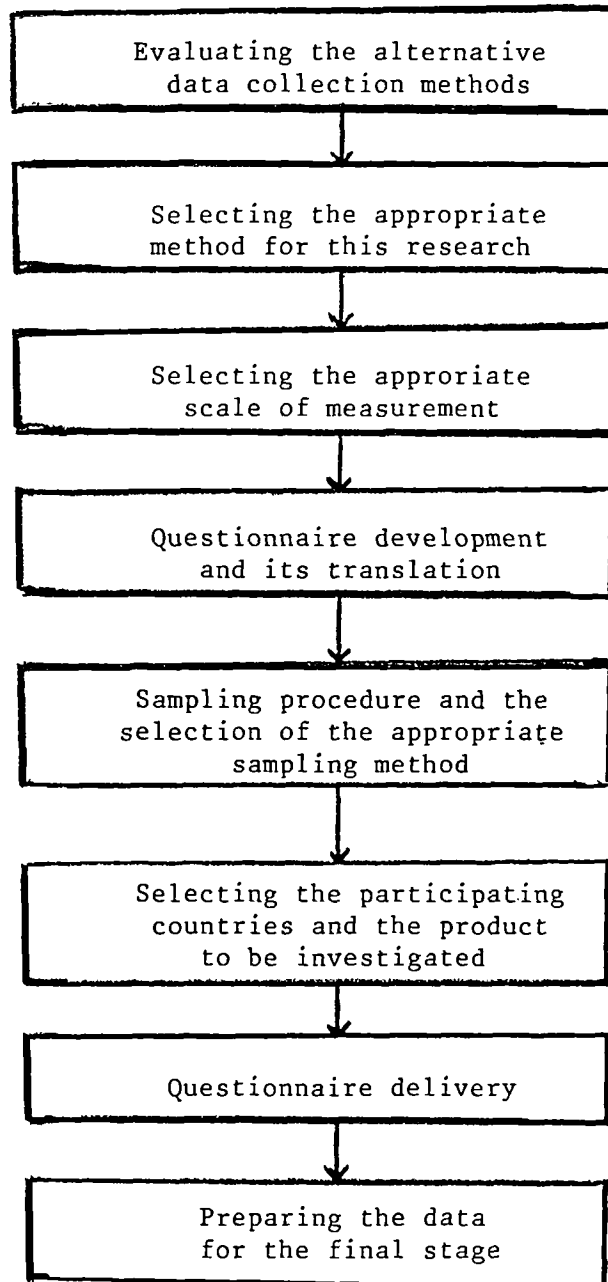
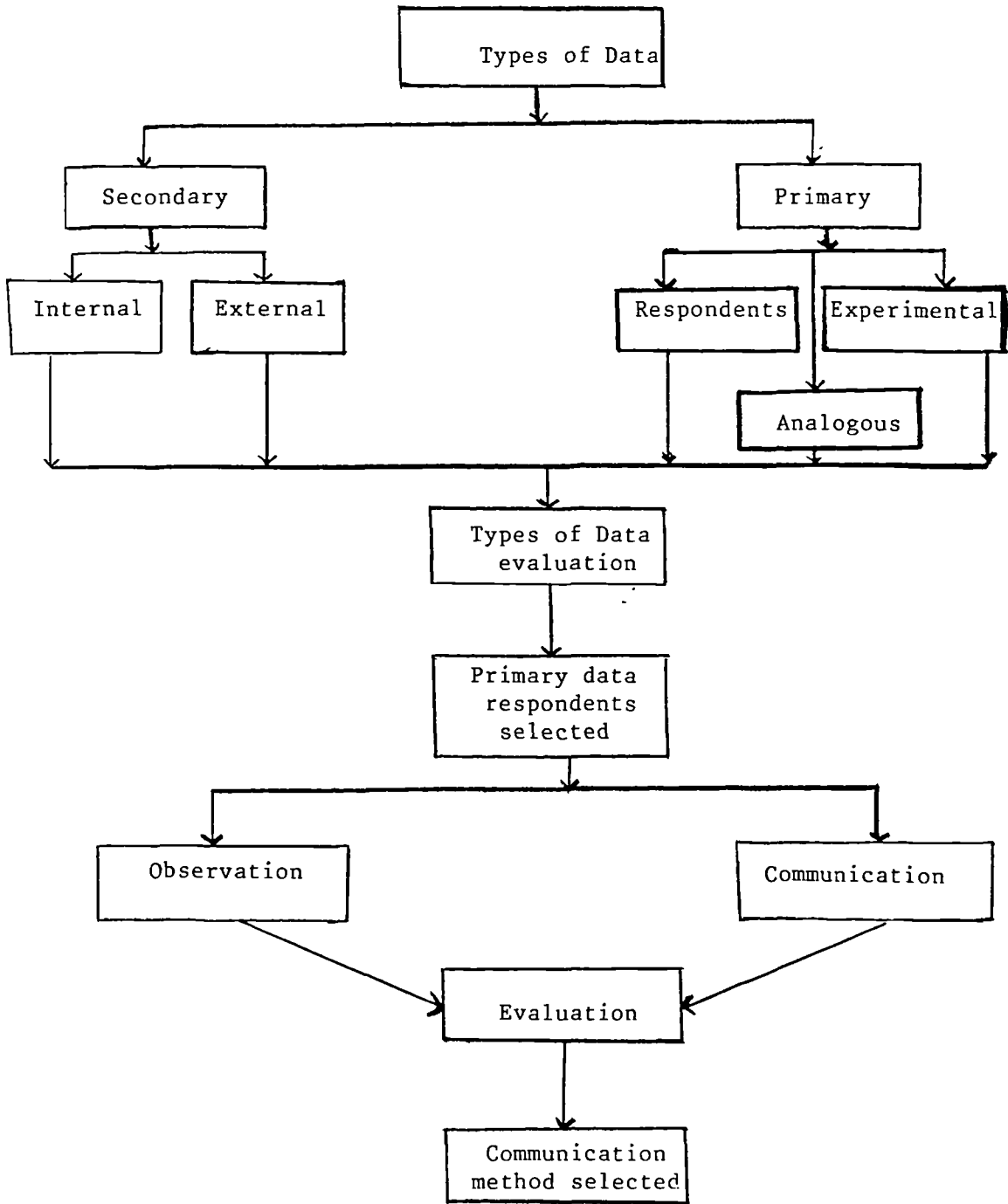


FIGURE 5.2

THE PROCESS OF SELECTING THE APPROPRIATE TYPE OF DATA AND THE APPROPRIATE COLLECTION METHOD

---



The other sources of the secondary data used in this study, related to the existing literature concerned with the research problem in Jordan and other countries. The purpose of using this source of information was to establish a depth of understanding of the problem and to determine the required data and the suitable methods for collecting it.

However, despite its importance and the need for using it, as mentioned above, it was found that the secondary data was insufficient to solve the research problem. This was due to the major limitations of the secondary data which related to: finding the suitable data and the accurate data.

As mentioned in chapter 1, the problem investigated in this study, has not been undertaken before in Jordan or in any of the Middle Eastern countries which have a similar marketing and economic situation to Jordan. Marketing research in general, and consumer behaviour research in particular, are very rare in Jordan. This might not be peculiar to Jordan, it might be the case for most developing countries. El-Ansary (1985) referred to that as "marketing is the most neglected function in the enterprises of Middle Eastern countries.....very little or no consideration is given to consumer needs in the market place". Kaynak (1982) reported that Drucker noted that "in less developed countries, marketing and marketing channels are often neglected in favour of the more 'productive' field of manufacturing".

Thus, and inspite of the cost in money and time, there was no alternative but to conduct a field study to collect the primary data needed for this thesis.

Primary data can be obtained through experimentation, analogous and respondents. The experimentation and analogous methods were found to be difficult to employ in this study because of: the wide area covered in the research, the limits of time and budget, and the specific objectives of

the study, which required contacting the respondents. Thus the respondents method was selected. Parasuraman (1986) classified the primary data collection methods into two broad categories: questioning and observation (figure 5.2). The key distinction between the two basic approaches stems from the role potential respondents play in the data collection process. In the questioning approach, respondents play an active role, while in the observing process, respondents do not directly interact or communicate with the researcher. The communication (questioning) method was found to be more appropriate for this research because of its various advantages: which include versatility, time and cost.

Versatility is the ability of a technique to collect information on the many types of primary data of interest to marketers (Churchill 1987). The information needed for this research is too wide and diverse, at the same time, it covers different locations and a large number of consumers. Thus it was found that the questioning method is more suitable than the observation method. In regard of the time and cost, it is known that The questioning method usually has an edge over observation in terms of the time and cost needed for data collection. The time allocated for data gathering was very limited and the resources available to cover the research expenses were limited too. In addition, data needed to be gathered from Jordan, while the research had to be completed in England. Thus, the need to minimise the time and cost were very crucial.

However, while it is true that the communication method might have the above mentioned advantages over the observation method, the latter is not without advantages. A key strength of the observation methods are that they are more likely to provide more accurate data since distortions stemming from respondents will be much lower than in studies employing the

questioning method. Moreover, the absence of direct respondent participation in the data collection makes the observation method more convenient to respondents and minimizes the need to secure their co-operation (Parasuraman 1986).

However, despite the importance of the advantages of the observation methods, which can be considered as limitations of the questioning method, they are not sufficient to compensate for the advantages of the questioning method, particularly for this research, where cost and time are very important. Kinnear and Taylor (1987) suggested that these limitations can be controlled by properly designing the data collection instrument, which were carefully considered in this study.

#### 5.2.1 CHOOSING THE MOST APPROPRIATE QUESTIONING METHOD

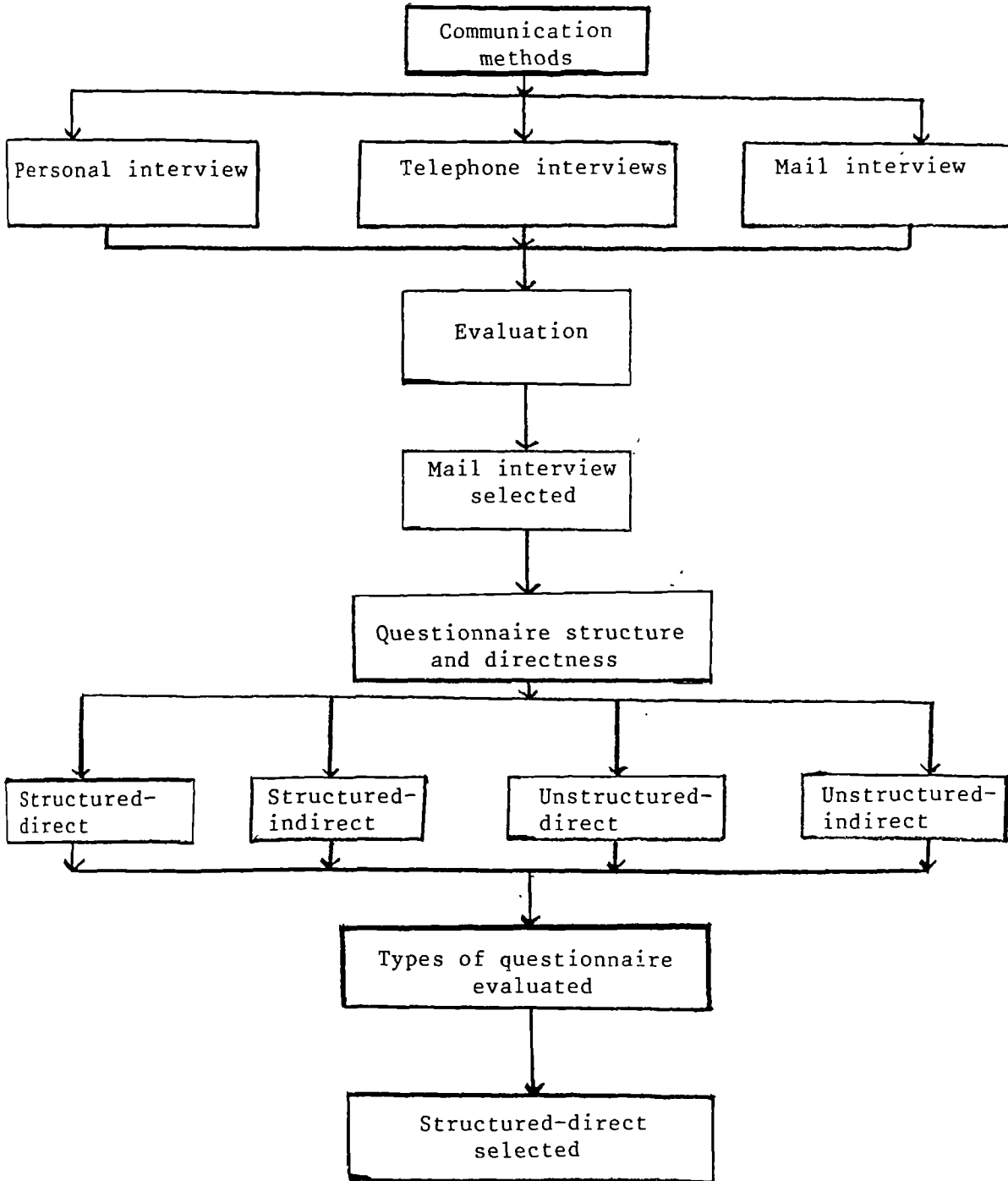
There are at least three methods available which can be used to conduct the questioning method, they are: personal interview, telephone interview and mail questionnaire (figure 5.3).

The mail questioning method which involves mailing the questionnaires to designated respondents with an accompanying cover letter, and requiring the respondents to complete the questionnaire at their leisure and mail their replies back to the research organisation (Churchill 1987) is selected for this research for the reasons which will be explained immediately.

Kanuk and Berenson (1975) summarized the advantages of mail questionnaires as: (1) the relative low cost, (2) geographic flexibility, (3) their ability to reach a widely dispersed sample without the attendant problems of interviewer access or the possible distortions of time lag, (4) respondents such as farmers, soldiers or busy executives can be surveyed with relative ease, (5) businessmen and academic researchers

FIGURE 5.3

SELECTING THE MOST APPROPRIATE COMMUNICATION METHOD



favour mail surveys for reasons of expediency, since data can be procured more quickly, more abundantly and more cheaply than when a personal interview is employed, (6) they are free from the costs and time consumption of interviewer bias or variability, (7) their relative or personal anonymity encourages respondents to freely divulge private, embarrassing or socially undesirable information and finally, (8) mail questionnaires tend to be more valid than either telephone or personal interviews because they enable respondents to check information by verifying their records or consulting with other members of the family, and because they permit a leisurely and thoughtful reply.

The major disadvantages as reported by Kanuk and Berenson (1975) related to the low response rates with attendant problems of response bias and non response bias.

The mail survey was selected (drop-off delivery, to be discussed later) for the following reasons:

1. The area and sample covered by this research are too wide to allow the researcher to conduct personal interviews. The study covered the entire country with a sample size of 1,000 respondents. Given the time and cost restrictions it is impossible for the researcher to perform personal interviews. More than that, it is also difficult to locate the address of the targeted respondent unless one is very familiar with that part of the city that the respondent lives in. (More discussion will be presented about this problem in the sampling section of this chapter.)
2. The use of telephone interviews was hindered by the fact that telephones are not widely used in Jordan especially in areas outside the Amman district, thus, this method was eliminated for this reason. More than that, the relatively lengthy questionnaire, which needs a minimum

time of 30 minutes to complete, made the use of telephone interviews costly and time consuming.

Consequently, the mail survey was the only option that could be used. However, in addition to the common disadvantages of the mail survey mentioned above, the application of this method also has other limitations in a developing country such as Jordan, they include:

1. According to the 1984 estimates of the Department of Statistics in Jordan, there are about 33.46% of the population who are illiterate in the category of 15 years old and over. This problem was aggravated when one found that the higher the respondents age, the higher the illiteracy rate (for example the illiterate percentage among the 50-54 group category was about 52.9%. For the segment 60-64 the illiterate level increased to 68%.
2. Houses are not numbered, city maps are not completed, names of the streets are not well displayed and they are not well known by citizens. All these problems contributed to the difficulty of locating the targeted respondent.
3. Home mail delivery is not widely spread in Jordan, and it is a common practice that a person uses his/her work place or the nearest grocery as an address for correspondence.

Those main obstacles in using the mailed questionnaire constrained the researcher's ability to distribute the questionnaire via mail. However, it was found that the use of a drop-off and pick-up method would be more suitable for this purpose. Volunteer students from Mu'tah University, Jordan, who are from various parts of the country, were used to deliver and pick up the questionnaires. This method has been used to overcome the mail survey limitations. The following are some of the advantages of the home delivery method as applies to this research.



1. Students were given instructions about the questionnaire and were instructed to give assistance to the respondents if they needed it. This helped in securing responses from illiterate and low educated respondents.
2. It was easier to locate the addresses of the targeted respondents, since the students were familiar with the places they distributed the questionnaire.
3. Using female students in distributing the questionnaire facilitated the women participation in responding to the survey. Keegan (1984) suggests that it is not an easy task to secure the female co-operation in responding to a survey study in the Middle East.
4. The use of a drop off delivery also had the advantage of increasing the response rate and it was found to be the most cost-effective approach. (Lovelock et al 1976).

#### 5.2.2 THE STRUCTURE OF THE QUESTIONNAIRE

Four types of classifications can be made according to the questionnaire structure and directness, they are: (1) structured-direct, (2) unstructured-direct, (3) unstructured-indirect and (4) structured-indirect (figure 5.3). Structure was defined by Churchill (1987) as the degree of standardization imposed on the questionnaire. Directness (disguise) is the amount of knowledge about the purpose of a study communicated to respondents.

The structured-direct technique is used in this study. This technique requires that the questions be asked with exactly the same wording and in exactly the same sequence for all respondents. The reason for this standardization is to ensure that all respondents are replying to the same question (Churchill 1987).

According to Kinnear and Taylor (1987) "Conclusive research projects typically require a structured-direct questionnaire. The standardized questions and fixed-response alternatives can evolve from previous research which used less structure techniques". The reason for choosing this method is summarized in its advantages "easy to administer, ease of data processing".

However, the structured-direct method is not without limitations. These limitations might be summarized in the following: (1) the respondents may not be able to provide the desired data, (2) they may not be willing to provide the data, (3) misunderstanding the questions may bias the data and, (4) the limited options available for the respondent to choose may affect the validity of the data.

Despite these disadvantages, it was found that the advantages of this method outweighed the disadvantages, for the present research. It was, therefore, decided to use the structured-direct questionnaire method, bearing in mind the serious disadvantages of the alternative method, which involved more cost in time and money.

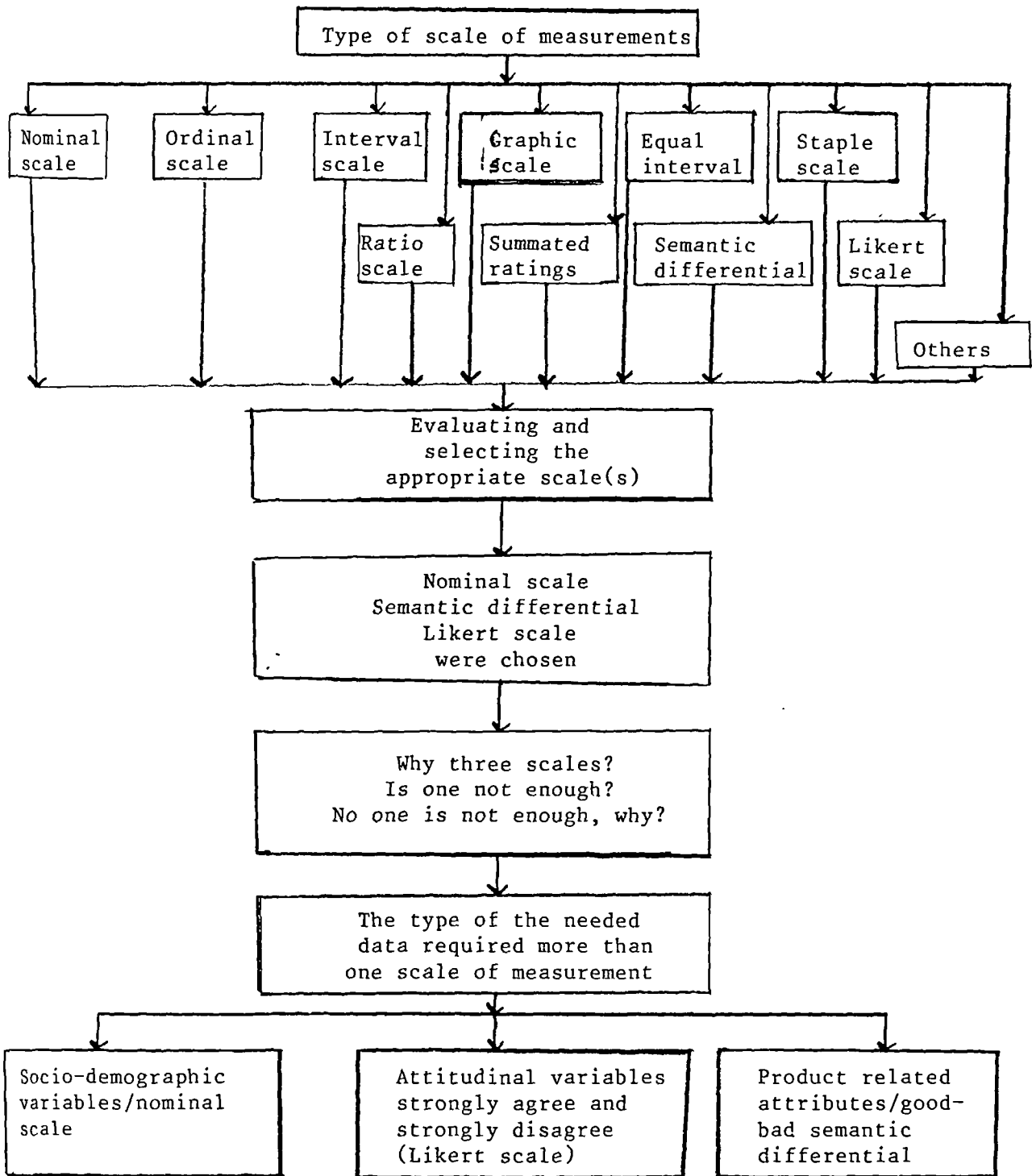
However, every care has been taken to reduce the effects of the disadvantages to the minimum level by careful wording of the questionnaire and the valuable use of the pre-test stage to administer the questionnaire in the best and most understandable manner.

### 5.3 SCALE OF MEASUREMENT

Several measurement scales are suggested in the marketing research literature (figure 5.4). Among these several scales of measurement, three types were selected for this research: the semantic differential, the Likert scale and the nominal scale. The reason for selecting three types of scales of measurement is related to the type of data required. The

FIGURE 5.4

THE SELECTION OF THE APPROPRIATE SCALE OF MEASUREMENT



product related attributes (good-bad) required a semantic differential scale, the attitude variables (agree-disagree) required a Likert type scale and the socio-demographic variables required a nominal scale.

The semantic differential scale of measurement was originally developed in 1957 by Osgood and Tannenbaum. The original usage of the scale was to investigate the perceived meanings of words and concepts. (Clevenger, et al. 1965.)

Parasuraman (1986) summarized the basic features of a typical semantic differential scale as:

1. It consists of a series of bipolar adjectival words or phrases (rather than complete statements) that pertain to the attitude object.
2. Each pair of opposite objectives is separated by a seven category scale, with neither numerical labels nor verbal labels other than the anchor labels.
3. While some individual scales have favourable descriptions on the right-hand scale, the other scales are reversed, with favourable descriptions operating on the left hand side.

According to Kinnear and Taylor (1987) the semantic differential scale is one of the most popular attitude measurement techniques in marketing research. Image research is one of the main applications of the semantic differential.

Although the seven categories (1-7) measured by the scale are assumed to have only ordinal properties; researchers typically assume the scale to have interval properties (Parasuraman 1986).

The reasons for the high use of the semantic differential scale in marketing research was summarized by Greenberg et al 1977 as: (1) the ease with which the scale can be developed, (2) the ease with which the

findings can be communicated and, (3) according to Kinear and Taylor 1987 the scale was found to be a discriminating and reliable research tool.

However, the semantic differential is not without limitations. These disadvantages relate to: (1) the difficulty of generating a useful and comprehensive set of adjectival pairs necessary for an effective semantic differential scale (Parasuraman 1986), and (2) the possibility that people tend to provide ratings more toward the middle of the scales and hesitate to express extreme views (Ferber et al 1964).

Despite the above mentioned disadvantages, which in fact are applicable to most of the attitude scale measurements, it was found that the semantic differential was the most suitable tool for this research in measuring the images of the products for the various countries. In addition to the advantages listed above, the semantic differential was found to be particularly easier to translate in to an Arabic language, without missing the equivalent meaning in English. This is obviously because translating one word or short phrase is easier than translating a lengthy sentence. However, the weaknesses of the technique were not ignored. The remedy for these limitations could be controlled by: (1) choosing the appropriate analysis techniques and, (2) taking proper action to improve the respondents understanding of the scale during the pre-test stage of the study, in addition to providing a lengthy and clear instruction with the questionnaire. It was argued by Churchill (1987) that "when combined with proper item analysis techniques the semantic differential seems to offer the marketing researcher a most valuable research tool".

