THE INFLUENCE OF ETHICS AND SOCIAL RESPONSIBILITY ON GROCERY SHOPPING BEHAVIOUR IN THE UK

by

JULIET EMMA MEMERY

A thesis submitted to the University of Plymouth in partial fulfilment for the degree of

DOCTOR OF PHILOSOPHY

Marketing Group
Faculty of Social Science and Business
University of Plymouth Business School

August 2005
THE INFLUENCE OF ETHICS AND SOCIAL RESPONSIBILITY ON GROCERY SHOPPING BEHAVIOUR IN THE UK

Abstract

Consumption as an aspect of most people's lives in affluent societies is widely acknowledged as having become increasingly important (Newholm, 2005). We consume more, and consume more often, than previous generations (Durning, 1992) meaning the actions we make and the decisions we take have greater impact than ever before on the world we inhabit. For many their involvement with consumption goes beyond the act of purchase (Ollman, 1998) to include complex ethical dimensions.

The relationship between ethics and social responsibility (E&SR) and consumption choices has received growing attention over recent years, resulting in the topic of 'sustainable consumption' becoming a central focus for national and international policy (Jackson, 2005). Yet a review of the pertinent literature in the fields of E&SR, consumer behaviour and shopping motives uncovers the limitations of existing E&SR research in relation to grocery shopping activities.

What E&SR factors influence consumers' grocery shopping choice decisions and behaviour? How important are they when compared to traditional store image and product attribute criteria? How do attitudes influence E&SR grocery consumption? Who are the E&SR buyer types and how may they be differentiated and segmented?

This thesis sets out to address these questions and comprises the results of, and reflections on, an investigation into grocery shopping behaviour in the South West of England. It consists of three stages: a literature review; a series of exploratory focus group interviews; and a confirmatory quantitative study.

Content, factor, multiple regression and cluster analysis find: shopping motivations vary according to two facts 1) the shopping consideration (store to patronise, product to purchase), and 2) the shopping occasion (main shop, top-up shop); differences occur in the importance of E&SR issues and traditional elements of store image/product attribute depending on the shopping activity; attitudes, perceived behavioural control and ethical obligation are linked to E&SR behaviour with differences in the importance of E&SR concerns meaning that E&SR shoppers are not a homogenous group. Results enable a preliminary typology of E&SR grocery shopping concerns to be derived and a range of E&SR consumer types to be proposed.

This insight offers a far more complex market that has hitherto been recognised. Motivating E&SR behaviour is far from straightforward due to dissonance occurring in decision-making as consumers try to balance traditional retail aspects with their E&SR beliefs, so finding themselves 'locked in' to non-E&SR behaviours in spite of their best intentions. In these circumstances strategies are required to make it easy for consumers to behave in an E&SR manner: ensuring access to information that aids and encourages pro-E&SR behaviour, highlighting non-financial E&SR behaviours, and for Government to exemplify the desired changes through their own policies and practices.
AUTHOR'S DECLARATION

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Committee.

The study was funded by the University of Plymouth Business School, with additional sources of information and expertise being gifted by The Cooperative Wholesale Society Ltd, Manchester.

The findings have been the subject of several research seminars at the University of Plymouth, as well as a couple of business related workshops and conferences. Several authored and co-authored papers have been submitted for publication based on the findings of this thesis, with several more in the pipeline.

Publications submitted:


Presentation and Conferences Attended:


External Contacts:
Nigel Walter, CWS Ltd, Manchester.
Tim Marsden, CWS Ltd, Manchester.

Word count of main body of thesis: 85,734

Signed

Date 16th August 2005
ACKNOWLEDGEMENTS

The road to a PhD is long and winding, with a fair number of hills along the way – some steeper than others! When I set out on my doctoral mission six years ago I though the end may have been reached a little more quickly than it has – an excursion more than an expedition. However this was not to be the case, but the journey has proved to be interesting, enlightening and thought provoking, although not for the faint hearted!

The assistance and support I have received from many people has made the doctoral journey enjoyable, and I would not have achieved it without their help. Therefore I would like to thank my colleagues for their support, my friends for their encouragement, and my family for their patience.

Special thanks go to my supervisors Phil Megicks and Jasmine Williams for their day-to-day support, their guidance in steering me towards completion, and their continual encouragement that each new task would be “good for me”.

Outside of the Plymouth Business School gratitude goes to all the organisations and individuals kind enough to give their time to participate in the study. Particular thanks is given to Tim Marsden, Nigel Walter and the Cooperative Wholesale Society for their interest, support and archive of information.

Finally I would like to say a big thank you to my parents for helping out wherever possible with the research, along with their constant support and encouragement; and to my partner Paul for his support and tolerance, and doing his best to look interested when I have talked endlessly about research dilemmas.
## CONTENTS

### CHAPTER ONE

**INTRODUCTION**

1.1. Background  
1.2 Parameters of the study  
1.2.1. Ethics  
1.2.2. Social Responsibility  
1.2.3. The Context of Ethics & Social Responsibility in this Study  
1.3. Market Forces  
1.4. Thesis Structure  
1.5. Summary  

### CHAPTER TWO

**SHOPPING BEHAVIOUR IN GROCERY RETAILING**

2.1. The Meaning of Needs and Motivation  
2.2 Motives and the Shopping Activity  
2.3. The Changing Nature of Grocery Shopping  
2.4. Brands and Retailing  
2.4.1. Definition of a Brand  
2.4.2. Components of a Brand  
2.4.3. The Importance of Brand Identity  
2.4.4. The Rise of the ‘Own-Label’ Grocery Brand  
2.5. A Store’s Personality or Image  
2.6. Identifying Product Attributes  
2.7. Store Choice  
2.7.1. Store Selection Criteria  
2.7.2. The Importance of Price in Grocery Shopping  
2.7.3. The Relationship between Quality and Price in Grocery Shopping  
2.8. Influences upon Selection Criteria  
2.8.1. Selection Criteria and Perceived Risk  
2.8.2. Store Patronage and Satisfaction
CHAPTER THREE

ATTITUDES TO ETHICAL & SOCIALLY RESPONSIBLE SHOPPING BEHAVIOUR

3.1. Theories of Consumer Behaviour 63
3.2. Attitude Theory 67
3.2.1. Learning Theory and Attitudes 68
3.2.2. Expectancy-Value Theory and Attitudes 68
3.2.3. The Functional Approach and Attitudes 69
3.3. The Cognition-Affect-Conation Paradigm of Attitudes 70
3.4. The Formation of Attitudes 72
3.5. Attitudes and Values 74
3.6. Attitudes and Behaviour 75
3.6.1. The Theory of Reasoned Action 76
3.6.1.1. Past Studies using the Theory of Reasoned Action 81
3.6.2. The Theory of Planned Behaviour 82
3.6.3. Modifications to the Theory of Planned Behaviour 88
3.7. Summary 92

CHAPTER FOUR

ETHICAL AND SOCIALLY RESPONSIBLE CONSUMERS

4.1. Segmenting Retail Markets 95
4.2. Shopper Classifications of Shopping Orientations 97
4.3. Establishing a Term for these Consumers 101
4.4. Characterising the E&SR Consumer 102
4.5. Identifying E&SR Consumer Measures 106
4.6. E&SR Consumers and Attitude Measures 108
4.7. The Growth of the E&SR Grocery Market 113
4.8. Factors Affecting E&SR Shopping Decisions 115
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.8.1</td>
<td>Product Attributes Consumers Look For – Is One Enough?</td>
<td>120</td>
</tr>
<tr>
<td>4.9.</td>
<td>Proposed Model of E&amp;SR Grocery Shopping Behaviour</td>
<td>122</td>
</tr>
<tr>
<td>4.10</td>
<td>Summary</td>
<td>124</td>
</tr>
</tbody>
</table>