The semantic differential scale was used in the first part of the questionnaire, this was intended to measure the consumers' perception of the quality, price and risk attributes of the various countries.

The scale was divided into seven points (1 to 7). One, represented the most negative perception of the attribute, while seven represented the most positive perception. The adjectives as well as the order of the countries was rotated to avoid the halo-effect bias (to prevent respondents from checking either the right or left hand sides without even bothering to read the descriptions) (Churchill 1987). However, for the purpose of the profile analysis, the right hand side of the scale always represents the favourable images, while the left hand side represents the negative images. This method was supported by Parasuraman (1986) who stated that "to facilitate interpretations of the profiles, one usually places all the favourable descriptions on the same side of these diagrams".

The second scale is the Likert scale. This was used to measure the consumers' attitudes toward a set of attitudinal questions. This scale was originally developed by Rensis Likert (1932) (Churchill 1987). The Likert scale involves a series of statements (or items) related to the attitude in question. Respondents are asked to indicate their degree of agreement or disagreement with each and every statement in a series by checking the appropriate cell.

The Likert scale consists of thirty-one statements related to various issues such as: patriotic variables, consumers' attitudes towards product quality control, price-quality, local firms' marketing practices, the prospects of the domestic product, and towards free trade, etc.

Although no strict limitations were specified in regard of the number of statements to be included in the Likert scale, which vary from study to study, Parasuraman (1986) suggested that a typical Likert scale has about twenty to thirty statements. Thus, it was not far from the typical size of the scale in using thirty-one statements.

The scale ranged from strongly disagree to strongly agree, which transformed to a scale of one to seven, where one was related to the strongly disagree dimension and seven to the strongly agree dimension. The original Likert scale consists of five points only, however, it is suggested that the scale could be used for more than five points (Boyd and Westfall 1972).

The main advantages and disadvantages of the Likert scale were summarized by Kinnear and Taylor (1987) as follows:

- Advantages - 1) It is reasonably easy to construct and administer
- 2) The simplicity of the instructions and the judgment task allow its use on mail surveys.

The major disadvantage of this type of scale lies in the argument that the Likert scale produces only an ordinal scale. However, many researchers believe that the Likert data closely resembles those of an interval scale, and so they prefer to use statistical techniques requiring interval data (Churchill 1987).

Nominal scale. This scale was used in the third part of the questionnaire, which was related to the need for information about the socio-demographic variables. Though this scale was considered to be the simplest type among the rest of the available scales, it was the only scale suitable for the kind of data needed for part three of the questionnaire. The numbers in the nominal scale cannot be used for normal arithmetic calculations, adding, subtracting, multiplying or dividing. This is because they represent only categories.

#### 5.4 QUESTIONNAIRE DEVELOPMENT

In previous discussions, it was indicated that the questioning method was found to be the most suitable method (for this study) for data

collection. The aim of this section is to give a brief presentation about the questionnaire development process.

Churchill (1987) suggested a systematic process for developing a questionnaire. These processes are presented in Figure 5.5.

Steps 1 and 2 were discussed in the previous sections. Step 3 determines the content of individual questions. The content of the questionnaire depends primarily on the type of data to be collected, on the data collection method, and on the ultimate use of the results. Since this study is concerned with the consumers' perception of the product quality, price and risk, it is necessary that these major attributes be covered in the questionnaire. On the other hand, since the multi-cue variable was used to investigate the above mentioned three attributes, it was also vital that the questionnaire covered the sub-variables which contribute to the evaluation of the quality, price and risk dimensions.

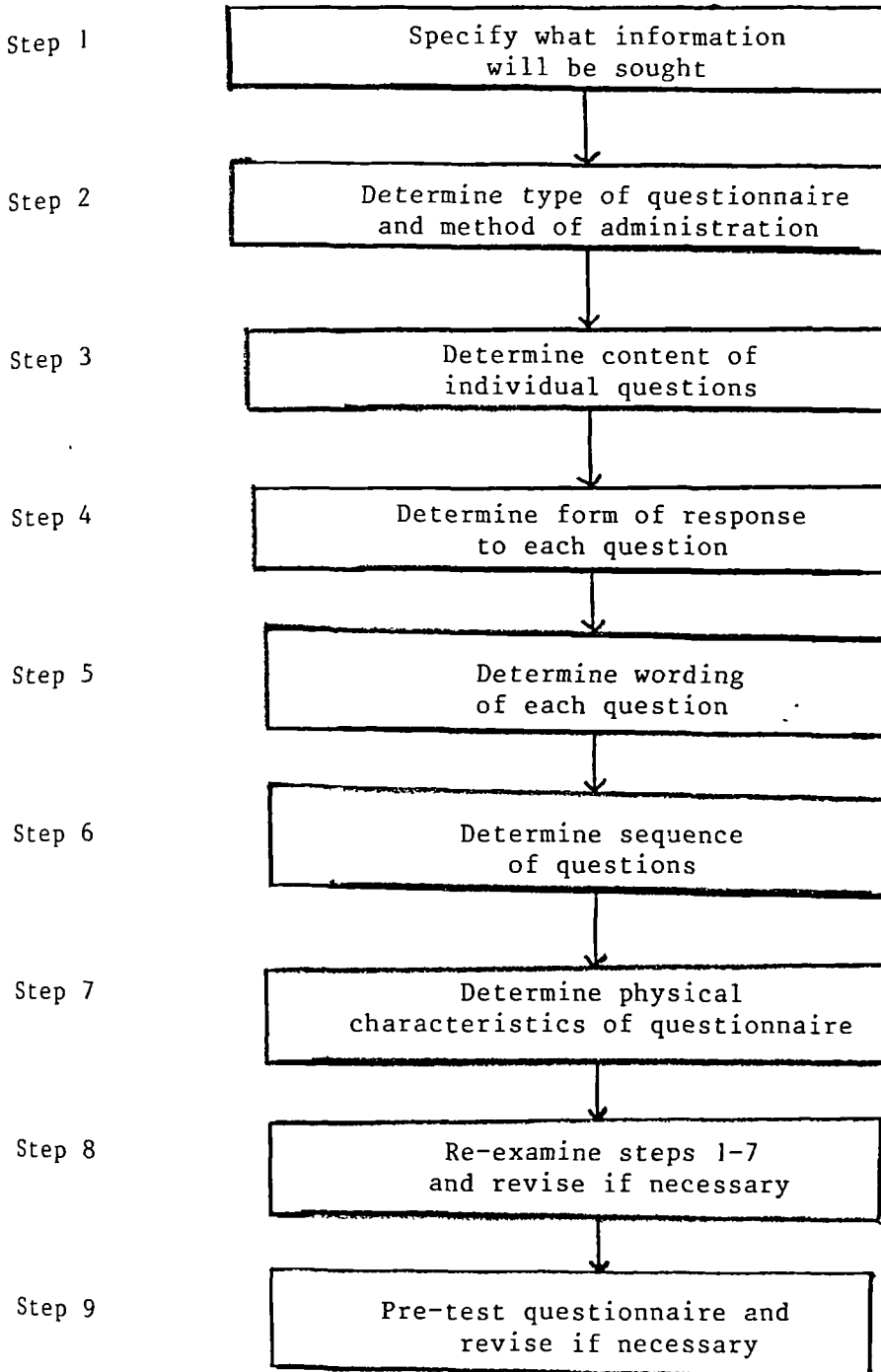
In such a situation, it was found more easier for the respondents to be asked about each sub-variable which was assumed that they will be able to answer the question. Asking technical questions which needed specialist knowledge to answer were avoided. However, most of the questions has been used in one way or another in previous studies and none of the researchers reported any significant difficulty in the ability of the consumers to answer such questions. The variables were drawn mostly from the relevant literature, with some other variables added during the pre-test stage of the study. All unnecessary or confusing questions were either altered or modified during that stage.

In addition to the quality, price and risk variables, socio-demographic variables were also included as classifying questions. This type of question was kept to a minimum, where only the variables which had some relevance to the Jordanian consumers were left in the



FIGURE 5.5

QUESTIONNAIRE DEVELOPMENT PROCEDURES



Source Churchill 1987, page 272

questionnaire. Questions such as marital status, occupation, number of children or the place of residence were omitted from the final questionnaire, this was done because most of the respondents did not answer such questions during the pre-test stage.

Step 4. Determines the form of response to each question: several forms of response were suggested in the marketing research literature, including: open ended questions, multichotomus questions, dichotomous questions and scales (Churchill 1987).

The open ended questions were excluded, because the structured direct questionnaire was selected. The response form widely used was the scale form. However, the multichotomous questions were used in collecting the required data for the socio-demographic variables. Also, it was used for one variable with an answer yes or no which related to the importance they gave to the product origin in the evaluation process.

Step 5. Decide on question wording. Since the semantic differential scaling for image variables was chosen, phrases which give a clear meaning were selected. This helped to avoid the lengthy sentences with the possibility of ambiguous words. Also, in using the Likert scale, every effort was made to ensure the clarity and understanding of the statements. Again, this was monitored during the pre-test stage.

Step 6. Decide on question sequence. Though several strategies were suggested to tackle the question sequence such as using simple, interesting opening questions, using the funnel approach, design branching questions with care, and place classification information last, place difficult or sensitive questions late in the questionnaire.

The researcher tried his best to apply at least some of these strategies, such as starting with the product quality attributes which consumers presumed to be more familiar, then their price perception and

risk perception. The attitude questions were presented in the second part of the questionnaire. This was done because it was felt that, at least for some consumers, these types of questions might be considered so sensitive, that they may not continue to answer the rest of the questions. The last section was about the socio-demography variables, and the last question was about the consumers' income, which could be considered the most personal and sensitive question. Though every effort was made to follow the logic of the questioning sequence, however, the nature of the study gave no room except to start asking relevant questions from the very beginning.

Step 7. Determine physical characteristics. The questionnaire was typed and revised several times, and it was given to professional people before it was copied and distributed. When the questionnaire appeared to have a satisfactory appearance, it was copied and then used in the pre-test stage. All the comments received whether relating to the appearance of the questionnaire or the wording of some parts, were considered when preparing the final copy. The only complaint which could not be rectified was with regard to the length of the questionnaire. It was a very lengthy questionnaire, but all the variables covered were vital for the study and it was not possible to omit any of them. However, the usable response rate (63.9%), which in comparison with similar studies can be considered to be satisfying, indicates that the questionnaire was manageable.

Step 8. Re-examination and revision of the questionnaire. Churchill (1987) suggested that "each question should be reviewed to ensure that the question is not confusing or ambiguous, potentially offensive to the respondent, leading or bias inducing and that it is easy to answer".

As indicated in stage seven, the questionnaire was reviewed by the researcher and by members of staff at the Department of Administrative

Sciences at Mu'tah University, Jordan. All comments and suggestions were highly welcomed, until the questionnaire reached the optimum possible accuracy. More than that, the questionnaire was again revised after the pre-test stage.

Pre-testing. A convenient sample of 100 respondents from Mu'tah Town, Jordan were used to test the questionnaire.

The respondents were assumed to be similar to the final respondents, who were expected to respond to the final questionnaire.

The response rate for the questionnaire at this stage was very encouraging. Eighty-seven questionnaires were returned within the cut off period of ten days, however, of these returned questionnaires, 13 were only partially filled in, which seriously affected their use in any final study. Another 8 questionnaires were also partially filled, but the omitted variables were within the tolerable limit, which permits their use in further steps.

Due to the non availability of sufficient computing facilities in Mu'tah University (during the period of data collection from 18th November 1988 to 31st January 1989, personal computers were the only computing facilities in the University and the SPSSX package needed to perform the computational operations for this research was not working). It was not possible to apply the statistical techniques on this data. However, the space allowed for the respondents' comments and the inspection of the most omitted answers, gave the researcher some idea about the prospects of the research performance.

As a result of the pre-test, the questionnaire was re-edited and some of the questions relating to the demographic variables or the attitude variables were omitted from the questionnaire. The time limit was very strict which did not allow the researcher to conduct another pre-test

study. However, the questionnaire was given to a limited number of undergraduate students during the class time period. They were asked to read the questionnaire and ask any questions should there be any ambiguous questions. The feedback was satisfying, thus, it was encouraging to carry on to the final stage. The distributed questionnaires carried two telephone numbers where the researcher could be reached if the respondents faced any difficulties in filling the questionnaire. In addition to that, respondents were requested to contact the students who delivered the questionnaires and seek their help, if needed. Students were trained to understand the questionnaire and instructed to give the required assistance to the respondents.

It is worth mentioning that the original draft of the questionnaire was in English, while most of the respondents were not familiar with that language. Thus, the need for translating the questionnaire to a language that could be understood by all of the respondents was unavoidable. Moreover, the interpretation and the writing of the thesis had to be in English again. This necessitated the need that the Arabic version should be equivalent to the English version (which implied that careful consideration should be given to the translation process).

Douglas and Craig (1983) suggested three main procedures most commonly used in international marketing research, they are: (1) direct translation, (2) back translation and, (3) parallel translation.

In the first method (direct translation) a bilingual translator translates the questionnaire directly from a base language in to the desired language. In the back translation method, the questionnaire is translated from the initial or base language by a bilingual who is a native speaker of the language into which the translation is to be made. This version is then retranslated back into the original language by a

bilingual who is a native speaker of the initial language. This method has an advantage over the previous method in that it is useful in identifying translation errors and the competency of a translator.

In the third method "parallel translation", a committee of translators conversant with the two languages employed compare the various translated questionnaires. The adequacy of alternative versions could then be discussed until agreement was reached on a final version. The main disadvantages of this method is related to the lack of formal control over translations and the personalities which may tend to dominate. However, it appears that this method is useful in the international marketing research context, especially where a free and less exact translation is required (Douglas and Craig 1983).

In this research, the following procedures in translating the questionnaire into the Arabic language were used:

1. The questionnaire was translated from English to Arabic by the researcher
2. The English and Arabic drafts of the questionnaire were given to the members of the department of English staff at the University of Mu'tah to revise the Arabic translated version of the questionnaire and to make sure of its equivalence to the English version (the origin)
3. The English and the modified Arabic version of the questionnaire were also revised by members of the Administrative Science department staff in the same University to ensure that the expressions in the Arabic version were equivalent to the general terminology used in the marketing sciences courses in Arabic language
4. The Arabic version of the questionnaire was revised by members of staff in the Arabic literature department at the same University to edit any mistakes related to the grammatical usage of the Arabic language.

Having done that, the questionnaire was ready for use in the pre-test stage. Despite the omission of a few variables or the addition of some other variables, the questionnaire was applied in the final stage without any major modification.

## 5.5 SAMPLING PROCEDURES AND THE SELECTION OF THE APPROPRIATE SAMPLING METHOD

### 5.5.1 SAMPLING PROCEDURES

The marketing research literature suggested several methods for sample drawings (see for example Douglas and Craig 1983). Basically, these techniques can be classified into two major classifications, non probabilistic sampling and probabilistic sampling (figure 5.6). The major distinction between the two kinds of sampling is that in probability sampling, each respondent in the target population has an equal chance of being in the sample. However, non probability samples involve personal judgment somewhere in the selection process, it involves the establishment of a criteria on the basis of which respondents are to be selected. (For more discussion about these types of sampling see any of the marketing research texts, i.e. Parasuraman 1986, Churchill 1987, Kinnear and Taylor 1987 and Douglas and Craig 1983).

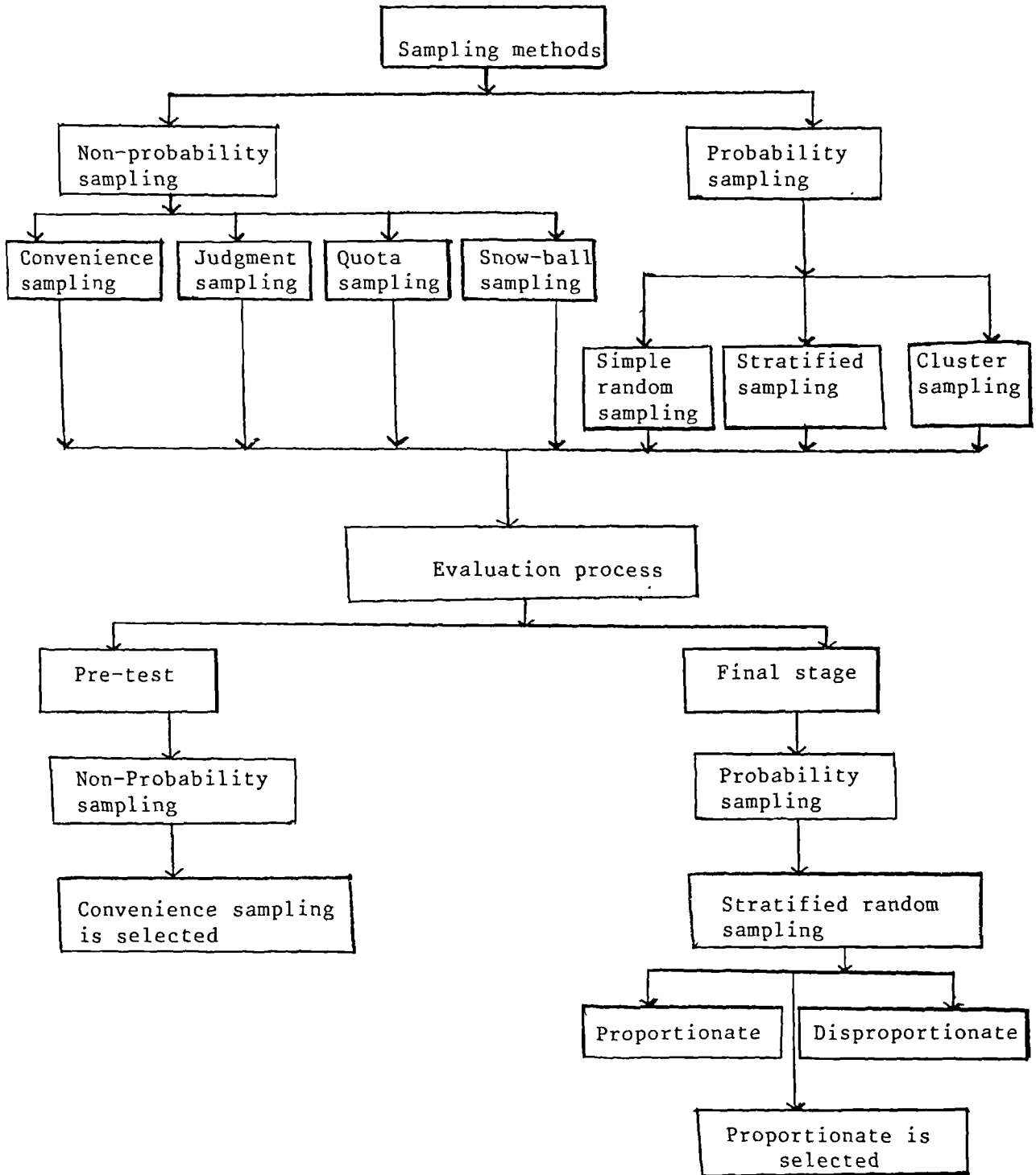
### 5.5.2 SELECTING THE APPROPRIATE SAMPLING METHOD

For the purpose of this research, it was found that it might be more desirable to have a probabilistic sampling method. This is due to the serious weaknesses related to the non probabilistic methods (Churchill 1987).

However, since this was the first study of this kind to be undertaken in Jordan, it was decided to develop a sampling method which avoids the shortcomings of the non probabilistic methods. The difficulties of applying the pure random sampling methods in marketing research in general were

FIGURE 5.6

SELECTING THE APPROPRIATE SAMPLING METHOD





taken into account. The specific difficulties which related to the developing countries, of which Jordan is no exception, were considered also. These include: (1) the non-existent or poor sampling frames, (2) the inadequate demographic statistics, (3) street maps are not available or are out of date, (4) houses may not be numbered and, (5) dwellings may be occupied by several family units.

Due to these problems, it is often suggested by some researchers in the international marketing literature that non probabilistic sampling tends to be used frequently in international marketing research (Douglas and Craig 1983).

Inspite of all these difficulties, the method for developing a sample resembling the stratified random sampling was found in the following way:

1. The kingdom was divided into three main regions; the north, middle and the south.
2. The major cities in each region were selected (the north: Irbid, Ramtha, Jarash, Mafraq and Ajloan, the middle; Amman, Salt, Zarqa and Madaba, the south; Karak, Ma'an, Tafielah and Aqaba). Although these cities were not chosen on a random basis, they met the certain criteria to be included in the study based mainly on the availability of electricity which was a precondition for the use of electric appliances and the availability of retailing stores for selling these types of products.

It is assumed that consumers from towns and villages without electricity or with self generating electricity or recently connected with electricity will not have enough information to answer the questions of the research. However, according to the officially estimated population of Jordan 1987 these cities constitute about 80.36% of the kingdom population (Department of Statistics : Statistical Year Book 1987).

Having selected the cities where the questionnaire needed to be distributed, the next step was to decide the best method of choosing a representative sample of respondents from these cities. It was decided to use the proportionate stratified sampling method. This implies that the questionnaire needed to be distributed relatively in accordance with the population of these cities. Thus the questionnaire was distributed in the following percentages: 23% in the north region, 66% in the middle region and 11% in the south region.

However, the remaining main issue which needed to be solved was the development of an adequate sampling frame required for the random sampling process. The traditional method, mostly used in developed countries, the telephone directory was unfortunately found to be inadequate in Jordan for the following reasons:

1. The number of telephone owners is very limited in Jordan. Until very recently, it could have taken several years on the waiting list before one could acquire a telephone line.
2. The directory only lists the name of the subscribers and their telephone number, but no addresses were shown, which excludes the possibility of using it to locate the addresses of the respondents to be contacted by mail.

The other method that one could adopt is the consumer panels, available in developing countries. This method, as far as the researcher can ascertain is not available in Jordan.

In the light of the information availability and constraints in Jordan, it was found that the best method to be used here was the municipalities' records of households, which is very accurate due to its

use for tax purposes. The access to those records is very strict, however the researcher was able to get the municipalities' co-operation through the mediation of Mu'tah University, a formal institution of Jordan.

## 5.6 THE COUNTRIES AND PRODUCTS SELECTED FOR THE STUDY

### 5.6.1 THE SELECTION OF THE PARTICIPATING COUNTRIES

In choosing the countries for this study, one faced the question of what was the basis for selecting the appropriate countries? Does one need to choose countries with similar characteristics to those of Jordan, in terms of population, area, political system, culture, industrial development and so on? Or does one need to select countries according to their participation in the Jordanian market (trade exchange: ie. export import)? Or does one need to select the countries which sound familiar to the Jordanian consumer?

However, since the Jordanian market is basically open for all sources of products with many different origins, it was found to be more reasonable to select countries with various stages of development, in different locations in the world with different cultures. Thus the U.S.A., U.S.S.R., U.K., Japan, Romania, Taiwan and Egypt were selected.

These countries can be classified according to different criteria, for example: level of development, economic system, culture, geographic location.

1 - STAGE OF DEVELOPMENT According to Keegan (1984) the various countries in the international markets are at different stages of development with correspondingly different characteristics. These stages can be classified into five levels of development with accompanying income ranges. These five categories are: (1) pre-industrial countries with an income under \$330 per capital, (2) underdeveloped countries with an income of \$330-759,

(3) developing countries with an income of \$760-3249, (4) industrialized countries with an income of \$3250-7589 and (5) post-industrial countries with an income of \$7590 and over.

The countries selected for this study belong at least to four of these five categories, as follows:

Egypt from the less developed countries group

Jordan, Romania and Taiwan from the developing countries group

U.K. and U.S.S.R. from the industrialized countries group

U.S.A. and Japan from the post industrialized countries group.

However, the pre-industrial countries were excluded from this study for the simple fact that they were not well known in the Jordanian market especially for the product category (major electric and gas appliances) under study.

2 - ECONOMIC SYSTEM According to the economic system, the countries can be classified into two major categories, they are : (1) centrally planned - communist, socialist, and (2) capitalist - free enterprise. The selected countries fall into these two systems as follows:

U.S.S.R., Romania and to some extent Egypt can be classified as centrally planned countries

U.S.A., U.K., Japan, Taiwan and Jordan can be classified as capitalist - free enterprise - countries

3 - GEOGRAPHIC LOCATION The countries are from different regions in the world. The region distribution of the countries can be explained as follows:

U.S.A. is located in North America

U.S.S.R. and Romania are both from Eastern Europe

U.K. is a Western European country

Japan and Taiwan are Far Eastern Asian countries

Egypt is a Middle Eastern, North African country

and finally Jordan is a Middle Eastern Asian country.

4 - TRADE PARTNERSHIP All countries are, though on different levels, trade partners with Jordan. This implies that the products of these countries are relatively known in the Jordanian market. The combination of the imported goods from these seven countries contributed to approximately 28% of the imported products from the entire world (Statistical Year Book 1987).

5 - CULTURE All countries are assumed to have different cultures to that of Jordan except perhaps Egypt, the only Arabic country included in the study, which might be assumed to have a similar culture to that of Jordan at least on three dimensions, ethnic, language and religion. They are both related to the Arabic world, speak the same language (Arabic) and for most of the population, have the same religion (Islam).

Thus, the countries chosen for the study were heterogeneous in many of the above variables. This includes the economic stage of development, the geographic location, economic system, culture and trade partnership with Jordan. This will give more depth to the investigation of country of origin impact on product evaluation. However, none of the above criteria was addressed directly in the questionnaire, the evaluation was based on the individual ratings for the products of each country.

### 5.6.2 THE SELECTION OF THE PRODUCT TO BE TESTED IN THE STUDY

According to Krishnakumar (1974), the product to be selected for further investigation must meet the following criteria:

1. The product classes should be familiar and well known to the respondent. If they (the products) are not known, the respondent is likely to be unable to provide accurate and reliable answers to the questions asked.
2. Although all of the products may not, in fact, be manufactured by the selected foreign countries, it must be reasonable that the subjects assume this to be the case.
3. There should not be any well-known domestic or foreign brand names associated with the products, since the study investigates the consumers' perception of the products of the various countries, at the product rather than the brand level.

Based upon these criteria, it was found that the major electrical and gas appliance product class was more suitable for the purpose of the present study. In addition to the above criteria, the appliances product class (as defined by this research to include refrigerators, washing machines, dishwashers and ovens) was selected because they are expensive, infrequently purchased items and hence more likely to stimulate the consumers willingness to evaluate their source, country.

Another issue related to the selection of the product for investigation, was in regard of choosing a specific product, say washing machines, or even choosing a specific type of washing machine, say the small type of machine, or to choose a broad category, say consumer durables. It was found that choosing a specific product would be more precise and would give results that actually relate to this specific product as it related to a specific country. However, the researcher was

faced with a situation in which some of the countries would be under represented in one type of the product and other countries would be over represented. The other alternative which was related to a broad category such as consumer durables, was found to be more suitable in that each country would have at least one product which showed its strength. This alternative was very wide and restricted the ability to make specific references in comparing the products of the various countries.

The selection of a sub-group among the consumer durables was found to be more suitable in that it established the basis for the consumers to evaluate the products of the various countries. Thus, the electrical and gas appliances defined as refrigerators, washing machines, dishwashers and ovens, were the products chosen for the study. The sub-class of product has the advantage of specifying the product and the advantage of more than one kind of product to be evaluated discussed above.

#### 5.7 DELIVERING THE QUESTIONNAIRE AND FIELD WORK

As indicated earlier, the questionnaire delivery was not an easy task. This was due to the limitations of using the mail delivery in Jordan. To solve this problem, the researcher sought the help of Mu'tah University (Mu'tah University is the institution who gave a scholarship to the researcher and supported the research). With the co-operation of Mu'tah University the assistance of volunteer students was secured. Those students were familiar with the areas where the questionnaire needed to be distributed. The students were assigned to groups according to their place of residence and they were given the list of the names of the targeted respondents. Also, they were given enough information about the questionnaire, to assist any respondents who sought their help. Two weeks were given to return the questionnaire. As a precautionary measure,

students were asked to check the names of the respondents who received the questionnaire, those who were not available, those who returned the questionnaire and finally, those who failed to respond. To avoid any other pressure on the respondents, the students were told to try to arrange with the respondent for a suitable time to report again and pick up the questionnaire and not to contact the respondent in regard of the questionnaire more than three times during the two weeks excluding the first visit. This was to avoid any hasty response from the respondent to the purpose of getting rid of the questionnaire.

The cover letter. To establish more rapport between the respondents and the researcher, a covering letter was attached with the questionnaire explaining the importance of the study and seeking the co-operation of the respondent (appendix A). The letter stressed the confidentiality of the information given by the respondent. The name, address, and telephone number of the researcher was given in the letter and respondents were asked not to hesitate to contact the researcher for any questions, suggestions or comments. Respondents were also informed that the questionnaire would be delivered to them by volunteer students of Mu'tah University.\*

---

\*It was not possible for the researcher to distribute the questionnaire personally. This was due to the wide area covered by the study and the limited time allocated for the field study. However, every effort was made to control the distribution and collection of the questionnaire and to ensure that the processes were being performed as planned.



The letter also stressed that this study was supervised and supported by two Universities, Mu'tah University and the University of Sheffield, U.K. The covering letter carried the formal heading of Mu'tah University (a copy of the covering letter in English and the translation in Arabic is attached in appendix A).

The instruction sheet. To make sure that the respondents understood the questionnaire and the way it needed to be completed, a page of instructions were attached with the questionnaire. The first thing the instructions did was urge the respondent to read them before answering the survey questions. Then, it showed the respondent an example of how to complete the questionnaire. Respondents were told that they were not expected to give a right answer, because there was no right answer. They were told that they did not have to consult any references, whether personal or specialized sources (a copy of the instructions and the translation in Arabic is attached in appendix B).

Field work. Having prepared the questionnaire form (Appendix C) and obtained the targeted respondents lists of a total of 1,000 respondents, which constitute the total sample, the fieldwork was started. The researcher accompanied members of staff to the classrooms and presented the students with the questionnaire forms. Students were asked to read the questionnaire and ask any questions related to it. Efforts were made to explain the questionnaire and to ensure that the students understood the questionnaire, so they were able to give assistance, if needed, to the respondents. A co-ordinator from the students was selected to take the names of each of the volunteer students and the number of the questionnaires assigned to him/her for distribution. The co-ordinator was also instructed to record the number of the returned questionnaires from every student and to hand the returned questionnaires to one of the

members of staff. Female students were asked to distribute the questionnaire to the lady of the house and they were encouraged to collect as much information as possible from the ladies to increase the female participation in the survey.

#### 5.7.1 THE RESPONSE RATE

One thousand questionnaires were given to the students to be distributed to the designated respondents in the various cities in the kingdom (figure 5.7).

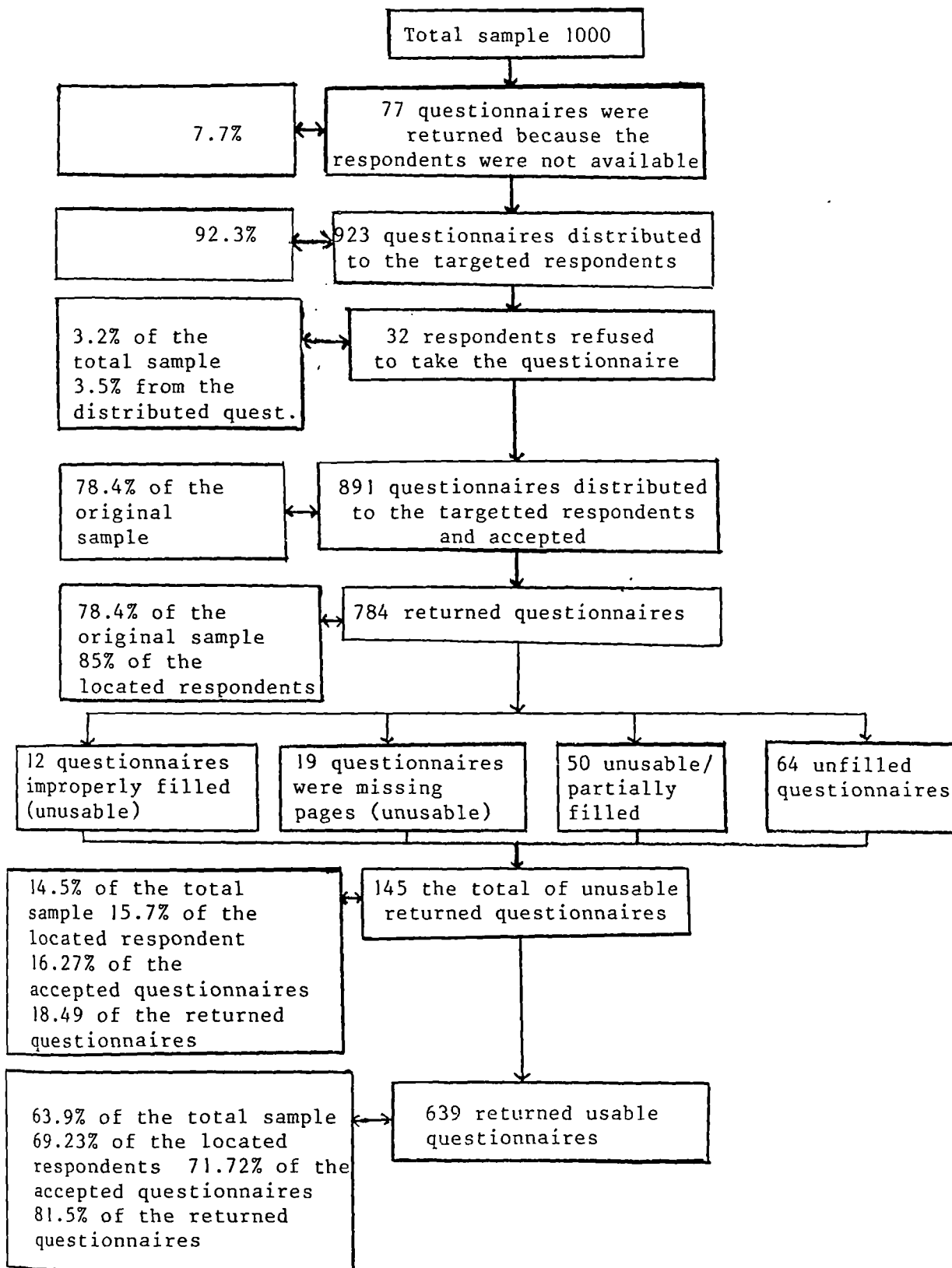
The students were successful in locating 923 questionnaires to the pre-specified respondents, 77 questionnaires were returned because the students could not find the respondents at home after three calls at three different times. No further action was taken to replace the unavailable respondents, this was due to the difficulty of contacting the municipalities again for new names. Also it was reported by Churchill (1987) that substituting not at home by more-at-homes is a very poor way of handling the not at home condition (Churchill 1987, p.509). However, it was found that this percentage (7.7% of the total sample) was reasonably low and was not considered serious enough to be worth further effort, especially with the limited time available.

In addition to the 77 not at home respondents, 32 questionnaires were returned because the respondents refused to take them and to co-operate in this matter. Thus, a total of 891 questionnaires were distributed and accepted by the respondents.

After three weeks, the students were able to return 728 questionnaires and another 56 questionnaires were sent by mail directly to the researcher's address at Mu'tah University. Thus, a total of 784 questionnaires were returned during the data collection period, which

FIGURE 5.7

THE DETAILS OF RESPONSE RATES AT VARIOUS STAGES



was extended one extra week to make it three weeks instead of two. In this case, the response was 78.4% from the total sample or 85% from the distributed questionnaires.

However, in checking the returned questionnaires, it was found that only 639 questionnaires could be used in the analysis or 63.9% of the total sample (71.72% of the distributed questionnaires or 81.50% of the returned questionnaires). Thus, 145 questionnaires were rejected for the following reasons:

64 questionnaires were returned blank

50 questionnaires were only partially filled, most of the parts were returned unanswered.

19 questionnaires were returned with one or more missing pages.

12 questionnaires were haphazardly filled in (ie. giving number seven for all countries, for a set of variables, 3 for the entire countries for another set of variables and so on).

Thus the usable questionnaires were 639 which constitute 63.9% from the total sample or 71.72% from the actual distributed questionnaires. The unusable questionnaires percentage was 18.49% from the total of returned questionnaires.

The response rate was considered to be relatively high even by the developed countries' standards in which a response rate of as low as 30% was reported (for example see Sayadian 1989 and Lovelock, et al. 1976).

Lovelock et al (1976) reported that the response rates to mail survey vary widely depending on such variables as: (1) the topic, (2) the length of the questionnaire, (3) the characteristics of the sample population, (4) the degree of personalization, (5) the appearance of the questionnaire

itself, (6) the class of mail and types of stamps used, (7) the provision of pre-paid stamps, (8) pre-addressed return envelopes, (9) the use of advance and follow up letters, and (10) monetary incentives.

Most of the above methods were found not to be applicable in the current situation which restricts their use for generating a higher response rate. In addition to not using any of the above methods, except perhaps the covering letter, the questionnaire was fairly lengthy. However, the reasonably high response rate was mainly attributed to the personal delivery and collection of the questionnaire.

Lovelock et al (1976) concludes that personal delivery and collection of self administered questionnaires appears to be a particularly appropriate method in surveys involving long and possibly complex questionnaires, requiring both substantial unit mailing expenses and a significant effort for respondents to complete. According to the authors, personal delivery, by partly trained survey takers, can be expected to yield a higher response rate than mail delivery. The personal delivery has an advantage of allowing greater control over sample design. It gives a more complete and up to date identification of subjects' geographic locations as well as selective elimination of the subjects outside the pre-defined sample frame on demographic, behavioural or object ownership criteria (Lovelock et al 1976, p.363).

It is the opinion of the researcher that the personal delivery of the questionnaire might be the more appropriate method for the case of Jordan, this is due to the well documented difficulties of doing marketing research in developing countries (see for example Kaynak, 1982). In this research the personal method might be the only method available with the given constraints in regard of the country, the people and the researcher's time and financial resources. The country constraints

related to the communication infrastructure in which the mail service was not very effective in distributing the mail to the targeted population. This is in addition to the difficulty of correctly identifying the proper address of the respondent. With regard to the people, the high illiterate level and the non-common use of surveys, will have limited the returned questionnaire. Finally, the expenses to cover the postal fees, given the large size of the questionnaire, and the number of respondents, was a financial constraint which was not covered by the researcher's grant.

#### 5.7.2 PREPARING FOR THE DATA ANALYSIS

Before starting the actual process of data analysis, it was necessary to undertake the preliminary analytical steps, to ensure the suitability of the data for the pre-specified analytical techniques. The process of preliminary data preparation include: editing, coding and tabulation.

Editing. The term editing, as used in marketing research, refers to the process of examining completed questionnaires and taking whatever corrective action is needed to ensure that the data is of high quality (Parasuraman 1986). Editing is often done in two stages: the field edit and the central-office edit. The field edit is a preliminary edit, designed to detect the most glaring omissions and inaccuracies in the data.

In this research, although the importance of the field editing was highly appreciated, it was kept to the minimum for the following two related reasons:

1. In no way had the researcher the ability to control the field work in the whole kingdom. This implies that this type of editing should be delegated to the interviewers (the volunteer students).

2. The researcher was very careful to keep the students interference in the data collection to the minimum possible. They were instructed to only deliver the questionnaire, to give help in explaining the questions if they were asked to and to pick up the completed questionnaires. They were asked not to fill nor to review any questionnaires.

Office editing. This involved a more complete and exacting scrutiny and correction of the completed returns (Churchill 1987). Five areas in which the editing function should be concerned, they include: legibility, completeness, consistency, accuracy and response classification (Kinnear and Taylor 1987, pp.460-61).

In the present research, most of the editing work was undertaken by the researcher personally. All questionnaires were inspected to ensure that they were properly filled in and no significant omissions were allowed. The partially filled in questionnaires in which many questions were left unanswered were ignored. However, if the omitted questions were few, the questionnaires were allowed to be used in the final analysis and the empty answers were assigned to the missing values. Also, if the questionnaire appeared to be hastily filled, (for example assigning 7 or 4 for the entire variables to the entire countries) then the questionnaire was eliminated from the final study. In some rare cases, the respondents were checking all or most of the numbers for some or all countries, example checking the numbers 1, 3, 5, and 7 for the Jordanian product durability. In this case, if this happened to only a few variables, then the answers were assigned to the missing value but if this happened in many or all cases, then the questionnaire was scrapped. Another problem detected through the editing related to the fact that some of the

questionnaires were returned with one or more empty pages. These questionnaires were eliminated from the analysis. All the pages of the questionnaire were attached and double checked.

CODING AND ENTERING THE DATA. Coding means translating answers into both class membership and into a symbolic representation of this membership - usually a column and position designation on a punch card used for machine tabulation (occasionally coding is used in manual tabulation, but this is more a use of shorthand than of truly symbolic codes). (Ferber et al 1964 p.391.)

In this case, the coding was done manually. There was little difficulty in coding the questionnaire, since most of the questions were to be rated in a scale of seven. (All of the questions except the socio-demographic variables and V32 related to the product origin importance, which required yes or no answers, were either a semantic differential or Likert type scale.)

In the semantic differential scale, number one was assigned to the most negative rating, number seven to the highest favourable rating and nought was assigned to the missing value. In the Likert scale, one was assigned to the strongly disagreeing dimension, while seven was assigned to the strongly agreeing dimension and again nought was assigned to the missing value. The numbers from two to six related to the various evaluations between the two extremes (1 and 7).

In regard of the socio-demographic variables, numbers were given according to the order of the sub-category, for instance the question in regard of the respondent gender was ordered as male or female. Male was assigned number 1 and female was assigned number 2. The same was applied to the rest of the socio-demographic variables. With regard to V32 which



required the respondents to answer the following question "do you think the origin of the product is important in the overall evaluation of the product? yes or no". The first choice yes was given number 1 and no was given number 2.

Each edited and coded questionnaire was transferred to the Coding Sheet. Every completed and edited coding sheet was sent directly to the computing department to be entered into the computer and copied on computer diskettes. The task would have been difficult without the assistance of the Head of the Natural Sciences department and the Head of Computer Services branch. They instructed the laboratory assistants to give first priority to entering the data. With their help it was possible to complete the data entry only one more week after completing the transfer of the data. During that extra week, the work the researcher had to do was to edit the printed data with the coding sheets and to ensure their equivalency.

#### 5.8 SUMMARY OF THE CHAPTER

In this chapter the various processes of selecting and designing the research instrument, as well as the data collection procedures, were explained. Although the secondary data sources are always important, it is not always sufficient, to resolve the research problem. A review of the main data collection methods including: observation, experiments and questioning, have been presented.

Questioning was the method chosen for this research and a justification for using this method rather than an alternative method was made. The advantages and disadvantages of the different methods were also discussed. This indicated that the questioning method was the most suitable method for this research. However, the questioning method was not free from

drawbacks. These drawbacks and the measures taken to reduce their impact were presented in the chapter. The various methods of questioning techniques (direct interviews, telephone interviews and mail questionnaires) were also discussed. Mail questionnaires were found to be the best method for this research, considering the population profile and the country's development at communication infrastructure.

Several forms of questionnaires were looked at including: direct non-structured, indirect non-structured, direct structured and indirect structured. On the basis of relative advantages and limitations, it seemed that the direct structured form was the most suitable form for this research. Several forms of measurement scales were also explored. The reasons for selecting the semantic differential, the Likert and the nominal scales for various parts of the research, were explained.

This chapter deals also with the issue of sampling. The methods of non-random and random sampling were introduced. A proportionate stratified random sampling was selected for this investigation. The process followed in developing a sample frame and research administration was explained in some detail also.

The difficulty of using the mail services in Jordan led the researcher to use the personal delivery and pick up approach. This method proved to be suitable and generated a sound response rate in comparison with a possible alternative response rate to be generated by mail services.

The questionnaire development stage/phase was explained in this chapter. The various steps suggested by the marketing research literature for developing a sound questionnaire was followed. The pre-test step of the questionnaire proved to be useful in eliminating, adding or re-wording

some of the questions. Finally, the stages of data preparation for final analysis were explained. These processes include: editing, coding, transferring the coded data to the code sheet and data entry.

In Chapter 6 the research methodology is explained. The various methods used in the analysis including the univariate, bivariate and multivariate techniques were discussed. The reasoning for using the specified methods to achieve a specific objective are given.

CHAPTER SIX  
RESEARCH METHODOLOGY

- 6.1 Introduction
- 6.2 Classification of Statistical Techniques
- 6.3 The Statistical Methods Used in the Study
  - 6.3.1 Chi-Square Test
  - 6.3.2 The Kolmogorov-Smirnov Test
  - 6.3.3 The T-Test
  - 6.3.4 The F-Test
  - 6.3.5 The Spearman Rank Correlation Coefficient
  - 6.3.6 Analysis of Variance
  - 6.3.7 Discriminant Analysis
  - 6.3.8 Factor Analysis
  - 6.3.9 Cluster Analysis
  - 6.3.10 Profile Analysis
- 6.4 Summary of the Chapter

## 6.1 INTRODUCTION

This chapter explains the research methodology used in the study. Its aim is to give a brief explanation of the statistical techniques used in achieving the research objectives and hypotheses testing. The primary purpose of this research study is to compare the Jordanian consumers perception of the domestic product quality, price and risk attributes with the same class of product manufactured in selected foreign countries. The comparison is based either on the aggregate image or in each attribute. The domestic product is compared to that of foreign, developed, developing and each of the participating countries.

Moreover, the research is designed to investigate the relationship between the consumers socio-demographic variables and with their perception of the domestic and foreign product attributes.

The various processes for the design of the questionnaire, data gathering and data preparation for the final stage of the analysis were fully explained in the previous chapter.

## 6.2 CLASSIFICATION OF STATISTICAL TECHNIQUES

The marketing research literature suggested different methods for data analysis which can be classified according to the type of data and number of variables, into univariate, bivariate or multivariate techniques. The univariate technique is used if there is a single measurement of each of the Kth sample objects, or if there are several measurements of each of the Kth observations, but each variable is to be analysed in isolation. The central tendency measures (mean, median, mode) and the measures of dispersion (standard deviation, relative and absolute frequencies), as well as the t-test, F-test and chi-squared are among the suggested techniques which can be used with the univariate data.

The bivariate data analysis allows the researcher to examine the interaction between variables taken two at a time. As for example the investigation of the relationship among pairs of variables. Among the suggested bivariate techniques are the These techniques include: linear correlation coefficient, rank correlation coefficient ( $\tau$ ), contingency coefficient  $\lambda$ , t-test on regression coefficient, Man-Whitney' U-test, Kolmogorov-Smirnov test and chi-square test and others (Kinnear and Taylor 1987). Multivariate analysis is concerned with the investigation of interaction among a set of variables. Multivariate analysis techniques are distinguished from the univariate and bivariate methods by their focus on more than two variables at a time. The multivariate techniques can be classified as either dependent or independent. The dependent methods imply that one or more variables are specified as being predicted by a set of independent variables, while the independent method implies that there is no variable selected as being a dependent variable. The dependence methods might include: analysis of variance (ANOVA), analysis of variance and covariance (ANCOVA), multiple regression, automotive interaction detection (AID), multiple classification analysis (MCA) and discriminant analysis (DA). The independence methods might include: factor analysis, cluster analysis, latent structure analysis and non-metric multidimensional scaling.

The decision was made in this research to use a combination of the selected types of the above techniques. From the univariate, the mean the chi-squared and Kolmogorov-Smirnov tests were utilised. From the bivariate, the t-test, the F-test and the Spearman correlation coefficient were used. Finally from the multivariate techniques, the analysis of variance, the factor analysis, the discriminant analysis, the cluster analysis and the profile analysis were used.

The following bases were used for selecting the appropriate statistical techniques. According to Churchill (1987) the selection of the appropriate technique depends upon: (1) the type of data (nominal, ordinal, interval or ratio), (2) the research design (dependency of the observations, number of observations per object, number of groups being analysed ...) and (3) the assumptions underlying the test statistics and its related consideration and the power of the test.

This research study involves the investigation of the consumers' perception of the product quality, price and risk measured by a set of variables, in addition to their attitudes towards a set of other attitudinal variables. These perceptions and attitudinal variables will be classified according to a group of selected variables. The perceptual and attitudinal variables were measured on scales which are assumed to have an interval property, while the socio-demographic variables were measured on a nominal scale. Also the study aimed to investigate these variables on univariate, bivariate and multivariate levels. This necessitated the use of the various statistical techniques which were deemed suitable for each level.

Kinnear and Taylor (1987) reported that most successful marketing researchers have certain common traits that "they rarely go to multivariate analysis until they have tested hypotheses through cross tabulation". Thus, the use of univariate and bivariate techniques are not just required because of the nature of the data and the research objectives, but it is also advisable by marketing researchers to start with these techniques before going to the multivariate techniques.

### 6.3 THE STATISTICAL METHODS USED IN THE STUDY

#### 6.3.1 CHI-SQUARED TEST

According to Siegel (1956) when frequencies in discrete categories (either nominal or ordinal) constitute the data research, the  $X^2$  test may be used to determine the significance of the differences among  $K$  independent groups. The  $X^2$  formula is:

$$X^2 = \sum_{i=1}^r \sum_{j=1}^K \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

where:

$O_{ij}$  = observed number of cases categorized in  $i$ th row of  $j$ th column

$E_{ij}$  = number of cases expected under  $H_0$  to be categorized in  $i$ th row of  $j$ th column

$\sum_{i=1}^r \sum_{j=1}^K$  directs one to sum over all cells

In this research the  $X^2$  test was used to investigate the differences among the consumers perceptions of the quality, price and risk attributes of the products of the various countries according to their socio-demographic variables. It was used after the cross tabulation process, which demonstrated that the data met the requirements of the  $X^2$  test. (Frequencies in each cell were large enough to facilitate the use of chi-squared).

#### 6.3.2 THE KOLMOGOROV-SMIRVNOV TEST

The K-S test is similar to the chi-squared test in that they are both goodness-of-fit tests and that they both compared the differences between the observed and expected frequencies to determine whether the observed result was in accordance with the stated null hypothesis. The K-S test takes, however, advantage of the ordinal nature of the data (Churchill 1987).