**CHAPTER FIVE**

**RESEARCH METHODOLOGY**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.</td>
<td>Introduction</td>
<td>127</td>
</tr>
<tr>
<td>5.2.</td>
<td>The Research Philosophy</td>
<td>127</td>
</tr>
<tr>
<td>5.3.</td>
<td>Positivist vs. Phenomenology</td>
<td>129</td>
</tr>
<tr>
<td>5.3.1.</td>
<td>Quantitative vs. Qualitative design</td>
<td>130</td>
</tr>
<tr>
<td>5.3.2.</td>
<td>Researcher is Independent vs. Researcher is Involved</td>
<td>132</td>
</tr>
<tr>
<td>5.3.3.</td>
<td>Large samples vs. Small Numbers</td>
<td>133</td>
</tr>
<tr>
<td>5.3.4.</td>
<td>Testing Theories vs. Generating Theories</td>
<td>133</td>
</tr>
<tr>
<td>5.3.5.</td>
<td>Experimental Design vs. Fieldwork Methods</td>
<td>137</td>
</tr>
<tr>
<td>5.3.6.</td>
<td>Verification vs. Falsification</td>
<td>138</td>
</tr>
<tr>
<td>5.4.</td>
<td>Integrative Research Paradigm - Methodological Triangulation</td>
<td>139</td>
</tr>
<tr>
<td>5.5.</td>
<td>Research Methodology and Rationale</td>
<td>141</td>
</tr>
<tr>
<td>5.6.</td>
<td>Phase 1 – Literature review</td>
<td>143</td>
</tr>
<tr>
<td>5.7.</td>
<td>Phase 2 – Qualitative Research: Focus Groups</td>
<td>144</td>
</tr>
<tr>
<td>5.8.</td>
<td>Phase 3 – Quantitative Research: Face-to-face Questionnaires</td>
<td>150</td>
</tr>
<tr>
<td>5.9.</td>
<td>Sampling</td>
<td>154</td>
</tr>
<tr>
<td>5.10.</td>
<td>Focus Group Sampling Frame</td>
<td>154</td>
</tr>
<tr>
<td>5.10.1.</td>
<td>Market Town Classification</td>
<td>157</td>
</tr>
<tr>
<td>5.10.2.</td>
<td>City Classification</td>
<td>159</td>
</tr>
<tr>
<td>5.10.3.</td>
<td>The Focus Group Sample</td>
<td>159</td>
</tr>
<tr>
<td>5.11.</td>
<td>Questionnaire Survey Sampling Frame</td>
<td>160</td>
</tr>
<tr>
<td>5.12.</td>
<td>Summary</td>
<td>161</td>
</tr>
</tbody>
</table>

**CHAPTER SIX**

**QUALITATIVE RESEARCH RESULTS: GROCERY SHOPPING BEHAVIOUR AND INFLUENCES**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1.</td>
<td>Introduction</td>
<td>163</td>
</tr>
<tr>
<td>6.2.</td>
<td>Overview of Content Analysis</td>
<td>163</td>
</tr>
</tbody>
</table>
6.3. Methodology 165
6.4. Shopping Behaviour Patterns 167
6.5. The Classification of Influences on Shopping Behaviour 170
6.5.1. Classification of Store Image Factors 170
6.5.2. Classification of E&SR Factors 177
6.6. The Effect of Store Image and E&SR on Shopping Behaviour 186
6.7. The Effect of Store Image and E&SR on Different Types of Shopper 189
6.8. Summary 195

CHAPTER SEVEN 198

QUANTITATIVE RESEARCH RESULTS I: FACTORS AFFECTING GROCERY SHOPPING DECISIONS

7.1. Introduction 198
7.2. Hierarchical Information Integration to aid Quantitative Research 198
7.3. Descriptive Statistics 199
7.3.1. Descriptive Statistics – Filter questionnaire 200
7.3.2. Descriptive Statistics – Respondent Characteristics 201
7.4. Reliability Analysis 206
7.4.1. Reliability Analysis: Store, Main Shop 207
7.4.2. Reliability Analysis: Store, Top-up Shop 209
7.4.3. Reliability Analysis: Product, Main Shop 211
7.4.4. Reliability Analysis: Product, Top-up Shop 214
7.5. Factor Analysis 217
7.5.1. Method 218
7.5.2. Factor Analysis: Store, Main Shop 219
7.5.3. Factor Analysis: Store, Top-up Shop 220
7.5.4. Factor Analysis: Product, Main Shop 221
7.5.5. Factor Analysis: Product, Top-up Shop 222
7.6. Multiple Regression Analysis 223
7.6.1. Method 225
7.6.2. Regression Analysis: Store, Main Shop 227
7.6.3. Regression Analysis: Store, Top-up Shop 231
CHAPTER EIGHT

QUANTITATIVE RESEARCH RESULTS 2: ATTITUDES AND E&SR GROCERY SHOPPING BEHAVIOUR

8.1. Introduction 245
8.2. Overview of the Extended Theory of Planned Behaviour 246
8.2.1. Implementation of the Extended Theory of Planned Behaviour 248
8.3. Overview of Correlation Analysis 260
8.3.1. Correlation Matrix: Store, Main Shop 260
8.3.2. Correlation Matrix: Store, Top-up Shop 261
8.3.3. Comparison of the Store models 263
8.3.4. Correlation Matrix: Product, Main Shop 263
8.3.5. Correlation Matrix: Product, Top-up Shop 265
8.3.6. Comparison of the Product Models 266
8.3.7. Comparison of the Main Shop Models: Store vs. Product 267
8.3.8. Comparison of the Top-up Shop Models: Store vs. Product 268
8.4. Model Measure Comparison – TRA, TPB or the Extended TPB? 269
8.4.1. Model Measure Comparison: Store, Main Shop 270
8.4.2. Model Measure Comparison: Store, Top-up Shop 271
8.4.3. Model Measure Comparison: Product, Main Shop 272
8.4.4. Model Measure Comparison: Product, Top-up Shop 273
8.4.5. Ethical Shopping Behaviour and the Extended Theory of Planned Behaviour – Predicting Intention 274
8.5. Reliability of the Findings 276
8.6. Summary 278

CHAPTER NINE

QUANTITATIVE RESEARCH RESULTS 3: IDENTIFICATION OF E&SR GROCERY SHOPPER TYPES

9.1. Introduction 280
9.2. Overview of Cluster Analysis 281
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.3.</td>
<td>Methodology</td>
<td>282</td>
</tr>
<tr>
<td>9.4.</td>
<td>Classification into ‘Types’ of E&amp;SR Consumer / Concern</td>
<td>284</td>
</tr>
<tr>
<td>9.4.1.</td>
<td>Cluster Analysis: Store, Main Shop</td>
<td>285</td>
</tr>
<tr>
<td>9.4.1.1.</td>
<td>The Identified Consumer Types of Store Main Shop</td>
<td>285</td>
</tr>
<tr>
<td>9.4.2.</td>
<td>Cluster Analysis: Store, Top-up Shop</td>
<td>294</td>
</tr>
<tr>
<td>9.4.2.1.</td>
<td>The Identified Consumer Types of Store Top-up Shop</td>
<td>295</td>
</tr>
<tr>
<td>9.4.3.</td>
<td>Cluster Analysis: Product, Main Shop</td>
<td>300</td>
</tr>
<tr>
<td>9.4.3.1.</td>
<td>The Identified Consumer Types of Product Main Shop</td>
<td>301</td>
</tr>
<tr>
<td>9.4.4.</td>
<td>Cluster Analysis: Product, Top-up Shop</td>
<td>309</td>
</tr>
<tr>
<td>9.4.4.1.</td>
<td>The Identified Consumer Types of Product Top-up Shop</td>
<td>309</td>
</tr>
<tr>
<td>9.5.</td>
<td>Summary</td>
<td>315</td>
</tr>
</tbody>
</table>

**CHAPTER TEN**

**CONCLUSIONS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1.</td>
<td>Introduction</td>
<td>318</td>
</tr>
<tr>
<td>10.2.</td>
<td>Summary of Findings</td>
<td>318</td>
</tr>
<tr>
<td>10.2.1.</td>
<td>Previous Research</td>
<td>318</td>
</tr>
<tr>
<td>10.2.2.</td>
<td>Qualitative Findings</td>
<td>322</td>
</tr>
<tr>
<td>10.2.3.</td>
<td>Quantitative Findings</td>
<td>323</td>
</tr>
<tr>
<td>10.3.</td>
<td>Research Outcomes</td>
<td>325</td>
</tr>
<tr>
<td>10.3.1.</td>
<td>Factors of Influence in Grocery Shopping Decisions and Behaviour</td>
<td>325</td>
</tr>
<tr>
<td>10.3.2.</td>
<td>Attitudes and Grocery Shopping Decisions</td>
<td>327</td>
</tr>
<tr>
<td>10.3.3.</td>
<td>Types of E&amp;SR Consumer within the context of Grocery Shopping</td>
<td>327</td>
</tr>
<tr>
<td>10.4.</td>
<td>Discussion of Findings</td>
<td>328</td>
</tr>
<tr>
<td>10.5.</td>
<td>Theoretical Implications</td>
<td>335</td>
</tr>
<tr>
<td>10.6.</td>
<td>Management Implications</td>
<td>338</td>
</tr>
<tr>
<td>10.7.</td>
<td>Implications for Government Policy</td>
<td>340</td>
</tr>
<tr>
<td>10.8.</td>
<td>Implications for Ethical Organisations</td>
<td>342</td>
</tr>
<tr>
<td>10.9.</td>
<td>Research Limitations</td>
<td>343</td>
</tr>
<tr>
<td>10.10.</td>
<td>Future Research</td>
<td>344</td>
</tr>
<tr>
<td>10.11.</td>
<td>The Next Step</td>
<td>346</td>
</tr>
</tbody>
</table>