The original formula for the K-S test is:

$$D = \text{maximum} \left| F_0(x) - S_n(x) \right|$$

where:

D = the maximum deviation

$F_0(x)$  = a completely specified cumulative frequency distribution function

$S_n(x)$  = the observed cumulative frequency distribution of a random sample of N observations.

According to Siegel (1956) the K-S test may in all cases be more powerful than its alternative, the  $X^2$  test. In this research the K-S test was used to investigate the significance of the differences in the consumers' attitudes in regard of the 31 attitude variables. This test was preferred over the  $X^2$  test because it was expected that in some cases the number of observations per cell might be relatively small (Siegel 1956, p.51).

### 6.3.3 THE T-TEST

This test is a parametric test of difference between two samples. Thus it is only applicable to the data which have at least an interval characteristic. When the data met the requirements of this test, then it was more powerful than the alternative non parametric tests. However, the researcher must have valid reasons to suppose that the variable measured, has a normal or nearly normal distribution.

In this research the T-test was used to investigate the difference between the consumers overall perception of the domestic product and their perception of the overall product of foreign, developed, developing taken as groups and compared to the domestic product. Also the T-test was used

to test the null hypothesis related to the significance of the difference among the various groups. It is worth mentioning that the data gathered for this research is assumed to be interval. This is built on the assumption that the data gathered through the semantic differential and Likert scales, although ordinal in nature, it is assumed to be treated as interval data. (See Chapter 5).

#### 6.3.4 THE F-TEST

The SPSSX statistical package provides the results of the F-test of the significance with the results of some of the statistical techniques (example the ANOVA).

In this research the F-test was used to test the significance of the differences in the consumers' perception between the domestic product and each of the participating countries for each of the 27 product attributes.

#### 6.3.5 THE SPEARMAN RANK CORRELATION COEFFICIENTS

This is a non-parametric measure of the relationship between two sets of ordinal (ranked) values. Non-parametric implies that there is no need for the assumptions regarding the normal distribution of the data.

The Spearman correlation coefficient was used in this research to test the degree of association among the consumers perception of each of the 27 quality, price and risk variables. The Spearman rank correlation coefficient is selected for this research, because it did not need the

strict assumption in regard of the distribution of the population needed by the Pearson correlation.\*

#### 6.3.6 ANALYSIS OF VARIANCE (ANOVA)

ANOVA is a parametric test which can be used to test the significance of difference between different samples. The ANOVA test requires at least that the dependent variable is measured in an interval scale. However, the independent variable can be nominal or ordinal.

The ANOVA procedure is appropriate for testing the equivalence of two or more population means (Guenther 1964, Bray and Maxwell 1985). It is a statistical test for testing null hypotheses, based on the assumption that the populations corresponding to the treatment effects have the same variance.

The SPSSX package as well as most of the computer packages performs the calculations required to produce the analysis of variance table which gives the critical value of the F-ratio for bounded level.

In the present study, ANOVA was used to test the significance of the differences between the consumers' perception of the domestic product quality, price and risk variables and their perception of the same variables to each of the participating countries.

---

\*Both the Spearman and Pearson correlations were applied on this research to compare the differences between the sub-techniques. It is found that in all cases the two techniques gave similar results (in that they both suggested to accept or reject the association between the variables at the same significance level). However, it was found that the correlation coefficients were higher in most cases with the Spearman correlation than with the Pearson correlation.

### 6.3.7 DISCRIMINANT ANALYSIS

Discriminant analysis is a multivariate technique whose end purpose generally is to provide a procedure for classifying individual observations into one of a set of groups or populations (Jackson 1983).

According to Klecka (1980) this statistical technique allows the researcher to study the differences between two or more groups of objects with respect to several variables simultaneously.

The benefits of the discriminant analysis technique are related to: (1) one can learn which variables are related to the criterion variable, and (2) will be able to predict values on the criterion variable when given values on the predictor variables (Kachigan 1982). The criterion variable is the classification label attached to the objects in discriminant analysis; example smokers vs. non-smokers. The predictor variables are related to those variables which one believes to be related to the objects membership in one or another of the criterion groups.

The technique is useful for identifying the likelihood of group membership of a case when the only information known is the cases' values on the discriminating variables. Classification is achieved through a series of classification functions. Fisher 1936 was the first to suggest that classification should be based on a linear combination of the discriminating variables. Fisher proposed using a linear combination which maximised group differences while minimizing variation within the groups (Klecka 1980).

The computer printout for the discriminant analysis provides a summary of the classification procedures. These are presented in a table known as the classification table or sometimes called the confusion matrix. The classification table provides an indication of how well the discriminant functions predict group membership, it also provides the ungrouped cases,

the misgrouped cases as well as the percentage of the correctly classified cases. The proportion of cases correctly classified indicates the accuracy of the procedure and indirectly confirms the degree of group separation.

According to Morrison (1969) the typical canned program (SPSSX package is one of these packages) uses all the observations to calculate the discriminant function. This might lead to upward biases that can occur in classification tables constructed in this way (Morrison 1969). However, it is possible to verify the accuracy of the discriminant analysis classification by comparing it to what is expected to be the result of chance classifications only. There are two methods for this evaluation: (1) the proportional chance criterion and (2) the maximum chance criterion. The formula for the proportional chance criterion is:

$$C_{\text{pro}} = x^2 + (1-x)^2$$

where:

$C_{\text{pro}}$  = chance proportional

$x$  = the proportion of individuals in group 1

$(1-x)$  = the proportion of individuals in group 2

The maximum chance criterion formula is:

$$C_{\text{max}} = \max (x, 1-x)$$

$(x, 1-x)$  = the larger of  $x$  or  $1-x$ .

According to Morrison (1969) in most situations in marketing research the chance criterion should be used.

Validation. As with other optimizing procedures, the ability of DFA to find strong relationships is the cause of the concern over the results obtained because the procedure may simply be capitalizing on relationships

that exist as an artifact of the sample. The smaller the sample, the greater the chance that such spurious relationships will influence the generalizability of the results (Crask and Perreault 1977).

Several methods to validate the discriminant functions analysis were suggested, including split sample validation, Monte Carlo simulations, the Jackknife method, and the U method. (Klecka 1980)

In this research the discriminant analysis was used to investigate if any of the socio-demographic variables were strong enough to discriminate among the Jordanian consumers' perceptions of the quality, price and risk of the domestic product and that of each of the participating countries. The stepwise method of Wilks provided in the SPSSX package was used in the analysis. In this method the linear discriminant functions were computed by a stepwise procedure. Variables were entered one by one on the basis of the significance of their contributions in accounting for among group relative within group variations. The most discriminating variable is entered first, and so on, until all discriminating variables that pass tolerance and significance levels for inclusion and retention were included.

However, the percentage of correct classification, produced by the discriminant analysis, was found to be relatively low. Though it was higher than the proportional chance classification, it was not high enough in any of the cases to allow the researcher to conclude that a specified demographic variable was strong enough to discriminate among the consumers. Thus, it was decided not to take any further steps, to use any of the validation methods presented in this chapter. The discriminant analysis was performed six times (once for each socio-demographic variable) for each country. This implies that in this research the DA was used 48 times, with relatively the same results. Due to the computing

limitations, it was found that the use of any of the validation methods was unnecessary, especially with the relatively low classification percentages.

Finally, the discriminant analysis was applied to data gathered by a data collection instrument, designed on the basis of the semantic differential scale. However, the discriminant analysis required that the predictor variables measured in at least an interval scale. Fortunately the semantic differential is often assumed to have an interval data characteristic (Kinnear and Taylor 1987).

#### 6.3.8 FACTOR ANALYSIS

Factor analysis was originally developed by Charles Spearman (1904) (Dunteman 1984) Factor analysis can be defined as: a procedure that takes a large number of variables or objects and search to see whether they have a small number of factors in common which accounts for their inter-correlation (Kinnear and Taylor 1987).

The common factor analysis assumes that each variable is a function of the same set of underlying common factors plus a factor unique to that variable. However, each variable has a different set of weights associated with the factors (for more discussion about the mathematical computations of factor analysis see Dunteman 1984 and Kim and Mueller 1978).

Factor analysis has several applications in marketing research including: data reduction, structure identification, scaling and data transformation (Kinnear and Taylor 1987).

Data Reduction. This application involved summarizing the important information in a set of observed variables by a new, smaller set of variables expressing that which is common among the original variables (Churchill 1987).

Structure Identification. In this application the task of factor analysis is to bring into bold relief the nature of distinct dimensions underlying an existing data set and hence offer managerial insights that may not emerge otherwise (Parasuraman 1986).

Scaling. This application is perhaps the one most frequently used, judging from published research reports and articles (Parasuraman 1985). Factor analysis can be used in developing a scale on which subjects can be compared. It helps the process by dividing the variables into independent factors, each factor represents a scale measure of some underlying dimension (Kinnear and Taylor 1987).

Data Transformation. Factor analysis can be used to identify factors that are uncorrelated. These factors can then be used as input in the relevant dependence method, such as multiple regression and discriminant analysis.

Methods of Extracting Initial Factors. The main objective of the extraction step in exploring factor analysis is to determine the minimum number of common factors that would satisfactorily produce the correlations among the observed variables (Kim and Mueller 1978).

Kim and Mueller 1978 summarized the basic factoring into five methods: (1) the maximum likelihood method, (2) the least square method, (3) Alpha factoring, (4) image analysis and (5) principal component analysis. Since the method 5 is the only method utilised in this research, it will be the only method that will be briefly discussed here.

Principal Components Analysis Method. The objective of a principal components analysis is to transform a set of inter-related variables into a set of unrelated linear combination of these variables. The set of linear combinations is chosen so that each of the linear combinations (factors or components) accounts for a decreasing proportion of the



variance in the original variables, subject to the condition, that each linear combination is uncorrelated to all previous linear combination (Churchill 1987).

Once the first component is defined in such a way that most of the information is contained in it, the second components is defined in a similar way with the condition that its axis is perpendicular to the first, and so on for the rest of factors.

According to Kim and Mueller (1978) in deriving the principal components, one needs not to assume the existence of hypothetical factors.

Principal components analysis is similar to factor analysis in that both methods allow for data reduction and both can be considered as a means of exploring inter-dependence of variables. However, they can be differentiated in that factor analysis represents the covariance structure in terms of a hypothetical causal model, whereas principal components analysis summarizes the data by means of a linear combination of the observed data.

Factor analysis users often face the problem of interpreting the initial factors (i.e. they sometimes find that some of the variables have high positive ratings in more than one variable). This situation raises the issue of rotating the original factor axis. In doing so, the interpretation can be somewhat easier than in the case of the original factors. There are three broad classes of rotation: (1) graphic rotation, (2) orthogonal rotation and (3) oblique rotation.

The graphic rotation method involves the examination of the pattern of variables graphically, then, to rotate the axis or to define new axes in such a way that the new axes best satisfy one's criterion of simple and meaningful structure. This approach might be possible to apply when there are clear clusters of variables, well separated from each other. However,

when the pattern is not very clear or there are many factors to examine, this method can be difficult, confusing and impractical.

The Orthogonal Rotation. Among the several methods of orthogonal rotation, the most commonly used are quartimax and varimax. Without getting into the mathematical details of each of these methods, a brief explanation of each method will be given.

Quartimax Rotation Method. This method tends to produce a final solution in which there is a general factor with moderate and small loadings on some of the variables. In practice, the application of this criterion may result in emphasizing the simplicity of interpretation variables at the expense of simplicity of interpretation of factors. According to Kim and Mueller (1978) the interpretation of a variable becomes simpler as fewer common factors are involved in it, whereas the interpretations of a factor will be simpler if a relatively small number of variables have zero loadings on it.

Varimax Rotation Method. This method attempts to 'clean up' the factors in the factor loading table, that is, force the entries in the columns to be near 0 or one. The varimax criterion concentrates on simplifying the columns of the factor matrix. According to Churchill (1987), empirical evidence indicates that varimax tends to produce loadings that are more interpretable except when there is a general factor present in the data, in which case quartimax is the preferred orthogonal rotation scheme. However, varimax is consequently the most popular orthogonal rotation scheme.

Oblique Rotation. The oblique rotation is more general than an orthogonal rotation in that it does not arbitrarily impose the restriction that factors be uncorrelated. Its advantage over orthogonal rotation is that, after making oblique rotations, if the resulting factors are

orthogonal, one can be sure that the orthogonality is not an artifact of the method of rotation. There are two different types of approaches to oblique rotation, one using reference axes and the other using the primary pattern matrix (for more discussion about these methods see for example Kim and Mueller 1978, pp.37-41).

In this study factor analysis, (the principal component version), with varimax rotation was used in two situations: it was used to test the possibility of reducing the 27 product attributes for the eight countries to a smaller number of factors which account for their intercorrelation. Furthermore, it was also used to test the possibility of reducing the 31 attitude variables into smaller factors in the same way as in the perception situation. In both cases the factor analysis was proved to be successful in reducing the large number of variables to a smaller number of factors. In both cases factor analysis was used to identify the constructs or dimensions that underlie the observed variables. Thus the principal component analysis is used because it is assumed that there are several underlying constructs and not one common factor.

#### 6.3.9 CLUSTER ANALYSIS

The purpose of cluster analysis is to group variables, objects or individuals into clusters that are more similar to each other than the variables, objects or individuals in another cluster (Douglas and Craig 1983). More specifically, a clustering method is a multivariate statistical procedure that starts with a data set containing information about a sample of entities and attempts to reorganise these entities into relatively homogeneous groups (Aldenderfer and Blashfield 1985).

An essential step in the cluster analysis procedure is to obtain a measure of the similarity or proximity between each pair of objects under

study. The most commonly used measures of similarity are: (1) correlation coefficients, (2) euclidean distances, (3) matching-type measure of similarity and (4) direct scaling of similarities.

The correlation coefficient is a measure of the relationship between two objects measured on several variables. In general, similarity coefficients take values in the range 0 to 1. One is a perfect correlation, while nought is the perfect incorrelation.

The euclidean distance is a measure of similarity based on the object values on each of the K variables under study. The euclidean distance can be defined algebraically as follows:

$$d_{ij} = \sqrt{\sum_{K=1}^P (X_{ik} - X_{jk})^2}$$

where

$d_{ij}$  = the distance between cases i and j

$X_{ik}$  = the value of the Kth variable for the ith case

The matching-type measures of similarity when objects are measured on dichotomous or binary variables, in which an object either has (1) or does not have (0) a given attribute, a matching-type measure of similarity is often used.

Direct scaling of similarities. According to Kachigan (1982) it is not always necessary to measure objects on a set of variables as a preliminary step for obtaining the inter-object, similarity measures. Rather, the similarities could be obtained directly by, perhaps, having expert judges rate the similarity of each object to each of the other objects, or against a certain standard.

This is a plausible approach if there is only a relatively small number of objects to be clustered, but if the number is large, the number of pair-wise comparisons becomes prohibitive.

Clustering Techniques. There have been several types of clustering techniques in the multivariate statistical techniques literature including: (1) hierarchical agglomerative, (2) hierarchical divisive, (3) iterative partitioning, (4) density search, (5) factor analytic, (6) clumping and (7) graph theoretic (for more discussion see for example Everitt 1981, Jackson 1983, Kachigan 1982, Aldenderfer and Blashfield 1984).

In the hierarchical agglomerative method the data is first separated into a few broad classes, each of which is further divided into smaller classes and so on until none of them can be subdivided any further. The procedure begins with the computation of a similarity or distance matrix between the entities and end with a dendogram showing the fusions of individuals which culminates at the stage where all the individuals are in one group (Everitt 1981).

According to Aldenderfer and Blashfield (1984) hierarchical agglomerative methods have been dominant among the seven families of methods in terms of the frequency of their applied use.

There are at least three methods of hierarchical agglomerative they are: single linkage, complete linkage and average linkage.

In the case of the single linkage method cases will be joined to existing clusters if at least one of the members of the existing cluster is of the same level of similarity as the case under consideration. Connections are thus based solely upon single links between cases and clusters.

In the complete linkage method, an object joining a cluster at a certain similarity coefficient must have relations at that level or above with every member of the cluster (Churchill 1987).

In the average linkage method the distance between groups is defined as the average of the distances between all pairs of individuals in the two groups (Everitt 1981). The average linkage method as its name implies, is mid way between the single linkage and the complete linkage methods.

All of the above methods have their own advantages and disadvantages. It was found to be beyond the scope of this research study to discuss in detail any of the above hierarchical agglomerative methods. Also, it was not the aim of this research to discuss the various clustering methods nor to get to the technical details of this statistical technique. The main purpose here is to relate the use of the cluster analysis to one of the specific objectives of the present research. That objective is concerned with grouping the countries according to the consumers' perception of their products.

The problems associated with cluster analysis can be classified into two categories: (1) general problems which are related to the majority of clustering techniques and (2) problems that are related to the specific technique. The general problems include the definition of a cluster and the determination of the number of clusters. Though a brief description of the general problems will be discussed, there will not be any discussion of the various problems related to each of the various clustering techniques. However, some of the problems related to the hierarchical clustering technique will be presented. This is because this method has been used in this research.

According to Everitt (1981) the common feature of most proposed definitions of a cluster is their vague and circular nature, in the sense that terms such as similarity, distance, alike, etc are used in the definition, but are themselves undefined. It has been suggested that the

ultimate criterion for evaluating the meaning of what is termed a cluster is the judgment of the researcher.

The problem with the number of clusters is a natural result of the previous problem. It is expected that if the cluster itself is hardly defined, it follows that the number of clusters also will be difficult to determine. This problem is well documented in the literature and several researchers have tried to suggest solutions for this problem (Wolfe 1971, Binder 1978). However, despite these efforts, the problem is far from being solved completely.

Problems with hierarchical clustering techniques. The major problem with these clustering techniques is that they contain no provision for reallocation of entities which may have been poorly classified at an early stage of the analysis (Gower 1967).

In this research cluster analysis was used to group the eight countries into clusters that are similar in terms of the consumers' perception of the quality, price and risk attributes of the various countries. The hierarchical agglomerative method - complete linkage method - was used. This method was found to be the most suitable method which gave an interpretable result. In fact, the single linkage, average linkage and ward linkage were all used with relatively similar results.

#### 6.3.10 PROFILE ANALYSIS

This is a commonly used method in analysing image variables. It is often used with the semantic differential statements. That is not to say that it cannot be used with other types of measurement scales. However, in the majority of consumer research it was found that in most cases it was used with the semantic differential. In the case of comparing consumers' perceptions/attitudes toward products of various origins, it

was found that this method had been used by many researchers (examples Nagashima 1970 and 1977, Krishnakumar 1974, Lillis and Narayana 1974, Dornof et al 1974, Niffeneger et al 1980 and Khanna 1986).

The profile analysis technique is based on calculating the average rating for each item in the questionnaire for each group (country in our case) and by linking these average positions on the semantic differential for a specific group, a profile of the mean scores by a group of respondents for that segment can be generated. (Aaker and Day 1986)

The main advantage of the profile analysis is that it enables to display graphically the differences among the respondents for the entire set of variables in an easy straight forward method. It also helps the reader to visualise the similarities and the differences between the objects without entering in more sophisticated statistical techniques. Another advantage of this technique is to rely on its flexibility which can be used with different types of data (ordinal, interval or ratio) in various marketing situations.

However, this method is not without limitations. One of its major limitations is when there are many groups to be compared and when the differences are very small, or when the profile lines intercept in more than one location, this makes the following of and the understanding of the profile challenging. In this situation the researcher will lose the simplicity of presentation he/she seeks. In most cases one might find himself/herself obliged to simplify the plot by comparing two or three objects at a time. Another problem with this technique is related to the fact that the technique is not accompanied with a statistical test to test the significance of the differences between the mean ratings of the profile. The researcher might need to go back to the original data to



perform the F-test or the T-test or any other kind of test which might be deemed suitable for the data and which served the research objectives.

In this research study the profile analysis was used to compare the consumers perception of the domestic and foreign product quality, price and risk variables. It was used to compare the domestic product quality with that of foreign, developed and developing as groups and with that of each country.

#### 6.4 SUMMARY OF THE CHAPTER

In the light of the research objectives and hypotheses, several statistical techniques were used to analyse the data and to achieve the research objectives in addition to testing the research hypothesis. The techniques used varied from the univariate, the bivariate and the multivariate, depending on the type of data and the number of variables. The univariate techniques used in this study were the mean and the chi-squared one sample test. The bivariate techniques used were the T-test, F-test, the Spearman correlation coefficient, and Kolmogorov-Smirnov test. In regard of the multivariate techniques, the following were used: analysis of variance (ANOVA), the factor analysis, the discriminant analysis, the cluster analysis and the profile analysis.

Some of these techniques were applied for the first time in analysing the problem of the perception of the source country impact in the product evaluation. These techniques were the multivariate discriminant analysis and the cluster analysis. Other techniques, such as the factor analysis and the ANOVA analysis were occasionally used in the previous studies. However, their use was limited to a few studies. As far as the researcher can ascertain, the univariate and bivariate techniques were the most

frequently analytical techniques used in the majority of the previous research.

Most, if not all, of the marketing problems are not the bi-result of one variable. It was found in addition, the availability of the ready-made computer packages which can perform, a sophisticated multi-variate statistical technique would help in a better understanding of the research problem. However, the capabilities and limitations of each of the various techniques were taken into account. The researcher sought professional advice from the specialised individuals in the statistical department in matters related to the justification of using such techniques in this research as well as in the interpretation of the results.

The chapter included a brief discussion of the alternative methods that had been used in this research. The basis for selecting the appropriate techniques and the reasons for using each technique in this research study.

A complete discussion of the several techniques used in the study and the alternative techniques that might be candidate for the use, will be too large to be included in this thesis and beyond the researchers' capability, given the limit of time and space. However, several references were specified for the interested reader.

Chapter seven will be devoted to testing the validity and reliability of the research data. This will contribute to the increasing demand of testing the validity and reliability of the research instrument. Also the sample characteristics and its comparison with the actual population will be presented in the same chapter.

CHAPTER SEVEN

VALIDITY, RELIABILITY AND SAMPLE CHARACTERISTICS

- 7.1 Introduction
- 7.2 Validity
- 7.3 Reliability
- 7.4 The Validity Method used in this Research
- 7.5 Testing the Reliability of the Research Data
- 7.6 The Importance of Reporting the Validity and Reliability of the Study
- 7.7 Sample Characteristics
- 7.8 Conclusions

## 7.1 INTRODUCTION

Examining the validity and reliability of the gathered data is an important step in the research process. The need for such a step is emphasised in the marketing research literature (Churchill and Peter 1984).

According to Douglas and Craig (1983) the examination of the validity and reliability of the data is particularly important in countries or contexts where little research has been conducted, or with which the researcher has little prior experience.

The main focus of this chapter is on the assessment of the validity and reliability of the primary data of this research. This will include the data related to the perceived quality, price and risk variable gathered through the application of the semantic differential scale as well as the attitudinal data gathered through the Likert type scale. Furthermore, the chapter will introduce the descriptive statistics of the sample.

## 7.2 VALIDITY

The validity of a scale of measurement is the extent to which it is a true reflection of the underlying variable it is attempting to measure (Parasuraman 1986) or it can be defined as the extent to which the measurement process is free from both systematic and random error (Kinear and Taylor 1987). Thus, there are at least two kinds of errors (systematic and random) that may exist and deviate the instrument from being measured what it was designed to. Systematic error refers to the kind of errors that cause a constant bias in the measurement. Random error, on the other hand, is not constant error, but rather is due to transient aspects of the person or measurement situation (Churchill 1987).

The researcher's problem in such a case is to develop measures in which the observed and recorded scores represents the true score in the characteristics or attitudes the researcher is attempting to measure, and nothing else.

There are several types of validation process which can be classified as internal and external types of validity. Or they can be described as construct, content, concurrent and predictive validity.

Internal validity is related to the degree of unambiguity with which one can draw conclusions about the set of observations. External validity refers to the degree to which one can generalise the findings of the study beyond the specific conditions and observations of the study (Moutinho 1982).

Construct validity involves the understanding of the theoretical rationale underlying the obtained measurements (Kinnear and Taylor 1987). It is most directly concerned with the question of what is the nature of the underlying variable or construct measured by the scale (Parasuraman 1986). Construct validity can be assessed by computing the correlations of a set of variables with another set of variables that one could expect a kind of correlation that might exist. If the observed relationship were found to be in the expected direction, then one can conclude that the construct validity is reserved in the research.

Two kinds of construct validity can be identified: 1. the convergent validity and the (2) discriminant validity. The convergent validity refers to the strong correlation between measures that one expects to have a strong relationship, while the discriminant validity refers to the weak correlations between measures that one expects not to have a strong relationship.

Content validity focuses on the adequacy with which the domain of the characteristic is captured by the measure. It involves a subjective judgment by an expert or experts as to the appropriateness of the measurement. Content validity which is also known as face validity is a common method used in marketing research to determine the validity of measurements. (Kinneer and Taylor 1987)

Concurrent validity is concerned with the relationship between the predictor variable and the criterion variable when both are assessed at the same point in time. If the results of the correlation was sufficiently high, then it might be possible to conclude that the measure has concurrent validity.