**REFERENCES**

347
**APPENDICIES**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>A Classification of Store Image Components - Kunkel &amp; Berry (1968)</td>
<td>372</td>
</tr>
<tr>
<td>II.</td>
<td>Store Image Attribute Groups – Lindquist (1974)</td>
<td>373</td>
</tr>
<tr>
<td>IV.</td>
<td>Focus Group Recruitment Questionnaire</td>
<td>376</td>
</tr>
<tr>
<td>Va.</td>
<td>Face-to-Face Survey Filter Questionnaire</td>
<td>378</td>
</tr>
<tr>
<td>Vb.</td>
<td>Face-to-Face Survey Main Questionnaire</td>
<td>379</td>
</tr>
<tr>
<td>Vc.</td>
<td>Face-to-Face Survey Main Questionnaire Visual Aid – Store</td>
<td>393</td>
</tr>
<tr>
<td>Vd.</td>
<td>Face-to-Face Survey Main Questionnaire Visual Aid – Product</td>
<td>394</td>
</tr>
<tr>
<td>VI.</td>
<td>Focus Group Sample Details</td>
<td>395</td>
</tr>
<tr>
<td>VIIa.</td>
<td>Focus Group Discussion Outline</td>
<td>398</td>
</tr>
<tr>
<td>VIIb.</td>
<td>Focus Group Grids</td>
<td>401</td>
</tr>
<tr>
<td>VIIIa.</td>
<td>Item-Total Statistics for Reliability Analysis - Store Main Shop</td>
<td>403</td>
</tr>
<tr>
<td>VIIIb.</td>
<td>Item-Total Statistics for Reliability Analysis - Store Top-up Shop</td>
<td>404</td>
</tr>
<tr>
<td>VIIIc.</td>
<td>Item-Total Statistics for Reliability Analysis - Product Main Shop</td>
<td>405</td>
</tr>
<tr>
<td>VIIIId.</td>
<td>Item-Total Statistics for Reliability Analysis - Product Top-up Shop</td>
<td>406</td>
</tr>
<tr>
<td>IXa.</td>
<td>Item-Total Statistics for the Extended TPB - Store Main Shop</td>
<td>407</td>
</tr>
<tr>
<td>IXb.</td>
<td>Item-Total Statistics for the Extended TPB - Store Top-up Shop</td>
<td>409</td>
</tr>
<tr>
<td>IXc.</td>
<td>Item-Total Statistics for the Extended TPB - Product Main Shop</td>
<td>411</td>
</tr>
<tr>
<td>IXd.</td>
<td>Item-Total Statistics for the Extended TPB - Product Top-up Shop</td>
<td>413</td>
</tr>
<tr>
<td>Xa.</td>
<td>Hierarchical Cluster Analysis Dendogram - Store Main Shop</td>
<td>415</td>
</tr>
<tr>
<td>Xb.</td>
<td>Hierarchical Cluster Analysis Dendogram - Store Top-up Shop</td>
<td>416</td>
</tr>
<tr>
<td>Xc.</td>
<td>Hierarchical Cluster Analysis Dendogram - Product Main Shop</td>
<td>417</td>
</tr>
<tr>
<td>Xd.</td>
<td>Hierarchical Cluster Analysis Dendogram – Product Top-up Shop</td>
<td>418</td>
</tr>
</tbody>
</table>
## ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1</td>
<td>What makes a business company ethical?</td>
<td>9</td>
</tr>
<tr>
<td>Figure 1.2</td>
<td>The overlap of ethics and social responsibility</td>
<td>14</td>
</tr>
<tr>
<td>Figure 2.1</td>
<td>Motivation Links Needs and Objectives (Behaviour)</td>
<td>20</td>
</tr>
<tr>
<td>Figure 2.2</td>
<td>Shopping: A Conceptual Framework</td>
<td>25</td>
</tr>
<tr>
<td>Figure 2.3</td>
<td>The Double Vortex Brand Model</td>
<td>32</td>
</tr>
<tr>
<td>Figure 2.4</td>
<td>Burnett Model of Brand Dimension</td>
<td>36</td>
</tr>
<tr>
<td>Figure 2.5</td>
<td>The Three Levels of Product Attribute</td>
<td>48</td>
</tr>
<tr>
<td>Figure 2.6</td>
<td>Supermarket Choice Criteria and Satisfaction</td>
<td>57</td>
</tr>
<tr>
<td>Figure 2.7</td>
<td>Sequence of Effects in Store Choice</td>
<td>59</td>
</tr>
<tr>
<td>Figure 3.1</td>
<td>Factors Determining a Person’s Behaviour</td>
<td>77</td>
</tr>
<tr>
<td>Figure 3.2</td>
<td>The Theory of Planned Behaviour</td>
<td>84</td>
</tr>
<tr>
<td>Figure 3.3</td>
<td>The Extended Theory of Planned Behaviour</td>
<td>91</td>
</tr>
<tr>
<td>Figure 4.1</td>
<td>Proposed Model of Responsible Environmental Behaviour</td>
<td>112</td>
</tr>
<tr>
<td>Figure 4.2</td>
<td>Model of Influential Variables on Consumer Purchase Intentions</td>
<td>118</td>
</tr>
<tr>
<td>Figure 4.3</td>
<td>Proposed Model of E&amp;SR Grocery Shopping Behaviour</td>
<td>123</td>
</tr>
<tr>
<td>Figure 5.1</td>
<td>Models of Process and Theory</td>
<td>135</td>
</tr>
<tr>
<td>Figure 6.1</td>
<td>Proposed Matrix of Grocery Shopping Behaviour</td>
<td>170</td>
</tr>
<tr>
<td>Figure 10.1</td>
<td>Model of E&amp;SR Grocery Shopping Behaviour</td>
<td>336</td>
</tr>
</tbody>
</table>