Predictive validity refers to the ability of the measure at a certain point in time to yield relatively similar results for the same phenomenon at a future time.

### 7.3 RELIABILITY

The reliability of the scale of measurement refers to the extent to which the measurement is free from random error. It refers to the question of how consistent, stable, accurate and predictable the ratings generated by the scale are likely to be. Reliability differs from validity in that it measures the agreement between two attempts to measure the same trait through maximally similar methods, while validity is concerned with the agreement between two attempts to measure the same trait through maximally different methods (Churchill 1987).

To assess the reliability of the study one could use one or more of the following methods: (1) test-re-test, (2) internal consistency and (3) alternative-forms reliability.

Test-re-test reliability. In this method one measures the stability of ratings over time which involves administering the scale to the same group of respondents at different times under relatively similar conditions. If the ratings generated through the two measurements were highly correlated, then it could be assumed that the scale meets the test-re-test reliability. However, two important considerations should be taken in account in applying this method: (1) the degree of the similarity of the conditions for the two experiments and (2) the time lag between the two experiments. Enough time interval should be elapsed before applying the second experiment, so the respondents will not be able to remember their ratings in the first experiment. Also the time should not be too long that the circumstances had changed.

Alternative-forms reliability. In this method the same objects are measured by two alternative forms which are judged to be equivalent but not identical. If the results of the two instruments were found to be highly correlated then the measure is judged to be reliable.

Internal consistency concerns the degree to which different items on a multi-item scale formed to represent a construct. Split-half reliability and alpha correlation coefficient are examples of the internal consistency methods. In the split-half reliability method, the researcher is interested in measuring the degree of consistency across items within a scale. It involves dividing the multi-item measurement device into equivalent groups. The correlation test is then performed to find out how much these groups correlate. If the correlation between the groups was sufficiently high, then the scale is assumed to be reliable.

The alpha correlation coefficient or as it is known the Cronbach alpha test is relatively similar to the split-half reliability procedure, in

that the procedure is established in testing the similarity among the respondents ratings for the same variable. The Cronbach alpha could be calculated utilizing the SPSSX "reliability" test.

#### 7.4 THE VALIDITY METHOD USED IN THIS RESEARCH

The researcher's awareness of the importance of the validity of the collected data and the final findings of the research dedicated the need to ensure the validity of the research. Two important procedures were taken to ensure the validity of data. These two procedures are related to the content validity and construct validity

Content validity or the face value of the study was ensured through the following steps:

1. The researcher intensively reviewed the existing literature related to the research domain, the product quality, price and risk variables. All the relevant variables were listed. Those variables were finally refined and the most relevant variables were kept to be used in the questionnaire.
2. The initial questionnaire was reviewed by the researcher's supervisor, Professor Arthur Meidan, to ensure the wording and completeness of the questionnaire.
3. The translated version of the questionnaire was reviewed by staff members at the University of Mu'tah (Professor Sami and Dr. Al-Zoubi) who are both familiar with the marketing concepts and the Jordanian consumers.
4. The questionnaire was pre-tested in a sample of respondents similar to the final respondents.
5. After each of the above steps the questionnaire was re-edited until it reached its final form.



6. The attitudinal variables in particular were developed through intensive interviews with selected consumers including University staff members and ordinary consumers.

Thus, the content validity was ensured through the preceding steps. In addition to that, the researcher developed a random sample to ensure the representativeness of the sample to the targeted population.

The construct validity involves the understanding of the theoretical rationale underlying the obtained measurements. Construct validity increases as the correlation between the variables were within the expected (theoretical) direction.

However, there is nothing in the problem under investigation, that is finally established, that one can use as a measure of the theoretical direction for the expected correlation among the variables. It is often argued that there is some kind of correlation between the price of the product and its quality. The relationship was mostly in the positive direction. This kind of correlation was found to be prevalent in this study. Also it is argued that there is some kind of relationship between the economic development of the nation and the consumers perception of its product quality. This situation was found to be relatively true.

In an additional effort to investigate the construct validity of the research, the researcher decided to use the Spearman correlation coefficient to examine the significance of the correlation among the variables which intended to measure one major dimension of the product. In other words, the three major cues, that is the product quality, price and risk were measured through a set of subvariables. The intention here is to display that the subvariables, designed to measure each individual cue, should be highly correlated. This is due to the main reasoning behind the

construct validity. It implies that items designed to assess the same thing are expected to display a reasonably significant relationship.

According to Bohrnstedt (1983) if items had perfect construct validity they would reflect one construct and that construct would correlate as hypothesized.

Tables 7.21 through 7.44 (Appendix D) summarize the Spearman correlation coefficients for each of the quality, price and risk variables for each country. To ensure that only the variables which display a significantly high level of relationship will be reported as correlated variables, a significance level of .05 or better were specified for an item to be considered significantly correlated with the other variables.

The investigation of the tables revealed that for each country the variables, which were intended to measure the same major cue, say quality, were highly correlated. Generally speaking, the percentages of the correlated items for each cue to the total of items in each cue, were in the range of 100% to 90% for each country.

Thus, the construct validity of the research data was confirmed through the test of the correlations among the variables which expected to behave according to the theoretically hypothesized method (ie. price quality relationship) and through the correlation among the variables which intended to measure the same thing (ie. risk variables).

#### 7.5 TESTING THE RELIABILITY OF THE RESEARCH DATA

The alpha correlation method known as Cronbach alpha was used to assess the reliability of the data. According to Nunnally (1967) Cronbach alpha is the single most meaningful measure of internal consistency reliability. It is one of the most important deductions from the theory of

measurement errors and it should be routinely applied to all new tests to assess the quality of the instruments.

Nunnally (1967) suggested that the reported reliability of .50 to .60 is acceptable for early stages of basic research. However, trying to increase the reliability beyond .80 is not necessary. In general a low coefficient alpha indicates that the sample of items perform poorly in capturing the construct which motivated the measure. On the other hand, a high alpha is an indicator that the variables are correlating well with true scores.

Despite the importance of reporting the reliability of data, Douglas and Craig (1983) reported that "reliability of data in cross-national research has received relatively little attention. Available evidence suggests, however, that the reliability of the data varies from country to country ..... especially with regard to attitudinal and life style data ..... examination of reliability, while costly and time consuming, is nonetheless critical, and more attention should be paid to include checks of this type as standard procedures".

Thus the reporting of the reliability of the data of this research which compares the developing country's consumers' perceptions of their domestic product with the product of seven developed and developing countries, is more than a routine requirement. It is required from the practical point of view as is quoted above.

The data gathered for the eight countries for the twenty seven variables for the three main cues, quality, price and risk, were used to test the internal consistency reliability alpha coefficient for each individual country. The results of the reliability test are summarized in Tables 7.45 through to 7.53 (Appendix D).

In examining the tables one found that the semantic differential scale, used in measuring the consumers' perception of the quality, price and risk of the eight participating countries, showed an internal alpha reliability estimate of as high as .90 for the Taiwanese product and as low as .70 for the U.K. and U.S.A. products, while the products of the remaining countries were distributed between the two extremes in the following order: Romania and Egypt .89, Jordan .86, Russia .82, and Japan .76. The Likert type scale, used for the attitudinal variables, showed an internal alpha reliability coefficient of .71.

Thus, both the semantic differential and Likert type scale performed reasonably reliable in this research, relatively higher than the average levels of Cronbach alpha recommended for social sciences.

#### 7.6 THE IMPORTANCE OF REPORTING THE VALIDITY AND RELIABILITY OF THE STUDY

Recent research in marketing and consumer behaviour stressed the need for testing and reporting the validity and reliability of the measures used in the research (eg. Meidan and Edris 1989). The lack of interest among the researchers to disclose the validity and reliability of their studies was stated directly by Kassarian (1971) as "too often researchers are disinterested in reliability criteria in the study of personality". Several studies reviewed the existing literature for the purpose of determining the percentage of researchers who reported either the validity, reliability, or both, of their studies. The results were extremely surprising. For example Jacoby (1978) reported that among the 300 articles he reviewed concerning the brand loyalty literature, only one study reported the reliability test, using test-re-test reliability construct. Peter (1979) reported that among 400 consumer studies, he surveyed less than 5% assessed the reliability of the measures employed. Moreover, Ray (1979)

found that approximately 8% of the articles he reviewed mention the reliability of the measures employed. This situation led him to conclude that "many marketing researchers do not even know or care to know what the term 'reliability' and validity mean with regard to measures".

However, Churchill and Peter (1984) reported that in response to the growing emphasis for explicit attention to investigating the reliability and validity of measures used in marketing research, marketing researchers have responded by making an impressive effort to develop and investigate the psychometric properties of new measures, as well as to investigate the previously proposed measures of marketing constructs. However, the authors reported that among 6484 articles, research notes and papers they reviewed for the period 1972-1982, only 108 were codable measurement studies, that is, reporting reliability estimates according to pre-specified criteria (Churchill and Peter 1984).

## 7.7 SAMPLE CHARACTERISTICS

The aim of this section is to provide some descriptive statistics which are considered to be necessary to give an idea about the construction of the sample and the distribution of the respondents according to the five socio-demographic variables chosen for this study. Since it was impossible to include all the individuals of the population in this research study, a sample of respondents was used. As was introduced in the research design chapter, the sample was planned to be a proportional stratified random sample. The sample will be compared to the original population to show and justify any deviations, whenever they exist.

Sex. Table 7.1 showed that approximately 65% of the respondents were males and 35% of the respondents were females. According to the Department

TABLE 7.1

## THE DISTRIBUTION OF THE SAMPLE BY SEX

Sex	Country	Percentage
Male	406	64.55
Female	223	35.45

TABLE 7.2

## THE DISTRIBUTION OF THE SAMPLE BY AGE

Age	Count	Percentage
30 or less	281	44.67
31-40	105	16.69
41-50	107	17.01
51+	136	21.62

TABLE 7.3

## THE DISTRIBUTION OF THE SAMPLE BY EDUCATION

Education Level	Count	Percentage
Elementary or less	90	14.54
More than elementary but not more than high school, college or some university	143	23.10
First university degree	160	25.85
Postgraduates (Master and PhD)	137	22.13
	89	14.38

TABLE 7.4

## THE DISTRIBUTION OF THE SAMPLE BY MAJOR (field of study)

Major	Count	Percentage
Human sciences	77	25.24
Social sciences	92	30.16
Pure sciences	44	14.43
Engineering	46	15.08
Medicine	46	15.08

of Statistics (Jordan) the estimated percentage of both genders in 1986 was: 52% males and 48% females.

In examining the above percentages one found that the percentage of females was lower than the percentage of males. Females are clearly more under-represented in the sample. However, it is believed that even with this low percentage, the fact that the researcher was able to get the females involved in this research was a real achievement to this research. Al-Hammad (1988) in a study of the Saudi consumers reported that due to cultural difficulties, women were excluded from the sample. He reported the male point of view only.

According to the Department of Statistics (Jordan) in 1986 the level of illiteracy among males (15+ years) was around 19%, while it was around 48% among females. It is expected that this higher level of illiteracy among females will affect their level of response to the research instrument.

The problem of securing the cooperation of women in the Middle East in particular and in the developing countries in general is very well documented in the marketing research (Kaynak 1982). Given this situation the sample deviation from the original population in regard of the sex of the respondent is justifiable.

Age. Table 7.2 showed the distribution of the sample according to the consumers age. It is clear in the table that about 45% of the respondents were in the range of 30 years of age or less. Approximately 55% were higher than 31 years of age. In comparing these percentages to the estimated population of Jordan in 1986 by age group, it was found that about 75.5% of the Jordanian population were less than 30 years of age. However, it was assumed that those who were less than 20 years of age would not be able to understand the research instrument. Nor do they buy the relevant products This left us with the segment between 20 and 30

which constitute 53% of the remaining population. The remaining segments were approximately 17% for the group between 31 and 40, 14% for 41 to 50 and 17% for 51 and over. Although the comparison revealed some deviation of the sample from the original population, but it was felt that this deviation was not big enough to destroy the representativeness of the sample to the actual population. In comparing these percentages one should remember that the actual population is an estimation built on the 1979 census and that the response rate was around 64% of the actual sample. Thus, at least as far as the age of the respondent is concerned the sample is fairly representative.

Education. The examination of table 7.3 reveals that the lowest educated segment and the highest educated segmented were relatively consisted with the same percentage, around 14% each while the highest represented segment were those with a somewhat middle education (college or some university). Those with an education of secondary school or less but higher than elementary school and university graduates were approximately the same between 23% and 22% respectively.

The comparison of these percentages with the Department of Statistics (Jordan) of the Jordanian population of 15+ years, educational qualification revealed that about 68% of the Jordanian population were within an education level of elementary or less, among them 33.46% illiterate and 14.48% semi-illiterate (those who were classified as can read and write, but without qualification).

The bias in the education variable is quite obvious. However, this bias is a natural consequence of the research instrument, the questionnaire. One of the main disadvantages of the questionnaire instrument is related to its bias toward the educated segment of the respondents, since they are the only segment, who can understand and respond to it. Despite the



researcher's efforts to secure the less educated segments cooperation in responding to the questionnaire through personal interviews, the length of the questionnaire and the time it needed was a real obstacle for both the respondents and the interviewers.

Furthermore, it is believed that the educated segment is the fast growing category in the Jordanian society and their role in the market place is very important, whether it relates to their purchasing power, or to their role as opinion leaders. However, that is not to say that the least educated consumers are not important or should be ignored, but it is the fact that the research instrument was unable to address that segment of the consumers.

Major (field of study). This variable was targeted toward the segment of the consumers who at least had college or some university education. As Table 7.4 showed about 305 of the respondents were in this level of education. The examination of the table revealed that about 55% of the respondents were with human sciences or social sciences majors and the remaining 45 were in pure sciences, engineering and medicine. Although there are no formal statistics related to this point, it is assumed that this distribution of the sample is not far from the real situation. This might be justified when one considered for instance that only two universities of the four Jordanian universities have a faculty of medicine, and three have departments for engineering.

Income. Table 7.5 presented the distribution of the sample according to the family income. In examining the table, one finds that approximately 57% of the sample were falling in the low income category, with an income rate of 200 JD or less. The middle income category with a monthly income range of 201 to 500 JD constitute 28% of the respondents. Finally, the

TABLE 7.5

## THE DISTRIBUTION OF THE SAMPLE BY INCOME\*

Monthly Income (JD)	Count	Percentage
100 or less	170	28.15
101-200	171	28.31
201-300	78	12.91
301-400	39	6.45
401-500	49	8.11
501-600	46	7.62
601+	51	8.44

## NOTES:

\* Income means the monthly income of the family in JD's

The exchange rate during the data collection period was approximately 1 JD = £1.60.

However, the Jordanian currency was seriously depreciated in early 1988 and now 1 JD hardly equals £1.

TABLE 7.6

## THE CROSS TABULATION OF SEX BY AGE

Sex Age	MALE		FEMALE	
	Count	Percentage	Count	Percentage
30 or less	146	36.0	135	60.5
31-40	78	19.2	27	12.1
41-50	69	17.0	38	17.0
50+	113	27.8	23	10.3

TABLE 7.7

## THE CROSS TABULATION OF SEX BY EDUCATION

Sex Education	MALE		FEMALE	
	Count	Percentage	Count	Percentage
Elementary	61	15.4	29	13.1
Higher than elementary but not more than high school	99	24.9	44	19.8
College or some University	71	17.9	89	40.1
First University degree	98	24.7	39	17.6
Post graduate (Master or Ph.D)	68	17.1	21	9.5

relatively high income category with a family income of more than 500 JD represent approximately 16% of the respondents.

One could not find an official statistic describing the income distribution level of the Jordanian population. However, the above distribution seems to be more likely representative of the real situation. This assumption is built on the fact that the average monthly salary, according to the researcher's knowledge, was around 130 JD for the government employees including the military personal, public security personel, school teachers and private sector employees. This segment might be considered the largest employed segment.

The second segment which might include the small business owners, (ie. shop keepers, small restaurants and alike) middle government and private sector employees, junior university staff and some other similar groups, might be the largest second segment. Finally the higher income segment which includes the relatively middle to large private business owners, senior government employees, and professionals (ie. physicians, lawyers, senior university staff, consultants and alike) is the smallest segment in the population.

Cross tabulating sex and age. The investigation of Table 7.6 reveals that the younger segment of both genders (40 years or less) were the highest among the other respondents in regard of their response rate. Male and female contributed to approximately 55% and 73% in sequence. This high contribution for both segments was related to the construction of the Jordanian population in which approximately 69% of the respondents (15+ years) are in this category. The male percentage was around 69.68% while the female percentage was about 70.33%. It is clear that the female presentation in this segment in comparison to their presentation in the other segments is much higher than that of the male in the same basis.

Also it was found that male and female share the same percentage in the middle age group (41-50), but in absolute figures male are almost twice as much as female. However, it was found that in the older group segment, the percentage of the male sub-group was almost three times the percentage of the females.

It is believed that these percentages of both genders are fairly representative of the real situation. Bearing in mind that the higher the female age in the Jordanian community the higher the possibility of non-response. This might be related to the low educated level of the older Jordanian citizens in general and females in particular, as was indicated in the distribution of the population by age. On the other hand a cultural variable related to the Jordanian consumers might play a role in this situation, that is, the older female generation were more conservative than the younger generation. This implies that the cooperation of the older female respondents were somewhat more difficult than with the younger females. In the case of males, the situation might seem to be somewhat different. It was found that the younger respondents were somewhat under represented, while the older respondents (50+ years) were relatively over represented. This might seem to be natural in a society like Jordan, where the extended family system is a fact of life. In this system the older of the male members might assume responsibility over the rest of the family. Thus, their response to the questionnaire, is clearly higher than their real percentage in the actual population. However, despite the above deviation, it is assumed that the sample was relatively fairly representative.

Cross tabulating the sex by education level. Table 7.7 presents the distribution of the sample according to the respondents sex and education level. The elementary segments were found to be the lowest segment for

males, followed by post graduate (Masters or Ph.D.'s), college or some university and first university degree. In regard of females it was found that the post graduates were the lowest, followed by the elementary, first university degree and college or some university.

It is clear, that in both males and females the sample is relatively biased toward the middle to higher education. Some of the justification for this bias was presented in the section of the sample distribution in relation to the education level of the consumers. Furthermore, one can find that there are some differences in the education level of the respondents in regard of their genders. The female segment is highly concentrated in the college or some university level of education. According to the Jordanian delegation paper, presented to the United Nations in 1981, the percentage of the female students in the Jordanian universities is 10% higher than the percentage of the male students. There is no evidence to contradict that trend for the years following 1981. Furthermore, it is assumed that the community colleges are following the same pattern. This might explain the concentration of the female respondents around the university and some college level of education. In respect of the differences between the percentages of the two genders in regard of the postgraduates education level. It was found that the percentage of males with postgraduate qualifications to the total population with such qualification was around 89%, this was according to the Department of Statistics publications in 1984. In such a situation it is thought that the deviation between the percentages of male and female postgraduates is acceptable in comparison to the real population.

Cross tabulating the sex of the consumer by his/her major (field of study) Table 7.8 presented the distribution of the sample according to the gender of the respondents and their field of study. In all majors one

TABLE 7.8

## THE CROSS TABULATION OF SEX BY MAJOR

Sex Major	MALE		FEMALE	
	Count	Percentage	Count	Percentage
Human sciences	44	21.1	33	34.4
Social sciences	62	29.7	30	31.3
Pure sciences	30	14.4	14	14.6
Engineering	39	18.7	7	7.3
Medicine	34	16.3	12	12.5

TABLE 7.9

## THE CROSS TABULATION OF SEX BY INCOME

Sex Income	MALE		FEMALE	
	Count	Percentage	Count	Percentage
100 or less	91	23.40	79	36.70
101-200	109	28.00	62	28.80
201-300	59	15.20	19	8.80
301-400	28	7.20	11	5.10
401-500	36	9.30	13	6.00
501-600	26	6.70	20	9.30
601+	40	10.30	11	5.10

can notice that the percentages are relatively similar, except in human sciences where the female percentage is higher than the male, and in engineering, where the male percentage is higher than the female. Although there was no hard evidence to justify these deviations, it is assumed that traditionally, human sciences were seen to be more suitable for females and engineering was seen to be more suitable for males.

Cross tabulating the sex of the consumer by income. The examination of Table 7.9 indicated that the income level reported by the female respondents is generally lower than that of the male respondent. About 65% of the female respondents reported an income level of 200 JD or less while about 51% of the male respondents reported such an income. At the same time approximately 32% of the male respondents reported an income of 201-500 JD, while only 20% of the female respondents reported such an income. However, the higher income respondents (501 and more) were relatively similar.

While it was expected that the family income should be relatively similar, despite the gender of the respondents, it was anticipated that the relatively low income of the female segment was due to their youth as reported in Table 6. This implies that the female respondents were still at the beginning of the ladder, as junior employees, and this might apply to their partners. Thus the female respondents were not earning as much family income as their counterparts, male respondents. However, when it comes to higher income, both males and females reported relatively similar income.

Cross tabulating income and age. Table 7.10 presents the distribution of income according to the respondents age. The examination of the table reveals that approximately 79% of those with an income level of 100 or less are those of 20-30 years of age, also the same segment constitutes around

TABLE 7.10

CROSS TABULATION OF INCOME BY AGE

Age	Income 100 or less	101-200	201-300	301-400	401-500	501-600	601+
	Count %	Count %	Count %	Count %	Count %	Count %	Count %
30 or less	134 79.3	91 52.9	16 20.0	6 15.4	3 3	9 6.1	5 19.6
31-40	10 5.9	48 27.9	23 28.8	10 25.6	3 3	7 6.1	2 15.2
41-50	11 6.5	21 12.2	24 30.0	11 28.2	14 14	12 28.6	12 26.1
51+	14 8.3	12 7.0	17 21.3	12 30.8	29 29	18 59.2	18 39.1
							32 62.7

TABLE 7.11

CROSS TABULATION OF EDUCATION BY AGE

Age Education	30 or less	31-40	41-50	51+
	Count %	Count %	Count %	Count %
Elementary or less	23 26.1	5 5.4	29 29	34 31.5
More than elementary but not more than high school	69 48.3	29 20.3	23 23	16.1 22
College or some university	123 76.9	24 15.0	7 7	4.4 6
University first degree	51 37.0	30 21.7	28 28	20.3 29
Postgraduates (Master and PhD)	12 13.3	15 16.7	19 19	21.1 44
				4.4 6
				29 21.0
				48.9 48.9



53% of those with an income level of 200 or less. While this segment only constitutes 20% and 10% of the income segments of 501-600 and 601.

Thus according to the sample there is some kind of linear relationship between age and income. That is the higher the age the higher the income level. The question of whether this is the real situation in the Jordanian society or not is a matter which one did not have strong evidence to approve it or disapprove it.

Cross tabulation of education by age. Table 7.11 presents the sample distribution according to the consumers age and the corresponding level of education. The investigation of the table revealed that the highest segment among those with elementary education level are aged above 51 years of age followed by the 41-50 years of age.

The distribution of the sample is relatively representative to what was expected to be the real characteristics of the population taking in account the limitations of the research instrument (the questionnaire).

Cross tabulating major and age. The results of the cross tabulation of major (field of study) by age are summarized in Table 7.12. The table indicated that around 66% of the 20-30 years of age respondents are with human or social science majors, while the remaining (34%) were distributed among the three pure science majors (natural sciences, engineering and medicine). However, the medicine major was the lowest among the five majors for this age segment. The 31-40 years of age segment was relatively similar to the pattern of the previous segment. Relatively the same percentages (67%) were with human and social sciences, the remaining 33% were distributed among the three pure sciences. However, it was noticed that those with medicine majors were almost twice the percentage of those in the 20-30 years of age group. The 41-50 years of age were relatively evenly divided between the human-social sciences (45%) and the pure

TABLE 7.12

## CROSS TABULATION MAJOR (field of study) BY AGE

Major	30 or less		31-40		41-50		51+	
	Count	%	Count	%	Count	%	Count	%
Human sciences	37	32.2	14	24.1	10	18.9	16	20.0
Social sciences	39	33.9	25	43.1	14	26.4	14	17.5
Natural sciences	15	13.0	7	12.1	9	17.0	14	17.5
Engineering	18	15.7	5	8.6	8	15.1	15	18.8
Medicine	6	5.2	7	12.1	12	22.6	21	26.3

TABLE 7.13

## CROSS TABULATION OF MAJOR BY EDUCATION

Major	College or some univ		First Univ degree		Post graduates	
	Count	%	Count	%	Count	%
Human sciences	22	37	26	20.2	20	23.0
Social sciences	22	37	42	32.6	18	20.7
Natural sciences	8	13	15	11.5	15	17.2
Engineering	0	0	25	19.4	19	21.8
Medicine	0	0	25	19.4	19	21.8

sciences (55%). The older group (51+) were more concentrated towards the pure science majors (63%) than toward the human-social science majors (37%). However, it was noticed that the medicine and engineering majors constitute a high proportion of the 41+ age segments. In fact medicine majors were the largest segment among the 51+ years of age and the second largest segment among the 41-50 years of age segment.