**Appended**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure X.a</td>
<td>Dendogram using Average Linkage (between groups) - Store Main Shop</td>
<td>415</td>
</tr>
<tr>
<td>Figure X.b</td>
<td>Dendogram using Average Linkage (between groups) - Store Top-up Shop</td>
<td>416</td>
</tr>
<tr>
<td>Figure X.c</td>
<td>Dendogram using Average Linkage (between groups) - Product Main Shop</td>
<td>417</td>
</tr>
<tr>
<td>Figure X.d</td>
<td>Dendogram using Average Linkage (between groups) - Product Top-up Shop</td>
<td>418</td>
</tr>
<tr>
<td>Table 2.1.</td>
<td>Factors Influencing Decision Where to do Weekly Shop</td>
<td>51</td>
</tr>
<tr>
<td>Table 3.1.</td>
<td>Buyer Strategies</td>
<td>71</td>
</tr>
<tr>
<td>Table 5.1.</td>
<td>Key Choices of Research Design</td>
<td>130</td>
</tr>
<tr>
<td>Table 5.2.</td>
<td>Sources Used to Operationalise the Focus Groups</td>
<td>149</td>
</tr>
<tr>
<td>Table 5.3.</td>
<td>Focus Group Quota Sample</td>
<td>159</td>
</tr>
<tr>
<td>Table 5.4.</td>
<td>Questionnaire Survey Quota Sample</td>
<td>160</td>
</tr>
<tr>
<td>Table 6.1.</td>
<td>A Typology of Store Image Attributes</td>
<td>171</td>
</tr>
<tr>
<td>Table 6.2.</td>
<td>A Preliminary Typology of E&amp;SR Grocery Shopping Factors</td>
<td>178</td>
</tr>
<tr>
<td>Table 7.1.</td>
<td>Filter Questionnaire – E&amp;SR Statements and Results</td>
<td>200</td>
</tr>
<tr>
<td>Table 7.2.</td>
<td>Respondent Location</td>
<td>201</td>
</tr>
<tr>
<td>Table 7.3.</td>
<td>Respondent Age</td>
<td>202</td>
</tr>
<tr>
<td>Table 7.4.</td>
<td>Number of Adults in Household</td>
<td>202</td>
</tr>
<tr>
<td>Table 7.5.</td>
<td>Total Number of Children in Household</td>
<td>202</td>
</tr>
<tr>
<td>Table 7.6.</td>
<td>Total Number of Respondents by ACORN Classification</td>
<td>203</td>
</tr>
<tr>
<td>Table 7.7.</td>
<td>Frequency of a Main Shop</td>
<td>203</td>
</tr>
<tr>
<td>Table 7.8.</td>
<td>Frequency of a Top-up Shop</td>
<td>203</td>
</tr>
<tr>
<td>Table 7.9.</td>
<td>Mode of Transport to a Store</td>
<td>204</td>
</tr>
<tr>
<td>Table 7.10</td>
<td>Distance Travelled to a Store</td>
<td>204</td>
</tr>
<tr>
<td>Table 7.11.</td>
<td>Whom Respondents Shopped With</td>
<td>205</td>
</tr>
<tr>
<td>Table 7.12.</td>
<td>Inter-item Correlation Matrix: Store, Main Shop</td>
<td>207</td>
</tr>
<tr>
<td>Table 7.13.</td>
<td>Statistics for Scale: Store, Main Shop</td>
<td>208</td>
</tr>
<tr>
<td>Table 7.14.</td>
<td>Factor Analysis Descriptives: Store, Main Shop</td>
<td>208</td>
</tr>
<tr>
<td>Table 7.15.</td>
<td>Inter-item Correlation Matrix: Store, Top-up Shop</td>
<td>209</td>
</tr>
<tr>
<td>Table 7.16.</td>
<td>Statistics for Scale: Store, Top-up Shop</td>
<td>210</td>
</tr>
<tr>
<td>Table 7.17.</td>
<td>Factor Analysis Descriptives: Store, Top-up Shop</td>
<td>210</td>
</tr>
<tr>
<td>Table 7.18.</td>
<td>Inter-item Correlation Matrix: Product, Main Shop</td>
<td>212</td>
</tr>
<tr>
<td>Table 7.19.</td>
<td>Statistics for Scale: Product, Main Shop</td>
<td>213</td>
</tr>
</tbody>
</table>
Table 8.8. Correlation Matrix - Extended TPB: Product, Top-up Shop
Table 8.9. Regression Analysis: Store, Main Shop
Table 8.10. Regression Analysis: Store, Top-up Shop
Table 8.11. Regression Analysis: Product, Main Shop
Table 8.12. Regression Analysis: Product, Top-up Shop
Table 8.13. Comparison of this Study with Previous TPB Studies – Correlations between Intentions and other Model Variables