It was pointed out in the previous sections that the older consumers segment was the highest segment in regard of income and again here it proved to be the highest in regard of the pure science majors.

Cross tabulation of education level by field of study. Table 7.13 presents the results of the sample characteristics according to the field of study and the consumers' education level. In examining the table one finds that approximately 74% of the respondents with college or some university education level were majoring in human sciences and social sciences. The remaining (26%) were majoring in natural sciences and engineering, and none were medicine majors. 53% of the first university degree holders were specializing in human and social sciences and the remaining 47% were majoring in natural sciences, engineering and medicine. Finally, 44% of the postgraduates were specializing in human and social sciences and 56% were specializing in natural, engineering and medicine sciences. While it might be plausible to assume that the concentration of the college or some university and university graduates, in the fields of social and human sciences, was possible due to the fact that these majors are offered in all of the community colleges and most of the Jordanian universities, the reasons for the postgraduate concentration in the pure science majors are not clear to the researcher. However, the total percentage of those with some college education and higher majority in human and social sciences were approximately 55% while the remaining 45%

were specializing in the pure sciences majors. Thus, though there were higher than expected postgraduates majoring in pure sciences, the total percentage of the respondents were within the expectations.

Cross tabulating the consumers income by their level of education. The results of the description of the sample characteristics according to the respondents education level and their income were presented in Table 7.14. The investigation of the table reveals that approximately 80% of the respondents with an education level of elementary or less were earning a monthly income of less than 300 JD and only 4.6% of this segment were earning more than 500 JD. A similar trend was found in the case of secondary, college or some university and university graduates. However, it was found that only 14.8% of the respondents with a postgraduate qualification were earning such an income (300 JD or less). The relatively high percentage (even higher than those with relatively very low education) of the university graduates low earning is somewhat surprising. However, as far as the researcher can ascertain, most of the job opportunities available to the university graduates are with government positions especially in teaching or government departments. This type of job opportunities are known for their low earnings, especially for junior staff. In addition to that it was reported that the unemployment rates among the university graduates and the community colleges were relatively high in Jordan (Al-Zoubi, 1988).

In regard of the postgraduate segment, it was noticed that they were the favourite segment in respect to the reported income level. As an example only 9.5% and 6.6% of the university graduates reported an income level of 501-600 and 600+ JD, while about 29.5% and 38.6% of the post graduates reported such income. This might give some indication about the relationship between income level and education. However, one should

TABLE 7.14

## CROSS TABULATION OF INCOME BY EDUCATION

Income	Elem. or less		< elem. but > high sch.		College or some univ		1st Univ degree		Post graduate	
	Count	%	Count	%	Count	%	Count	%	Count	%
100 or less	26	29.5	49	35.8	64	43.2	26	19.0	2	2.3
101-200	23	26.1	42	30.7	56	37.8	43	31.4	5	5.7
201-300	21	23.9	22	16.1	14	9.5	16	11.7	6	6.8
301-400	7	8.0	13	9.5	5	3.4	10	7.3	4	4.5
401-500	7	8.0	7	5.1	3	2.0	20	14.6	11	12.5
501-600	2	2.3	3	2.2	2	1.4	13	9.5	26	29.5
601+	2	2.3	1	.7	4	2.7	9	6.6	34	38.6

TABLE 7.15

## CROSS TABULATION OF INCOME BY MAJOR

Income	Human science		Social science		Pure science		Engineering		Medicine	
	Count	%	Count	%	Count	%	Count	%	Count	%
100 or less	24	32.4	25	27.5	10	23.3	4	9.1	2	4.3
101-200	23	31.1	34	37.4	9	20.9	8	18.2	5	10.9
201-300	5	6.8	10	11.0	2	4.7	5	11.4	2	4.3
301-400	2	2.7	6	6.6	3	7.0	1	2.3	4	8.7
401-500	4	5.4	4	4.4	6	14.0	12	27.3	6	13.0
501-600	7	9.5	8	8.8	7	16.3	5	11.4	9	19.6
601+	9	12.2	4	4.4	6	14.0	9	20.5	18	39.1

be very cautious about drawing such conclusions, due to the fact that this situation is not consistent for the other segments.

Cross tabulating the consumers' major (field of study) and their income level. Table 7.15 summarizes the sample characteristics according to the respondents income and their field of study. The investigation of the table reveals that about 64% of the human science majors and 65% of the social science majors were reporting an income level of 200 JD or less. At the same time about 27% and 15% of the engineering and medicine sciences were reporting that level of income. In regard of the natural science majors it appears that approximately 44% were reporting such low income.

It is clear that the income level of pure science majors is relatively higher than that of the social science and human science majors. This reflects the real situation in Jordan, where the allowances of the pure science majors were much higher than the human and social sciences. This situation leads to over supply of these majors in particular engineering and medicine, and it forced the government to reconsider the allowance regulations for these majors, in an effort to reduce the financial incentiveness for the engineering and medicine majors. Thus, once again it is believed that the sample characteristics to the income and field of study of the consumers, is fairly representative to the actual population. However, it is clear that this situation only applies to the respondents with college or some university education and above, where the field of study is clearly identified.

Cross tabulating the consumers' evaluation of the importance of the product origin by the sex of the respondents. Table 7.16 summarizes the results of the tabulation of sex and origin importance. The table showed that around 71% of the male respondents thought that the product origin

TABLE 7.16

## CROSS TABULATION OF ORIGIN IMPORTANCE BY SEX

Importance	MALE		FEMALE	
	Count	%	Count	%
Important	282	71.4	167	75.9
Not important	113	28.6	53	24.1

TABLE 7.17

## CROSS TABULATION OF THE EVALUATION OF ORIGIN IMPORTANCE BY AGE

Age	Important		Not important	
	Count	%	Count	%
30 or less	223	81.4	51	18.6
31-40	83	81.4	19	18.6
41-50	69	63.9	39	36.1
51+	76	56.3	59	43.7

TABLE 7.18

## CROSS TABULATION OF THE EVALUATION OF ORIGIN IMPORTANCE BY EDUCATION

Education	Important		Not important	
	Count	%	Count	%
Elementary or less	41	44.6	51	55.4
More than elementary but not more than high school	100	74.1	35	25.9
College or some University	116	74.4	40	25.6
First university degree	111	80.4	27	19.6
Postgraduates (Master or PhD)	76	85.4	13	14.6

TABLE 7.19

CROSS TABULATION OF THE EVALUATION OF ORIGIN IMPORTANCE BY MAJOR  
(field of study)

Origin	Important		Not important	
	Count	%	Count	%
Human sciences	58	75.3	19	24.7
Social sciences	83	90.2	9	9.8
Natural sciences	35	77.8	10	22.2
Engineering	30	65.2	16	34.8
Medicine	36	80.0	9	20.0

was important in the product evaluation. About 76% of the female sample agreed on the product origin importance.

It is self evident that both males and females gave greater importance to the origin of the product as a factor in the evaluation of the product. However, it was found that the percentage of the female respondents who agreed on the origin importance were relatively higher than their male counterparts.

Cross tabulating the consumers evaluation of the importance of the product origin by the age of the respondent. In examining Table 7.17 one finds that relatively all the age segments agree with the high importance of the origin of the product. However, it was found that the younger segments 30 years of age or less, and 31-40 years of age gave the highest agreement portion (98.4% each), with the notion of the importance of the product origin, while the oldest segment disagreed (56.3%) most with the importance of the product origin. Also, it was noticed that the 41-50 segment was somewhat lower than the first two segments and somewhat higher than the older group segment.

Cross tabulating the consumers' evaluation of the importance of the product origin by the education level of the respondent.

The investigation of Table 7.18 reveals that with the exception of the lowest educated segment (elementary or less) all the other education segments were strongly agreeing with the notion of the importance of the origin of the product in product evaluation. There appears to be some kind of linear relationship between the education level and the evaluation of the importance of the origin of the product. The higher the education level, the higher the ratings of the importance of the origin of the product.



TABLE 7.20  
 CROSS TABULATION OF THE EVALUATION OF  
 ORIGIN IMPORTANCE BY INCOME

Income	Important		Not important	
	Count	%	Count	%
100 or less	121	75.2	40	24.8
101-200	130	76.9	39	23.1
201-300	51	66.2	26	33.8
301-400	22	56.4	17	34.6
401-500	29	59.2	20	40.8
501-600	33	71.7	13	28.3
601+	41	80.4	10	19.6

Cross tabulating the consumers' evaluation of the importance of the product origin by the consumers field of study (major).

Table 7.19 presents the results of the tabulation of the sample characteristics in regard of major and origin importance. From the table it was found that the product origin was evaluated to be important by all the segments. However, the social science majors were the highest (90%) in agreeing with this notion while the engineering segment was the lowest (65%). The other segments, human sciences, natural sciences and medicine were somewhat between 75% and 80% agreeing with the importance of the origin of the product in product evaluation.

Cross tabulating the consumers' evaluation of the product origin by the consumer's income. An investigation of Table 7.20 revealed that the highest percentage of the respondents were in agreement with the high importance of the origin of the product in product evaluation. However, it was found that the lowest income (200 or less) and the higher income (501 and above) were more in favour of the importance of the product origin than the middle income segment (301-500).

## 7.8 CONCLUSIONS

This chapter investigated the validity and reliability of the research data, and introduced the characteristics of the sample. Among the various types of validity, two types were employed in this research. These two types were the content and construct validity. The content validity was ensured through the: (1) intensive literature review which led to the identification of all of the aspects related to the domain of the study, (2) the revision of the research instrument from an expert authority in the field of study in U.K. and Jordan, (3) the pre-test of the questionnaire on a sample of respondents similar to the final respondents.

The construct validity was assessed by computing the correlations of a set of variables (quality variables) with another set of variables (price variables). This step was taken to examine the existence and the direction of the relationship among these sets of variables. It is often indicated in the consumer behaviour literature that there is a positive correlation between the perceived product quality and its price (Zeithaml 1988). This situation was found to be prevalent to some extent in this research. Another method was employed to test the construct validity. That is to test the correlations among a set of variables which are intended to measure one dimension of one prime concept. It was assumed that these variables, should display a reasonably acceptable level of correlation. Using the Spearman correlation coefficient it was found that the variables which were intended to measure the product quality, for example, were highly correlated. The same situation was prevalent among the variables, which intended to measure the product price and the product risk.

The alpha correlation coefficient (Cronbach alpha) was used to ensure the reliability of the gathered data. It was found that the collected data was quite reliable in the range of .70 to .90 for each of the products of the participating countries. This level of reliability was found to be relatively higher than the specified level for this type of research (Nunnally 1967).

In the second part of the chapter, the sample characteristics were introduced and compared with the actual characteristics of the population.

It was found that the sample resembles the actual population in many of these characteristics. The main deviations of the sample from the population were found in regard of the sex and the education level of the respondents. The justification for these deviations were discussed in the chapter.

So far we have discussed the theory behind this research, summarized and criticised the relevant literature, introduced the research framework, presented the research design and data collection methods, discussed the research methodology and tested the validity and reliability of the research as well as a description of the sample characteristics. The research findings will be presented in the following chapter. Chapter eight will concentrate on comparing the consumers' perception of the quality of the domestic product attributes and the quality attributes of foreign products.

## CHAPTER EIGHT

### A COMPARATIVE ANALYSIS OF THE CONSUMERS' PERCEPTION OF THE QUALITY OF THE DOMESTIC PRODUCT ATTRIBUTES AND THE QUALITY ATTRIBUTES OF FOREIGN PRODUCTS

- 8.1 Introduction
- 8.2 Interpretation of the Cluster Analysis Results
- 8.3 Domestic Product vs. Foreign Product
- 8.4 Domestic Product vs. The Developed Countries' Product
- 8.5 Domestic Product vs. The Developing Countries' Product
- 8.6 Ratings of Countries in Product Quality
- 8.7 Testing the Significance of the Differences
- 8.8 Domestic Product vs. The Product of Each of the Participating Countries
  - 8.8.1 Jordan vs. Taiwan
  - 8.8.2 Jordan vs. Romania
  - 8.8.3 Jordan vs. Egypt
  - 8.8.4 Jordan vs. Russia
  - 8.8.5 Jordan vs. Japan
  - 8.8.6 Jordan vs. U.K.
  - 8.8.7 Jordan vs. U.S.A.
- 8.9 Tests of Hypotheses
- 8.10 Conclusions

## 8.1 INTRODUCTION

This chapter presents the result of the comparison of the consumers' perceptions of the domestic product quality versus their perceptions of the foreign products' quality. The analysis begins by comparing the quality of the domestic product viz-a-viz that of foreign product in general, then comparing it to that of developing and developed countries, and finally the domestic product compared with other made products. This was done to find out the significance and the direction of the difference in all of these levels, so a specific marketing strategy can be formulated.

The analysis starts by using the cluster analysis to find out the possibility of grouping the participating countries in some homogeneous groups according to the consumers' perception of the quality, price and risk of the product of each country. Then the domestic product quality will be compared to that of foreign countries, developed countries and to each of the participating countries. The hypotheses related to this chapter will also be tested.

## 8.2 INTERPRETATION OF THE CLUSTER ANALYSIS RESULTS

In this section the cluster analysis is used to group the eight countries into two or three groups to ensure that the classification of the countries into developing and developed is relevant to the consumers' perception of the quality attributes of these countries.\*

---

\*The problem with the application of the cluster analysis in this study is related to the high correlation among the variables which will give more weight to the correlated variables than the non-correlated variables. Although there are some methods suggested to reduce the impact of this problem (factor analysis for example), it is found that none of these methods is capable of taking care of the problem without creating other problems. (Aldenderfer and Blashfield 1984).

Table 8.1 presents the squared euclidean dissimilarity coefficient matrix. The countries were labelled in the following sequence: 1. Romania, 2. U.S.A., 3. Egypt, 4. U.K., 5. Japan, 6. Jordan, 7. Russia and 8. Taiwan. The examination of the table revealed that the most similarity was between Romania and Egypt (.4327), Jordan and Egypt (.6418), U.S.A. and Japan (.6861), Taiwan and Romania (1.1059), U.K. and Japan (1.1310), Jordan and Romania (1.3941) and U.K. and U.S.A. (1.9237). The largest dissimilarity was found between U.S.A. and Taiwan (70.9176), Japan and Taiwan (63.4691), U.S.A. and Japan (57.5834), U.S.A. and Egypt (51.5235), Japan and Romania (51.4285), U.K. and Taiwan (49.8654), U.S.A. and Jordan (46.8300), Japan and Egypt (45.5595), U.K. and Egypt (40.9030), U.K. and Jordan (40.9030) and so on.

These results are confirmed in Table 8.2 which presents the agglomeration schedule using the complete linkage method. In this table one finds that Egypt and Romania were the first to be clustered together followed by U.S.A. and Japan, Romania and Jordan, U.S.A. and U.K., Romania and Taiwan and so on.

From the two tables (8.1 and 8.2) one can find that the highest similarities exist among the countries which can be described as achieving the same status of industrialization (development). That is the developing countries can be grouped together in one cluster and all the developed countries except Russia can be grouped together. Russia in itself performs one cluster, somewhere in between the two groups. However, the Russian product seems to be more related to the developing countries block than the developed countries block.

Figure 8.1 demonstrates that from the eight countries, three clusters can be performed as follows: the first cluster includes Jordan, Egypt, Taiwan and Romania, this cluster can be identified as the developing

THE RESULTS OF THE HIERARCHICAL CLUSTER ANALYSIS FOR  
 CLUSTERING THE EIGHT COUNTRIES ACCORDING TO THE CONSUMERS'  
 PERCEPTION OF THE QUALITY ATTRIBUTES OF THEIR PRODUCTS

TABLE 8.1

THE SQUARED EUCLIDEAN DISSIMILARITY COEFFICIENT MATRIX

Case	1 Romania	2 U.S.A.	3 Egypt	4 U.K.	5 Japan	6 Jordan	7 Russia
2 U.S.A.	57.5834						
3 Egypt	.4327	51.5235					
4 U.K.	38.8752	1.9237	33.9781				
5 Japan	51.4285	.6861	45.5595	1.1310			
6 Jordan	1.3941	46.8300	.6418	30.1553	40.9030		
7 Russia	9.4667	20.7394	7.2025	10.2929	17.1095	6.0512	
8 Taiwan	1.1059	70.9176	1.8976	49.8654	63.4691	3.4201	15.4857



THE PROCESS OF ESTABLISHING CLUSTERS FROM THE EIGHT  
COUNTRIES ACCORDING TO THE CONSUMERS' PERCEPTION  
OF THE QUALITY ATTRIBUTES OF THEIR PRODUCTS\*

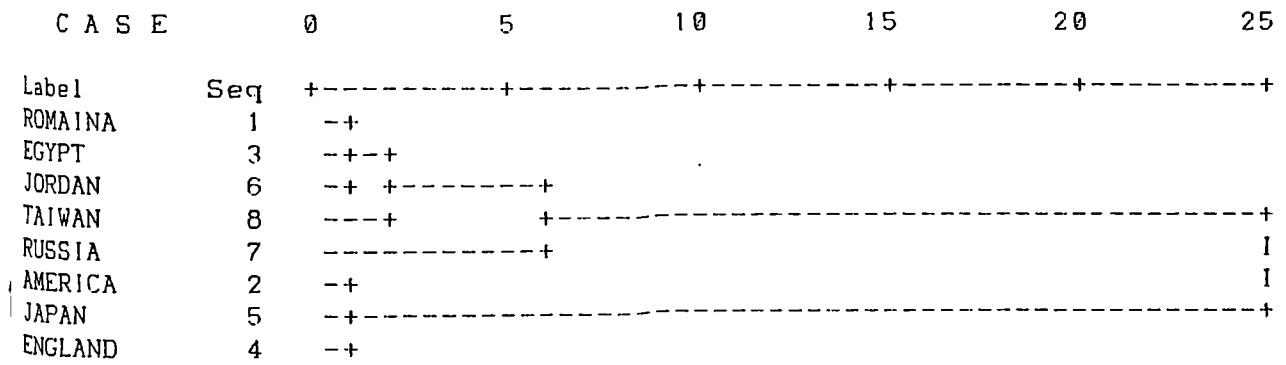
TABLE 8.2

THE AGGLOMERATION SCHEDULE USING COMPLETE LINKAGE

Stage	Clusters Combined		Coefficient	Stage Cluster 1st Appears			Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	Cluster	
1	1	3	.432721	0	0	0	3
2	2	5	.686096	0	0	0	4
3	1	6	1.394072	1	0	0	5
4	2	4	1.925702	2	0	0	7
5	1	8	3.420076	3	0	0	6
6	1	7	15.485671	5	0	0	7
7	1	2	70.917633	6	4	0	0

\*Countries are numbered as follows:  
 (1) Roumania, (2) U.S.A., (3) Egypt, (4) U.K., (5) Japan,  
 (6) Jordan, (7) Russia, (8) Taiwan

FIGURE 8.1  
A DENDOGRAM PRESENTS THE FORMATION OF THE FINAL CLUSTERS  
OF THE CONSUMERS' PERCEPTIONS OF THE QUALITY OF THE  
PRODUCTS OF THE PARTICIPATING COUNTRIES USING THE COMPLETE  
LINKAGE METHOD.



countries cluster; the second cluster includes Russia only; the third cluster includes, U.S.A., U.K. and Japan. This cluster can be known as the developed countries cluster.

Since one of the objectives of this study is to compare the Jordanian consumers perception of the domestic product quality viz-a-viz their perception of the developed and developing countries product, it is found that the Jordanian product should be detached from the developing countries to be named the domestic product, and the Russian product could be attached to the developed countries product. However, the results of the cluster analysis provide further evidence that the country's stage of development could be relevant in the consumers' perception of the product quality made in that country.

### 8.3 DOMESTIC PRODUCT V.S. FOREIGN PRODUCT

Consumers were asked to evaluate the major home appliances made in Jordan, Egypt, Taiwan, Romania, Russia, U.K., Japan and U.S.A. on sixteen selected concepts which contributed to the overall evaluation of the product quality.

As shown in Table 8.3 and figure 8.2, the Jordanian consumers perceive the overall quality of the foreign product to be of a higher overall quality than that of the domestic product. The overall rating for the domestic product was 3.9058 and the foreign product was 4.6065. The T-test results indicated that the difference was significant at (.000) level of significance.

The T-test was performed in the sixteen quality variables. The superiority of the foreign product to that of the domestic product was found to be consistent in the sixteen quality cues on a level of significance no less than (.000) in all the cases.

TABLE 8.3

A COMPARISON OF THE CONSUMERS' PERCEPTION OF THE DOMESTIC  
QUALITY VERSUS THE QUALITY OF FOREIGN PRODUCTS\*

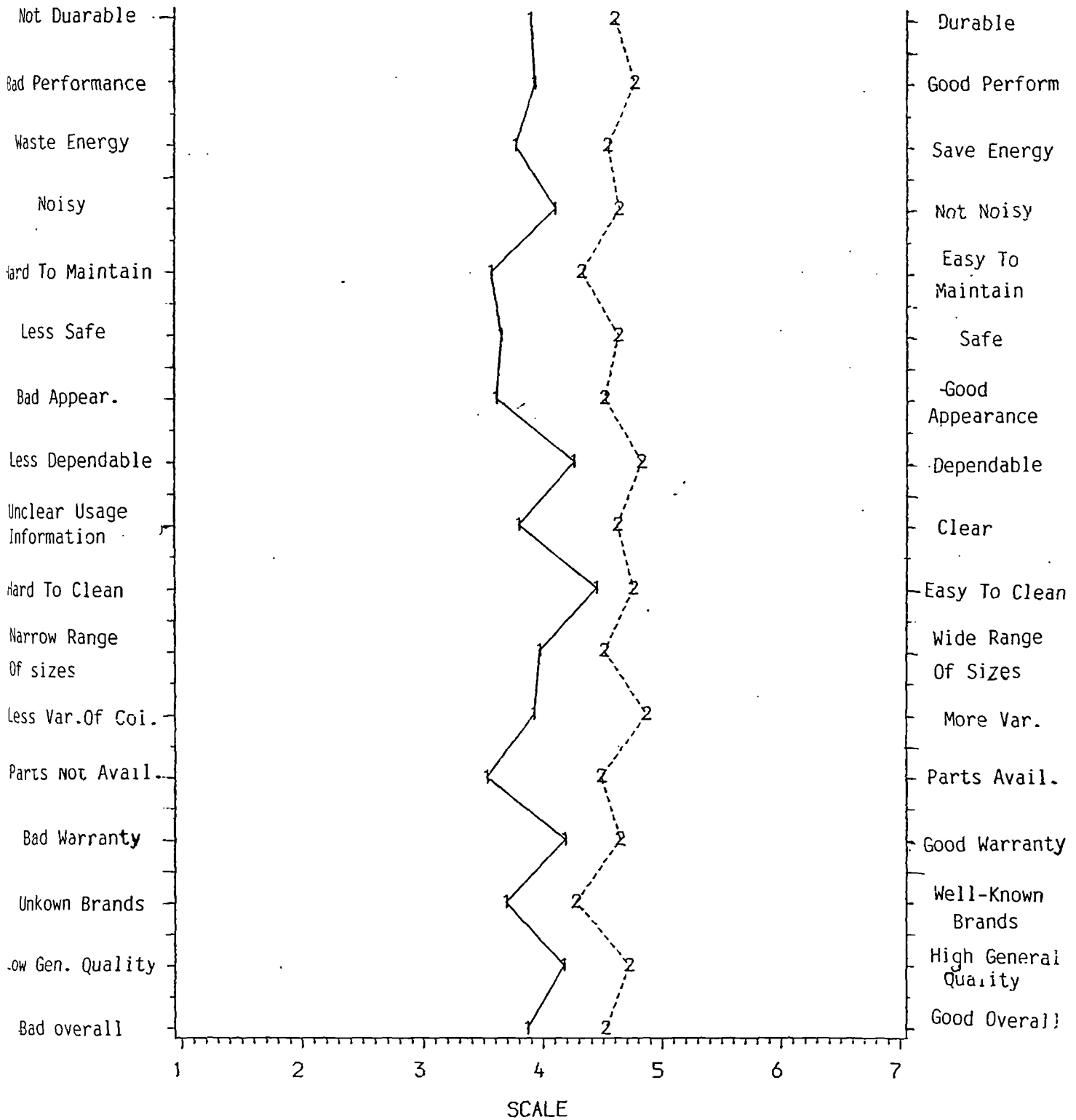
QUALITY CUES	DOMESTIC MEAN	FOREIGN MEAN	DIFFERENCE	t-VALUE	DEGREE OF FREEDOM	2-TAIL PROB.
Overall	3.9058	4.6065	-.7007	-21.18	638	.000
Durability	3.9405	4.7751	-.8346	-13.13	638	.000
Performance	3.7793	4.5476	-.7683	-12.01	638	.000
Energy Saving	4.1129	4.6389	-.5261	-8.57	637	.000
Noise Level	3.5728	4.3269	-.7541	-10.32	638	.000
Maintenance	3.6588	4.6333	-.9745	-14.04	638	.000
Safety	3.6138	4.5161	-.9023	-13.71	636	.000
Appearance	4.2645	4.8297	-.5652	-9.59	638	.000
Dependability	3.7997	4.6204	-.8207	-13.17	638	.000
Clear Usage Instruction	4.4474	4.7568	-.3094	-4.61	636	.000
Ease of Cleaning	3.9749	4.5130	-.5381	-8.44	637	.000
Variety of Sizes	3.9249	4.8707	-.9458	-13.35	638	.000
Variety of Colours	3.5282	4.4856	-.9574	-13.24	637	.000
Spare Parts Availability	4.1897	4.6495	-.4599	-5.89	637	.000
Warranty	3.6897	4.2786	-.5889	-8.48	637	.000
Brand Recognition	4.1818	4.7254	-.5436	-8.13	637	.000
General Quality	3.8715	4.5255	-.6540	-9.64	637	.000

## \*NOTES:

- The scale of measurement is of 7 points the highest is 7 and the lowest is 1 while 4 is the average.
- The higher the score the better the evaluation.

Figure 8.2

A Profile Of The Consumers Perception Of The Quality Attributes Of The Domestic Product Vs. Foreign Products



1 JORDAN 2 FOREIGN

These results contradict the previous research findings performed in the United States and other developed nations, which indicate, that there was a bias against foreign products in favour of domestic products. As an example of this research, Gaedeke (1973) found that products made in the United States were ranked in first place for products in general as well as for the more homogenous groups of food products, electronic items and textiles.

Lillis and Narayana (1971) found the Japanese consumers to be favourably disposed towards their own products. Darling and Kraft (1977) found that the Finnish consumers rated their home country products the highest in overall ratings among products made in France, West Germany, Japan, Sweden, U.S.A. and Russia. The American product was rated sixth in the overall ratings, just ahead of the U.S.S.R.

Bannister and Saunders (1978) found that U.K. consumers rated the products of domestic origin quite highly but, compared with respondents ratings in the various U.S.A. and Japanese studies, the U.K. consumer demonstrates relatively favourable inclinations towards imported products.

Cattin and Jolibert (1979) found that the French consumers perceived "made in Germany, Japan and U.S.A." concepts to have lower mean values than the "made in England and France". Chasin and Jaffe (1979) found that the U.S.A. had a much more favourable rating on all attributes investigated compared to eastern European countries (U.S.S.R., Poland, Romania, Czechoslovakia, Hungary, East Germany and Bulgaria).

Niffenegger, White and Marmet (1980) found that the U.K. retail managers rated the English product the first for electrical appliances,

textiles, foods and pharmaceutical products among the French and American products in terms of the greatest value. Second and third places were automobiles and cosmetics.

Johansson, Douglas and Nonaka (1985) found that the American consumers rated the American automobile higher on horse-power than the German and Japanese automobiles. Wall and Heslop (1986) found that for clothing and footwear products the Canadian consumers rated the Canadian made products higher than the Japanese, and the European made products.

Chao (1989) indicated that products made in the U.S.A. produced higher mean quality ratings than those made in Korea. The study was conducted in the U.S.A. Howard (1983) found that domestic products (American products) were rated higher in quality than products from South Korea, France, Taiwan, Brazil, Mexico and England. He concluded that this was consistent with the "home country" bias found by earlier studies.

Although the research findings in regard of the domestic product quality in comparison with foreign product quality, were in contradiction with most of the research in this field, it was found that it was consistent with certain other research. Krishnakumar (1974) found that the Indian consumers rated products made in the U.S.A., Germany and England higher than products made in India. The same results were found when the Chinese consumers evaluated "made in Taiwan" with the same countries (U.S.A., Germany and England). It was found that the unfavourable "made in" image of the domestic products among persons from a less developed country affects their view of product class as well as products.

Schooler (1965) found that the Guatemalan consumers rated the products of Mexico to be equal to their own country product, while they rated the

product of the Central American Common Market (C.A.C.M.) to be inferior to their own country product.

Dornoff, Tankersley and White (1974) found that the American products were not considered to have the highest quality in all product classes. Japan outranked the U.S.A. in electrical equipment and Germany was rated superior in mechanical products. Nagashima (1977) found that the Japanese consumers rated the "made in Germany" highest among the five countries - U.S.A., England, France, Germany and Japan - in terms of workmanship, technical advancement and inventiveness. White (1979) found that the American consumers evaluated the products from West Germany as being significantly higher than products from the U.S.A.

Niffenegger, White and Marmet (1980) found that the U.K. retail managers evaluated the French cosmetics and automobiles better than that of the United Kingdom. Johansson, Douglass and Nonaka (1985) found that the American consumers' respondents rated Japanese automobiles more positively than did Japanese respondents. They indicated that there was little evidence to suggest any prejudice in favour of home country products.

Wall and Heslop (1986) reported that the Canadian consumers rated the overall quality of Japan and Germany products higher than the Canadian made products. However, the T-tests revealed no significant difference ( $<.05$ ) between Canada and Japan, West Germany or the U.S.A. Khanna (1986) indicated that the Indian industrial consumers perceive the Indian made product to have the lowest ratings on critical products and factors, such as quality, creativeness, fashion or design and technology. Comparatively, the Japanese have the highest ratings on all critical product factors.



The same situation was found in regard of the product service factors, and to some extent for the promotion factors. The other countries used in the study were Taiwan and South Korea.

#### 8.4 DOMESTIC PRODUCT vs. THE DEVELOPED COUNTRIES' PRODUCT

The consumer evaluations of the products of U.S.A., U.K., U.S.S.R. and Japan are grouped together to represent the developed countries' product to be compared with the domestic product.

Table 8.4 summarises the results of the T-test. The last column of Table 8.4 shows the significance of the difference between the domestic product quality and the developed countries' product quality. As is shown in the table the differences between the two groups for the entire variables are significant at .000 level of significance. To find out the direction of the significance, column eight was examined, which showed that the direction is negative for the sixteen variables and the overall variables. This indicates that the quality of the domestic product is seen to be inferior to that of the developed countries' product. (Figure 8.3)

The greatest difference between the products of the two groups are related to the following cues: maintenance (-1.676), safety (-1.651), durability (-1.598), variety of colours (-1.586) and variety of sizes (-1.543). The lowest difference was related to the usage instructions variable (-.899). The variables which showed the greatest difference between the products of the two groups can be classified as intrinsic cues, while the only variable which showed a low difference can be classified as an extrinsic variable. From the marketing point of view the

TABLE 8.4

A COMPARISON OF THE DOMESTIC PRODUCT QUALITY  
VS. THE DEVELOPED COUNTRIES' PRODUCT QUALITY\*

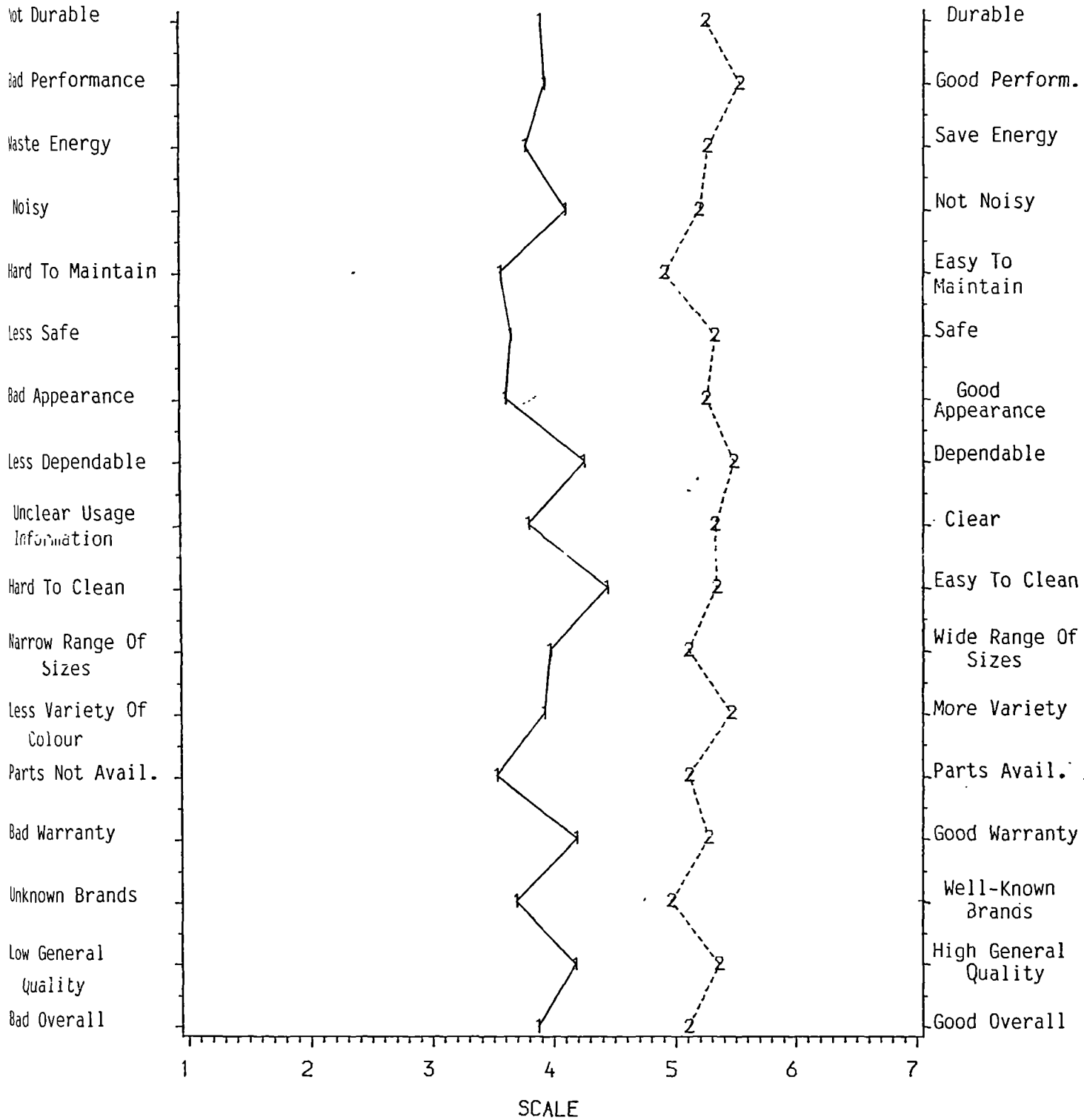
QUALITY CUES	DOMESTIC MEAN	DEVELOPED MEAN	DIFFERENCE	t-VALUE	DEGREE OF FREEDOM	2-TAIL PROB.
Overall	3.9058	5.2559	-1.3501	-31.84	638	.000
Durability	3.9405	5.5387	-1.5982	-21.60	638	.000
Performance	3.7793	5.2748	-1.4954	-19.17	638	.000
Energy Saving	4.1129	5.2023	-1.0895	-14.47	637	.000
Noise Level	3.5728	4.9225	-1.3457	-16.05	637	.000
Maintenance	3.6588	5.3316	-1.6758	-21.01	638	.000
Safety	3.6138	5.2652	-1.6514	-21.69	636	.000
Appearance	4.2645	5.4924	-1.2280	-17.90	638	.000
Dependability	3.7997	5.3354	-1.5357	-21.15	638	.000
Clear Usage						
Instruction	4.4474	5.3442	-.8968	-11.59	636	.000
Ease of						
Cleaning	3.9749	5.1082	-1.1332	-14.95	637	.000
Variety of						
Sizes	3.9249	5.4674	-1.5425	-19.04	638	.000
Variety of						
Colours	3.5282	5.1139	-1.5857	-19.45	637	.000
Spare Parts						
Availability	4.1897	5.2772	-1.0875	-12.33	637	.000
Warranty	3.6897	4.9676	-1.2780	-16.08	637	.000
Brand						
Recognition	4.1818	5.3619	-1.1801	-15.47	637	.000
General						
Quality	3.8715	5.1062	-1.2347	-15.86	637	.000

## \*NOTES:

- The scale of measurements consisted of 7 points, the highest is 7 and the lowest is 1 while 4 is the average.
- The higher the score the better the evaluation.

Figure 8.3

A Profile Of The Consumers Perception Of The Quality Attributes  
Of The Domestic Product Vs. Developed Countries Product



1 JORDAN 2 DEVELOPED

variety of colours, the variety of sizes and the usage instructions variable can be associated with the marketing related cues while the others are more related to the production related cues.

In an effort to relate the research findings to the existing literature, it was found that very little work was done in relation to the comparison of a developing country product with a group of developing countries' product in a developing country market. However, it was documented in the literature that the developing countries' products were seen as inferior to the developed countries' products when they were evaluated by consumers from developed countries (Reierson 1966, Schooler and Sunnoo 1969, Schooler 1971, Gaedeke 1973, Chasin and Jaffe and Wall and Heslop 1986).

All of these studies were done in developed countries and their results in general indicated a negative image of the developing countries' products.

The only two studies in which one can find some support to the present findings were done in India, one by Krishnakumar (1974) and the other by Khanna (1986). In both studies the researchers reported negative images of the Indian consumers towards their home country product and more valuable images towards the products of developed countries. However, in both studies no attempt was made to group the developed countries in one group and to compare the overall image of the Indian product with the developed countries' product. Japan was the only developed country tested in the Khanna study, while Japan, the U.S.A., the U.K. and German products were compared individually to the Indian product in Krishnakumar's study.

The fact that the domestic product was seen to be inferior in all variables of the product quality in comparison to the developed countries' product and that the most distinguished weaknesses were related to the

intrinsic cues and the production dimensions, is worth more attention from the local manufacturers. In several studies it was found that intrinsic cues were more important to the consumer than extrinsic cues in assessing product quality. (Gutman and Alden 1984, Olson and Jacoby 1972, Szybillo and Jacoby 1974)

#### 8.5 DOMESTIC PRODUCT vs. DEVELOPING COUNTRIES PRODUCT

Table 8.5 and figure 8.4 summarise the results of the comparison between the products of the two groups. The first two columns of the table show the average ratings of the overall quality of the domestic and developed countries' product as well as the average rating of the variables used in the study. The third column shows the difference between the two means and the last column shows the significance of the difference.

As is shown in Table 8.5, there is a significant difference between the domestic product and the developing countries' product in regard of the overall quality of the products. The difference was significant at (.000) level of significance. The mean ratings of the two groups as well as the positive sign of the T-value, indicate that the difference is to the benefit of the domestic product. This trend is seen to be consistent in eleven variables of the sixteen attributes used to measure the quality of the product. In seven of these variables, energy-saving, appearance, usage instructions, ease of cleaning, availability of spare parts, product warranty and brand recognition, the difference was significant at (.000) level of significance. The difference was significant at (.02) for product durability and performance, at (.028) for dependability and at (.034) for variety of sizes. The differences in the remaining variables are considered insignificant, because they are more than .05 the maximum level to accept the significance of the test of difference.

TABLE 8.5

A COMPARISON OF THE DOMESTIC QUALITY VIZ-A-VIZ WITH  
DEVELOPING COUNTRIES' PRODUCT QUALITY\*

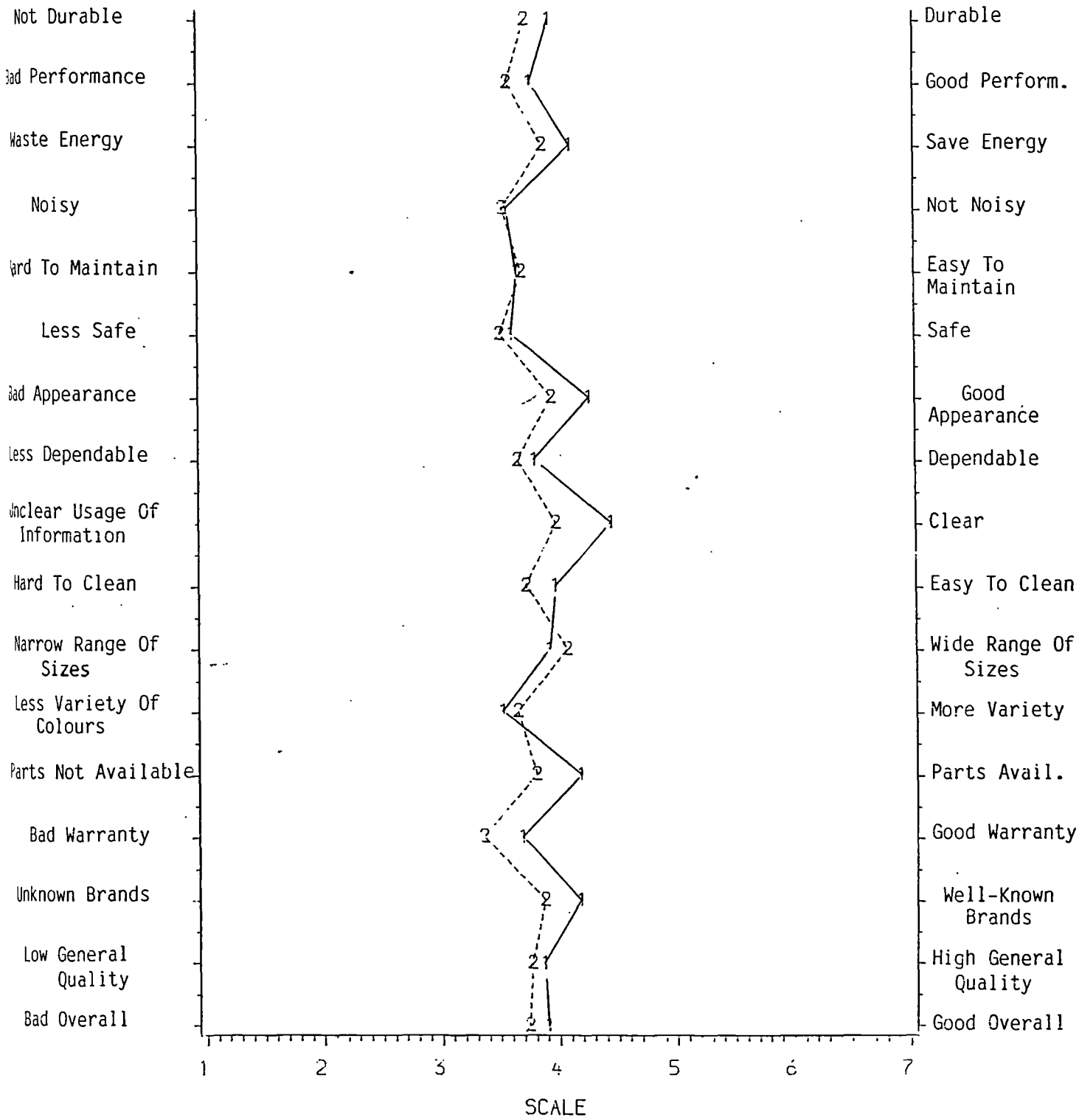
QUALITY CUES	DOMESTIC MEAN	DEVELOPING MEAN	DIFFERENCE	t-VALUE	DEGREE OF FREEDOM	2-TAIL PROB.
Overall	3.9058	3.7407	.1651	4.61	638	.000
Durability	3.9405	3.7490	-.1978	3.08	637	.002
Performance	3.7793	3.5828	.1962	3.08	637	.002
Energy Saving	4.1129	3.8775	.2354	3.97	637	.000
Noise Level	3.5728	3.5383	.0344	.47	638	.641
Maintenance	3.6588	3.6961	-.0373	-.54	638	.591
Safety	3.6138	3.5128	.1010	1.51	636	.131
Appearance	4.2645	3.9441	.3255	5.25	637	.000
Dependability	3.7997	3.6568	.1429	2.21	638	.028
Clear Usage Instruction	4.4474	3.9793	.4681	7.01	636	.000
Ease of Cleaning	3.9749	3.7241	.2508	3.91	637	.000
Variety of Sizes	3.9249	4.0769	-.1521	-2.12	638	.034
Variety of Colours	3.5282	3.6531	-.1240	-1.66	636	.098
Spare Parts Availability	4.1897	3.8119	.3777	4.86	637	.000
Warranty	3.6897	3.3595	.3250	4.68	636	.000
Brand Recognition	4.1818	3.8777	.3041	4.36	637	.000
General Quality	3.8717	3.7640	.1041	1.50	636	.135

## \*NOTES:

- The scale of measurement consisted of 7 points, 7 is the highest 1 is the lowest and 4 is the average.
- The higher the score the better the evaluation.

Figure 8.4

A Profile Of The Consumers Perception Of The Quality Attributes  
Of The Domestic Product Vs. Developing Countries Product



1 JORDAN 2 DEVELOPING

The same pattern is observed in all of the above variables, where the consumers show more favourable perception toward the domestic product than that of the developing countries' product. The only exception is the variety of sizes, where the developing countries' product is perceived to have more variety of sizes than the domestic product. The difference between the products of the two groups (-.1521) is significant at .034 level of significance. The other two variables, in which the developing countries' product surpasses the domestic product are the variety of colours and the need for maintenance. Both considered insignificant at .05.

The greatest differences in favour of the domestic product are related to the usage instruction variable, availability of spare parts, product appearance, product warranty and brand recognition. The smallest differences between the products of the two groups, where the differences are in favour of the domestic product, are related to the noise level variable, safety and general quality. The difference in all these variables were found to be insignificant at .050 the significance level.

It is worth mentioning that the domestic product is in clear advantage in comparison to the developing countries' product in both the extrinsic and intrinsic cues of the product. However, all of the variables which showed no significant differences can be classified as intrinsic cues.

In a developing country like Jordan, with a short experience in producing such an important class of products as major home appliances, one might anticipate that the consumers may expect some shortcomings of the production attributes of the domestic product. On the other hand, due to the effect of the promotion efforts of the local producers and the "buy national product" campaign, one can assume that the Jordanian consumers may be familiar with the marketing cues of their product. Moreover, they may recognise it more than they do for the products coming from developing



countries, although in various levels of development (Tolbert 1985, Schooler 1966 and Wall and Heslop 1985).

The study results in Table 8.5 indicate that while the difference in the calculated overall perceptions between the products of the two groups is significant at .000 the difference in the general quality reported by the consumers is found to be insignificant at .050 level of significance. This might seem to be a contradiction in the results. This may be the result of at least two factors. The first might be that consumers were assigning different weights to each attribute measured in the questionnaire while the calculations assigned the same weight for each of the variables. The second reason might be that when consumers asked about the general quality, they might take more variables in to account than that measured in the questionnaire. Such cues as the product risk, the product price might be taken into account in evaluating the products' general quality, when it was attempted to measure them separately and to see how they affect the product evaluation. Other variables might enter in the evaluation and are mentioned in the research (see Chapter 4, The Research Framework). However due to time, money and space limitations, those variables will not be investigated in the present research. These can be categorized as country related cues such as the familiarity with the specific country, language, political relations and others, which were left for future research.

However, the following chapters will verify at least partially the second factor by taking the quality, price and risk variables collectively to see how they affect the products' overall evaluation and the general quality variable measured in the survey. The first variable is not without merits in the literature. It was indicated that consumers assigned different weights to different attributes. For instance, Olson

and Jacoby 1972 indicated that consumers may prefer intrinsic cues to extrinsic cues. Similar suggestions were found in Szybillo and Jacoby (1974) when they conclude that if intrinsic cues are available consumers will use them, placing less emphasis on extrinsic cues.

The weights assigned to different variables is a topic which is thought to be worth more investigation. It is recommended to be the focus of future research in the Jordanian market.

In general, the findings in regard of the comparison of the domestic product with the developing countries' product, indicated that the domestic product had more favourable reception in its local market, which is in agreement with most of the research done in developed countries. However, it contradicts most of the little research done in developing countries.

For example, Nagashima (1970), Schooler (1971), Tongberg (1972), Dornoff et al. (1974), Nagashima (1977), Cattin and Jolibert (1979), Narayana (1981), Howard (1983), Erickson and Johansson (1984), Johansson et al. (1985), Henthorne (1986) and Chao (1989), found that the American consumers have a more favourable image for their home country product than the products imported from developed or developing countries. It was noticed that the consumers' bias was more intense toward the East European countries and the developing countries' product (for more discussion about the findings of the previous research see Chapter 3).

Similar results were reported in studies done in other developed countries for example Nagashima (1977) in Japan, Wall and Heslop (1986) in Canada, Niffenegger, White and Marmet (1980) in the U.K., Cattin and Jolibert (1979) in France and Darling and Kraft (1981) in Finland. They all reported that the domestic products were perceived better than the imported products in many attributes and product classes.

The only study done in developing countries which showed some support to the research results is conducted by Schooler (1965) in Guatemala, which showed that the Guatemalian consumers rated their product superior to the rest of the Central American Common Market countries' members, except, the Mexican product which was found to be similar to the product of Guatemala. Bilkey and Nes (1982) reported two cases in which they suggest that the developing countries' consumers have a low favourable image in regard of their domestic products. One of these cases reported that a West German firm established production of its standard injection molding machines in the U.S. to serve both the North American and Latin American markets. Although the firm has a Brazilian subsidiary with access to those countries the company's sales director stated that many customers "won't buy a machine made in Brazil, the U.S.A. made products, by contrast, find ready acceptance". The other case was related to one of the authors' experience in which a Puerto Rican shoe manufacturer who shipped his entire production to New York City and back, advertised those shoes as being from New York. According to the authors, experience had convinced the firm that Puerto Ricans would buy the shoes more readily when they were perceived as made in New York rather than in Puerto Rico.