Table 9.1. Final Cluster Centres for Store, Main Shop
Table 9.2. Multiple Comparison (Scheffe) Test for Identified Consumer Types: Store, Main Shop
Table 9.3. Final Cluster Centres for Store, Top-up Shop
Table 9.4. Multiple Comparison (Scheffe) Test for Identified Consumer Types: Store, Top-up Shop
Table 9.5. Final Cluster Centres for Product, Main Shop
Table 9.6. Multiple Comparison (Scheffe) Test for Identified Consumer Types: Product, Main Shop
Table 9.7. Final Cluster Centres for Product, Top-up Shop
Table 9.8. Multiple Comparison (Scheffe) Test for Identified Consumer Types: Product, Top-up Shop
Table 10.1. Factors of Greatest Importance by Shopping Situation

Appended
Table VIII.A.1. Item-total Statistics, Reliability Analysis: Store, Main Shop
Table VIII.B.1. Item-total Statistics, Reliability Analysis: Store, Top-up Shop
Table VIII.C.1. Item-total Statistics, Reliability Analysis: Product, Main Shop
Table VIII.D.1. Item-total Statistics, Reliability Analysis: Product, Top-up Shop
Table IX.A.1. Item-total Statistics, Reliability Analysis, Ext TPB: Store, Main Shop
Table IX.B.1. Item-total Statistics, Reliability Analysis, Ext TPB: Store, Top-up Shop
Table IX.C.1. Item-total Statistics, Reliability Analysis, Ext TPB: Product, Main Shop
Table IX.D.1. Item-total Statistics, Reliability Analysis, Ext TPB: Product, Top-up Shop

xvi
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Attitude</td>
</tr>
<tr>
<td>ACORN</td>
<td>A Classification of Residential Neighbourhoods</td>
</tr>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>BSE</td>
<td>Bovine Spongiform Encephalopathy</td>
</tr>
<tr>
<td>BUAV</td>
<td>British Union for the Abolition of Vivisection</td>
</tr>
<tr>
<td>CFC</td>
<td>Chlorofluorocarbon</td>
</tr>
<tr>
<td>DV</td>
<td>Dependent Variable</td>
</tr>
<tr>
<td>DEFRA</td>
<td>Department for Environment, Food and Rural Affairs</td>
</tr>
<tr>
<td>E&amp;SR</td>
<td>Ethics and Social Responsibility</td>
</tr>
<tr>
<td>E&amp;SR consumer</td>
<td>Ethical and Socially Responsible Consumer</td>
</tr>
<tr>
<td>EO</td>
<td>Ethical Obligation</td>
</tr>
<tr>
<td>EPM</td>
<td>Resale Price Maintenance</td>
</tr>
<tr>
<td>GM</td>
<td>Genetically Modified</td>
</tr>
<tr>
<td>IV(s)</td>
<td>Independent Variable</td>
</tr>
<tr>
<td>JICNARS</td>
<td>The Joint Industry Committee for National Readership Surveys</td>
</tr>
<tr>
<td>KMO measure</td>
<td>Kaiser-Meyer-Olkin measure of sampling adequacy</td>
</tr>
<tr>
<td>PBC</td>
<td>Perceived Behavioural Control</td>
</tr>
<tr>
<td>SEU</td>
<td>Subjective Expected Utility Model</td>
</tr>
<tr>
<td>SId</td>
<td>Self Identity</td>
</tr>
<tr>
<td>SMC</td>
<td>Societal Marketing Concept</td>
</tr>
<tr>
<td>SN</td>
<td>Subjective Norm</td>
</tr>
<tr>
<td>TPB</td>
<td>Theory of Planned Behaviour</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
</tr>
<tr>
<td>TRA</td>
<td>Theory of Reasoned Action</td>
</tr>
<tr>
<td>VIF</td>
<td>Variance Inflation Factor</td>
</tr>
</tbody>
</table>
1.1. Background