One possible explanation to the favourable image of the Jordanian product in comparison to the developing countries' product, which contradict most of the previous research results done in developing countries, is that the domestic product in the previous research was either compared with foreign products in general or with the developed countries' product. In both cases the respondents probably assumed the comparison with more developed nations, presumably, because most of the export was done by industrialized nations. This is confirmed in the comparison of the domestic product with foreign product in general and

with developed countries in particular. However, when the comparison is between nations in relatively similar stage of development, then consumers might prefer the domestic product to the imported products. This interpretation is supported by the findings of Schooler's (1965) research when he found that Guatemalian consumers prefer their home country product to that of the Central American countries. It is also supported by Krishnakamar's (1974) findings in regard of the preference of the Taiwanese respondents to their domestic product than that of India, while they prefer the American product to the product of Taiwan. Thus, a hierarchy of biases may exist in product evaluation. These include a seemingly positive relationship between product evaluations and degree of economic development (Schooler 1971, Tongberg 1972, Wang 1978 and Hampton 1977).

The second possible explanation might be related to the Jordanian consumers' characteristics, which might be different from the characteristics of the consumers of other developing countries, the Indian and the Taiwanese consumers for example, where different results had been reported. Yaprak (1978), Nagashima (1970) and Lillis and Narayana (1974) all found differences among respondents' attitudes in two countries regarding products from a third country.

The third possible explanation might be related to the product evaluated. Several studies found significant differences between general country attitudes and product attitudes (Etzel and Waker 1974). Also Gaedeke (1973), Reiersen (1966), Nagashima (1979, 1977) found that attitudes toward products from a country vary by product. It might be possible to conclude that building the overall image of the entire production of a specific country on the results of one product is misleading. However, the unfavourable difference between the domestic product and the developed countries product is greater than the favourable

difference between the domestic product and the developing countries product. This indicates that although the domestic product might have better perception than the developing countries' product, the developed countries' product is seen to be much better than the domestic product. In other words the favourable difference between the domestic product and the developing countries' product is much less than the unfavourable difference between the domestic product and the developed countries' product. This might explain why the foreign product in general (developed and developing) is perceived to be better than the domestic product.

#### 8.6 RATINGS OF COUNTRIES IN PRODUCT QUALITY

The responses from the first part of the questionnaire were aggregated across all consumers and the results are presented in Table 8.6. From the examination of Table 8.6 one finds that the American product had the highest overall ratings for product quality, Japan product was rated second, the United Kingdom were rated third, the Russian product fourth, followed by the domestic product fifth and the products of Egypt, Romania and Taiwan in that order.

It is noticed that the products of all the developed countries are rated higher above the domestic product, while all of the developing countries were rated lower than the domestic product. These findings are consistent with the previous findings in comparing the domestic product to that of developed and developing countries as groups. It is also consistent with most of the previous studies, that products from industrialized countries are rated higher in quality than products from less industrialized countries (Reiersen 1966, White 1979, Wall and Heslop 1986). However, they are in contradiction with the findings of the rest

TABLE 8.6

THE RATINGS OF THE PARTICIPATING COUNTRIES ACCORDING  
TO THE CONSUMERS' PERCEPTION OF THE OVERALL  
QUALITY OF THEIR PRODUCTS\*

COUNTRY	MEAN RATING	RANK
Japan	5.5482	2
Russia	4.5244	4
U.K.	5.3080	3
U.S.A.	5.6429	1
Jordan	3.9058	5
Romania	3.7680	7
Egypt	3.8766	6
Taiwan	3.5774	8

\*NOTES:

- The scale is of 7 points, the highest is 7 and the lowest is 1.
- The higher the mean rating the better the perception of the product quality.

of the other research which showed that domestic products are consistently rated overall superior in quality to foreign products. (Tongberg 1972).

#### 8.7 TESTING THE SIGNIFICANCE OF THE DIFFERENCE

In this section of the analysis, the attempt is made to test the significance of the difference. The T-test two tails pairs provided by the SPSSX statistical package was used. The results of the T-test in Table 8.7 showed that the difference between the domestic product and the product of the rest of the countries, is statistically significant beyond .001 significance level, except for Egyptian product. The sign of the T-value is negative for the difference between the quality perception of the domestic product and that of each of the developed countries, while the sign is positive for the difference between the domestic product and that of each of the developing countries. This is an indicator that the domestic product has an unfavourable image in comparison to the developed countries' product and a favourable image in comparison with the developing countries' product. The T-test is greater for the difference between the developed countries and the domestic than between the developing countries and the domestic. This might indicate that the quality of the developed countries' product when compared to the domestic product is more appreciated than the quality of the domestic product in comparison to the developing countries' product. It is noticed that the difference for the lowest rated developed country is higher than the difference for the lowest rated developing country (i.e. the difference between the domestic product and the Russian product is -14.57, while the difference between the domestic product and the Taiwanese product is 6.32).

In looking at the ratings of the various countries used in this study, one finds that the United States is given the highest ratings while the

TABLE 8.7

T-TEST RESULTS OF THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN  
THE MEAN QUALITY RATING OF THE DOMESTIC PRODUCT AND  
THE MEAN RATING OF EACH COUNTRY\*

COUNTRY	DIFFERENCE	S. DEV	S.ERROR	T-VALUE	TWO-TAIL PROB
Japan	-1.6424	1.280	.051	-32.44	.000
Russia	-.6186	1.0740	.042	-14.57	.000
Egypt	.0292	.865	.034	.85	.394
Taiwan	.3285	1.315	.052	6.32	.000
Romania	.1377	1.018	.040	3.42	.001
U.S.A.	-1.7371	1.290	.051	-34.03	.000
U.K.	-1.4022	1.171	.046	-30.26	.000

## \*NOTES

- Degrees of freedom is 638 for all countries.
- The negative sign indicate that the specified country is receiving higher ratings than the domestic product.



U.S.S.R. is given the lowest ratings among the developed countries. Jordan is given the highest ratings and Taiwan is given the lowest rating among developing countries. The fact that the U.S.A. product is rated first and the Russian product is last among developed countries is worth some comment. In its home market, Howard (1983), reported that the American consumers gave higher ratings with a significant difference to the Japanese product than that of the American product. He concludes that this might represent a shift in the American consumer attitudes. If this is the case then according to the present research results one might conclude that the American product has better perceptions in the Jordanian market, at least in comparison to the Japanese product, than it had in its local market.

In regard of the Russian product, it was reported in the literature that the Russian product and the rest of Eastern European countries were rated lower than the American product and the rest of the developed nations. (Bannister and Saunders 1978, Schooler 1968, Wang 1978, Darling and Kraft 1977 and Chasin and Jaffe 1979). This bias against the Russian product may apply to the developing countries' market (at least the Jordanian market) as well as to the developed countries' market.

The poor performance of the Taiwanese product in the Jordanian market is somewhat surprising. Several studies indicated acceptable levels of ratings to the Taiwanese product at least in some product classes for example electronics. (Gaedeke 1973, Krishnakumar 1974). The explanation to the product of Taiwan being rated the last in this study may be related to the product class investigated here. This class of product had not been tested (as far as the researcher can ascertain) in the previous

research in regard to the Taiwanese product. It might be related, on the other hand, to the Jordanian consumer's experience with the products of that country.

## 8.8 DOMESTIC PRODUCT vs. THE PRODUCT OF EACH OF THE PARTICIPATING COUNTRIES

In this section the domestic product quality will be compared to each country in all of the sixteen attributes which are used to measure the product quality. Analysis of variance will be used to test the significance of the difference for each variable. The results are summarized in Table 8.8 and presented in figure 8.5, which show the mean of each attribute and the F-test of the significance of the difference.

### 8.8.1 JORDAN v.s. TAIWAN

The Jordanian product is perceived to be superior to the product of Taiwan in all the variables with a significant difference of (.002) or less, except in two variables, the variety of sizes and the variety of colours where no significant differences are found. The greatest differences were found in the variables: usage instructions, product performance, spare parts availability and product appearance. The smallest differences were found in the variety of sizes, variety of colours, need for maintenance, general quality and product safety. The Taiwanese product was perceived to be better than the Jordanian product in the first two of these variables (variety of sizes and variety of colour).

### 8.8.2 JORDAN v.s. ROMANIA

The comparison of the Jordanian product to the product of Romania revealed that the product of Jordan is perceived to be better than the Romanian product with a significance level of (.05) or less in eight of the

TABLE 8.8

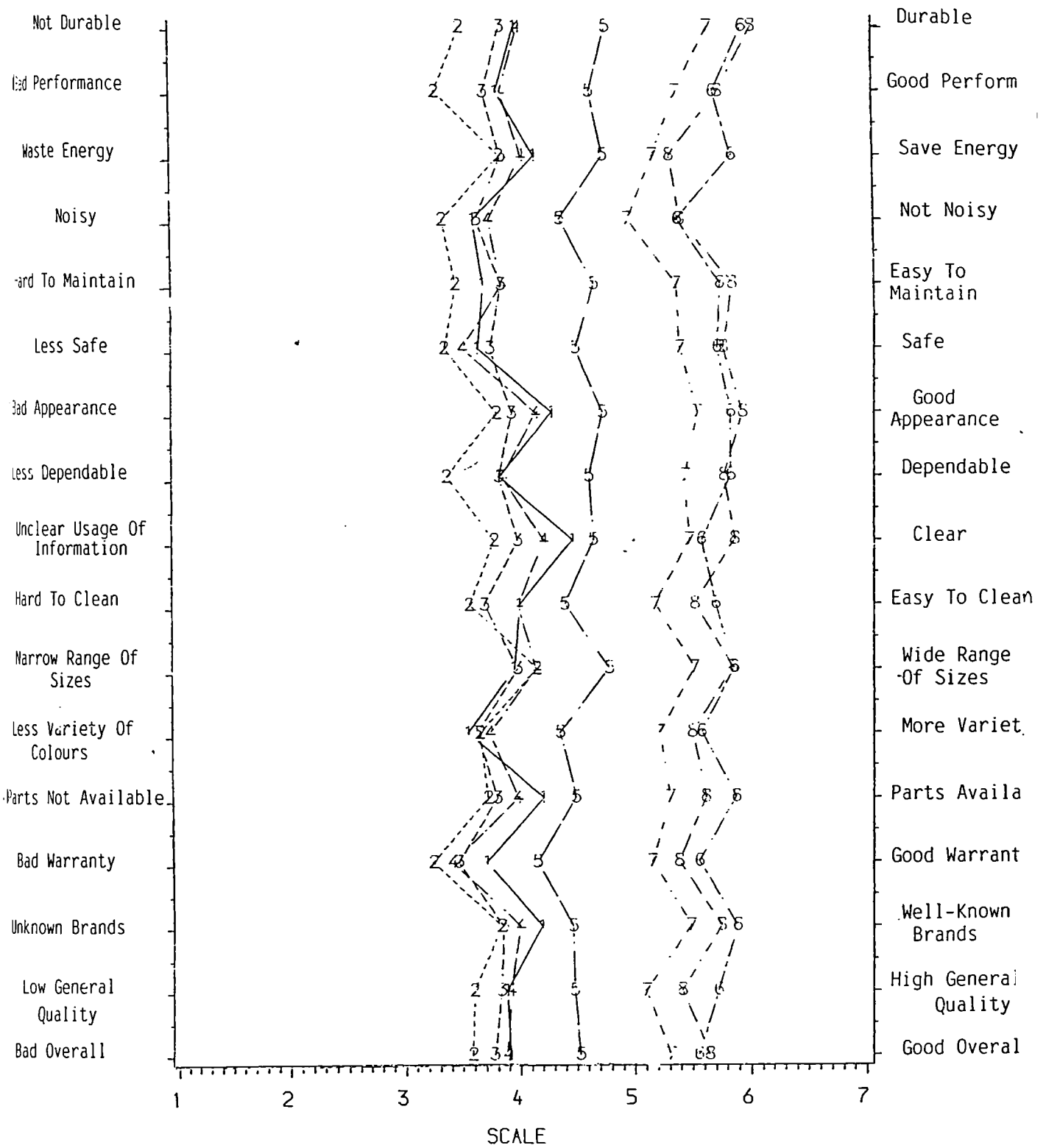
THE ANOVA RESULTS OF THE COMPARISON OF THE JORDANIAN PRODUCT QUALITY TO THE QUALITY OF THE PARTICIPATING COUNTRIES' PRODUCT\*

	JORDAN	TAIWAN	ROMANIA	EGYPT	RUSSIA	JAPAN	U.K.	U.S.A.
Durability (1)	3.940	3.467 (.000)	3.816 (0.043)	3.969 (.085)	4.745 (.000)	5.925 (.000)	5.632 (.000)	6.005 (.000)
Performance (2)	3.779	3.246 (.000)	3.664 (.057)	3.815 (.936)	4.601 (.000)	5.673 (.000)	5.349 (.000)	5.718 (.000)
Energy Saving (3)	4.113	3.807 (.000)	3.819 (.000)	3.995 (.044)	4.716 (.000)	5.830 (.000)	5.150 (.000)	5.295 (.000)
Noise Level (4)	3.573	3.305 (.002)	3.601 (.894)	3.706 (.287)	4.332 (.000)	5.358 (.000)	4.929 (.000)	5.384 (.000)
Maintenance (5)	3.659	3.424 (.001)	3.815 (.522)	3.824 (.448)	4.634 (.000)	5.723 (.000)	5.344 (.000)	5.831 (.000)
Safety (6)	3.614	3.327 (.000)	3.719 (.764)	3.483 (.012)	4.470 (.000)	5.698 (.000)	5.378 (.000)	5.748 (.000)
Appearance (7)	4.265	3.781 (.000)	3.913 (.000)	4.124 (.017)	4.710 (.000)	5.818 (.000)	5.531 (.000)	5.917 (.000)
Dependability (8)	3.700	3.350 (.000)	3.798 (.711)	3.825 (.954)	4.589 (.000)	5.818 (.000)	5.420 (.000)	5.757 (.000)
Clear Usage Instructions (9)	4.447	3.757 (.000)	3.963 (.000)	4.194 (.002)	4.630 (.119)	5.566 (.000)	5.460 (.000)	5.852 (.000)
Ease of Cleaning (10)	3.975	3.541 (.000)	3.668 (.000)	3.962 (.495)	4.375 (.000)	5.686 (.000)	5.161 (.000)	5.505 (.000)
Variety of Sizes (11)	3.925	4.126 (.104)	3.956 (.948)	4.120 (.066)	4.762 (.000)	5.843 (.000)	5.502 (.000)	5.833 (.000)
Variety of Colours (12)	3.528	3.630 (.628)	3.604 (.795)	3.714 (.162)	4.334 (.000)	5.566 (.000)	5.202 (.000)	5.486 (.000)
Spare Parts Availability (13)	4.190	3.702 (.000)	3.783 (.000)	3.965 (.000)	4.476 (.641)	5.862 (.000)	5.293 (.000)	5.604 (.000)
Warranty (14)	3.690	3.229 (.000)	3.448 (.002)	3.398 (.000)	4.140 (.000)	5.547 (.000)	5.141 (.000)	5.372 (.000)
Brand Recognition (15)	4.182	3.820 (.000)	3.837 (.000)	3.985 (.015)	4.453 (.012)	5.874 (.000)	5.479 (.000)	5.741 (.000)
General Quality (16)	3.872	3.589 (.002)	3.821 (.443)	3.904 (.889)	4.472 (.000)	5.717 (.000)	5.089 (.000)	5.405 (.000)
Overall Quality (17)	3.906	3.5774 (.000)	3.768 (.001)	3.8766 (.394)	4.5244 (.000)	5.5482 (.000)	5.3080 (.000)	5.6429 (.000)

\*The numbers in brackets are the significance level

Figure 8.5

A Profile Of The Consumers Percception Of The Quality Attributes Of The Domestic Product Vs. The Quality Attributes Of The Product Of Each Of The Participating Countries



1 Jordan 2 Taiwan 3 Romania 4 Egypt  
5 Russia 6 Japan 7 UK 8 USA

sixteen quality variables; product durability, energy saving, product appearance, usage instructions, ease of cleaning, spare parts availability, warranty conditions and brand recognition. It was also found, that no significant differences existed between the products of the two countries in the remaining variables. However, the product of Romania is seen as slightly better than the product of Jordan, although with no significant difference in the following variables: need for maintenance, product safety, variety of sizes and variety of colours.

#### 8.8.3 JORDAN v.s. EGYPT

An examination of Table 8.8 revealed that the Jordanian product is perceived to be better than the Egyptian product with a significant level of (.050) or less in seven of the sixteen quality variables: energy saving, product safety, product appearance, usage instructions, spare parts availability, product warranty and brand recognition. No significant differences were found in the remaining variables.

#### 8.8.4 JORDAN v.s. RUSSIA

The Russian product is perceived to be better than the Jordanian product in all the variables with a significant level of (.050) or less except in two variables. These two variables are the usage instruction and the spare parts availability.

#### 8.8.5 JORDAN v.s. JAPAN

The Japanese product is perceived better than the Jordanian product in all of the sixteen quality attributes. The difference is perceived to be too wide, that in all the variables the significance level was (.000).

#### 8.8.6 JORDAN v.s. U.K.

The United Kingdom product is perceived to be superior to that of Jordan in the sixteen quality cues. The difference was significant at (.000) level of significance in all the variables.

#### 8.8.7 JORDAN v.s. U.S.A.

The product of Jordan is perceived to be lower in quality than the product of the U.S.A. in all of the sixteen quality variables. The difference between the product of the two countries was significant at (.000) level of significance for the entire quality variables.

### 8.9 TESTS OF HYPOTHESES

In this section the hypotheses related to the comparison of the domestic product with the quality of the product of the countries used in this study.

Hypothesis one stated in its null form that "there is no significant difference between the domestic product and the foreign product neither in the overall rating nor in the specific attribute ratings".

The T-test is used to test this hypothesis as well as the first three hypotheses. The results of the test in Table 8.3 showed that the difference between the mean ratings is significant at (.001) level of significance or less for both the overall quality and for each quality attribute. Thus the first hypothesis in its null form is rejected and the alternative hypothesis is accepted, which stated that the foreign product quality is perceived to be higher than the domestic product quality in both the overall rating and the individual attribute ratings.

Hypothesis two in its null form stated that "there is no significant difference between the quality of the domestic product and the quality of

TABLE 8.9

## RESULTS OF TESTING HYPOTHESIS FOUR FOR EACH CUE FOR EACH OF THE PARTICIPATING COUNTRIES (1)

	TAIWAN	ROMANIA	EGYPT	RUSSIA	JAPAN	U.K.	U.S.A.
Durability	Reject *	Reject *	Accept	Reject *	Reject *	Reject *	Reject *
Performance	=*	Accept	Accept	=**	=**	=**	=**
Energy Saving	=*	Reject *	Reject *	=*	=**	=**	=**
Noise level	=*	Accept	Accept	=**	=**	=**	=**
Maintenance	=*	Accept	Accept	=**	=**	=**	=**
Safety	=*	Accept	Accept	=**	=**	=**	=**
Appearance	=*	Reject *	Reject *	=**	=**	=**	=**
Dependability	=*	Accept	Accept	=**	=**	=**	=**
Usage instruction	=*	Reject *	Reject *	Accept	=**	=**	=**
Ease of cleaning	=*	Reject *	Accept	Reject **	=**	=**	=**
Variety of sizes	Accept	Accept	Accept	=**	=**	=**	=**
Variety of colours	Accept	Accept	Accept	=**	=**	=**	=**
Spare parts	Reject *	Reject *	Reject *	=**	=**	=**	=**
Warranty	=*	Reject *	Reject *	Accept	=**	=**	=**
Brand recognition	=*	Reject *	Reject *	Reject **	=**	=**	=**
General	=*	Accept	Accept	=**	=**	=**	=**
Overall	=*	Reject *	Accept	=**	=**	=**	=**

\* The Jordanian product is perceived to be higher in quality

\*\* The Jordanian product is perceived to be lower in quality

(1) Hypotheses four in its null form stated "the consumers perception of the Jordanian product overall quality and each of the quality attributes are similar to that of each of the participating countries.

Note\* The significance level for accepting or rejecting the hypothesis is .05 or better upon the ANOVA results presented on Table 8.8

the developed countries' product neither in the overall rating nor in the specific attribute rating".

The results of the T-test in Table 8.4 showed that the difference in the mean ratings between the products of the two groups is statistically significant at (.000) level of significance. So the conclusion is to reject hypothesis one in its two parts and to accept the alternative hypothesis two which stated that the product of the developed countries is perceived to be higher than the quality of the domestic product.

Hypothesis three in its null form stated that "the Jordanian consumers' perceived the quality of the Jordanian product and the quality of the developing countries' product, both the overall rating and the single attribute ratings, to be similar".

The T-test results in Table 8.4 showed that the null hypothesis for the overall rating should be rejected in favour of the alternative hypothesis which confirmed the significance of the difference at (.000) level of significance. The null hypothesis for the second part is partially accepted for the following attributes: noise level, need for maintenance, product safety, variety of colours and general quality, and to be rejected for the rest of the attributes which showed that differences between the two groups were significant at (.050) or less. The conclusion is that the third hypothesis should be partially rejected in favour of the alternative hypothesis, which stated that the Jordanian consumers perceive the quality of the domestic product to be higher than the quality of the developing countries' product.

The fourth hypothesis in its null form stated that "the consumers perception of the Jordanian product overall quality and each of the quality attributes, are similar to that of each of the participating countries".



The results of testing hypothesis four are summarised in Table 8.9 (Table 8.9 is built on the results summarized on Table 8.8).

#### 8.10 CONCLUSION

The results of the cluster analysis indicated that the eight countries used in this study can be grouped into three groups according to the consumers' perception of the quality attributes of each country. These three groups were classified as developed countries group which include: U.S.A., U.K. and Japan, developing countries group which include: Jordan, Egypt, Taiwan and Romania and the third group is a single country, the U.S.S.R., which was somewhat in between the two groups. This situation represents the confusion in the consumers' perception of the quality of the U.S.S.R. product. This perception was not high enough to give it the same image as the rest of the developed countries nor was it bad enough to group it with the developing countries. However, the results of the cluster analysis were strongly supporting the concept related to the consumers' stereotyping of the products of the various countries according to their level of development.

Accordingly, the consumers' perception of the domestic product has been compared to that of : (1) foreign products in general, (2) developed countries including the U.S.S.R., (3) developing countries and finally (4) to each of the countries used in the study.

The results of the study indicated that the quality of the domestic product is perceived to be lower than the quality of foreign product in general, and the developed countries as a group. However, it was found that the quality of the domestic product is perceived to be higher than the quality of the developing countries as a group. This finding is of special importance to the Jordanian industry. It is not to the benefit of the

local producers to deal with the imported products under the general term 'foreign'. This is because the term foreign might imply higher quality to the consumer. Although the developed countries products are perceived to be higher in quality than the domestic product, it might be more beneficial to the domestic producers to deal with the imported product according to its source country stage of development. This suggestion is supported by the fact that while the domestic product is perceived to be inferior to the foreign product, it is perceived to be higher in quality than developing countries' products. Since the gap between the quality of the domestic product and the developed countries product, is too wide to allow the domestic producer to compete with those countries - at least in the short run, they might be better off concentrating their efforts to increase their position in the domestic market in comparison with the developing countries. The need for government protection against the developed countries product might be unavoidable, in the short term. However, the local producers should not take this for granted, they depend on the government protection, instead of improving the quality of the domestic product and increasing its image in the local market. It might be suggested to grant the local producers a partial protection for a short period of time and to allow the imported product from developed countries to enter the domestic market on a quota basis. This suggestion will probably motivate the local producers to improve the quality of the domestic product and to increase their efforts to improve the consumers' image of the locally produced product. On the other hand, the higher image of the quality of the domestic product viz-a-vz that the developing countries, should have been seen as an opportunity for the local producers. That is, by allowing the products imported from these countries on the Jordanian market, and allowing the Jordanian product to

be exported to these markets, the local producers can establish a foreign base for their products. This suggestion is built on the relatively strong position of the domestic product in the local market in comparison with the developing countries product. If the local producers can achieve the same advantage in the developing countries market, their opportunity for success will be much better than monopolizing the Jordanian market.

In regard of the comparison on a country level, the research results indicated that the Jordanian product is perceived to be lower in quality than the products of U.S.A, U.K. and Japan. However it is perceived to be higher in quality than the products of Egypt, Taiwan and Romania. The Egyptian product is perceived to be the most similar among the rest of the developing countries to that of the Jordanian product. This situation is of critical importance to the Jordanian manufacturers. This is because Egypt, Jordan, Iraq and North Yemen are members of the Arab Cooperation Council. The announced objective of this Council is to facilitate the economic and trade cooperation among its members. This implies that the markets of the Council members should be open to the products of other members. If the Egyptian product maintained or improved its image and if the products of the other members have the same image in the Jordanian market, then the position of the domestic producers will be critical. However, more effort needs to be done to differentiate the quality of the domestic product from that of the Egyptian product and the rest of the developing countries.

The best performance of the domestic product was related to the usage instruction, product appearance, spare parts availability, energy saving and brand recognition. These variables need to be emphasised in any effort to strengthen the Jordanian product position. More attention needs to be paid to the rest of the quality attributes for the same purpose.