The primary purpose for studying consumer behaviour within the context of marketing is to understand more fully why, and how, consumers make their purchase decisions. Clearer insights into these areas enable marketers to design more effective marketing strategies, and communicate their offering more distinctly to their target market. Buyer behaviour is complex, and influenced by many factors, which are constantly changing. Therefore comprehensive, reliable knowledge about buying behaviour is needed, and should take account of the intricate web of influences that surrounds patterns of consumption, such as the interaction of groups and personal behaviour, the effects of culture, and the interrelationship between attitudes and behaviour (Chisnall, 1995). These fundamental issues profoundly affect the pattern of the individual’s consumption of goods and services, and their complexity means explanations based solely on economic theory are clearly inadequate. As consumer behaviour is about human responses in a commercial world, it makes sense to incorporate theories and findings from the behavioural sciences.

A study of market variables, and their expression in buying behaviour, may give an appreciation of some of the fundamental psychological factors that affect individual behaviour, and start to answer the question of how individuals make decisions to spend their available resources (time, money, effort) on consumption-related items. It is these market variables that have contributed to the growing interest in, and study of, consumer behaviour, such as the accelerated rate of new product development, the consumer movement, public policy concerns, environmental concerns, and the opening
of global markets (Schiffman & Kanuk, 2000). An area that has come to the forefront in recent years due to its increasing influence on the consumer's decision-making process, and hence consumption, is that of ethics and social responsibility, which is the focus of this study.

In the past few have considered the field of ethics and social responsibility (E&SR) to be harmonious with competitive business practices. Many have thought these areas incompatible with survival in an aggressive global marketplace, and have seen the concept of 'business ethics' as a contradiction in terms. However, changes in the market are 'being driven by consumer preference and purchasing capacity' (Adams et al., 1991) as consumers see that they can use their purchasing power as a vehicle to express their concerns. Responsible marketers have realised that they need to respond to this change in attitudes and behaviour in order to remain competitive and fulfil consumers' demands.

The extant literature relating to business ethics and social responsibility has in the main been concerned with corporate behaviour (Buehler & Shetty, 1975; Stevens, 1984; Laczniak & Inderrieden, 1987; Frederick, 1994; Arlow, 1991; Owen & Scherer, 1993) and marketing related activities within firms (Hunt & Vittell, 1986; Robin & Reidenbach, 1987; Drumwright, 1994; Thompson, 1995; Sirgy & Lee, 1996; Menon & Menon, 1997). Only limited attention however has been given to the consumer's viewpoint, addressing issues such as ecologically responsible consumption (Balderjahn, 1988), purchase intentions (Schwepker & Cornwell, 1991; Amyx et al., 1994; Creyer & Ross, 1997), purchase behaviours (Carrigan & Attalla, 2001), and environmental behaviours (Arbutnot, 1977; Berger & Corbin, 1992; Minton & Rose, 1997). Yet despite there being much discussion of the implications of E&SR for consumer
behaviour driven by populist authors (e.g. Klein 2000) and the results of proprietary market research company investigations (e.g. Mintel 1994; 1999; Keynote, 2002), there has hitherto been little detailed research into the part played by E&SR in shopping behaviour.

Albeit that the field of E&SR shopping research is not well developed, some notable contributions to the literature offer a basis for further investigation. Strong (1997), in her study of Fair Trade products, identified and explored the problem of translating consumer principles into consumer purchase behaviour. She highlighted the importance placed upon the individual consumer in attaining an 'ecologically sound consumer society', and stressed the need to gain a developed understanding of consumer decision-making in this area. Furthermore, Shaw & Clarke (1999) began to address this by looking at the growth in ethical consumerism, and questioning how the beliefs underlying ethical concerns are formed. They expressed a concern that only limited understanding could be achieved as much of the existing research on consumer behaviour focused on decision-making rather than the beliefs themselves. Despite acknowledging that there is evidence which suggests choices do not always follow beliefs, Shaw & Clarke (1999) stressed the need to examine belief formation more closely to better understand consumer behaviour.

In addition, many of the studies on ethical and socially responsible consumer behaviour have been undertaken in order to try and explain awareness of E&SR issues in relation to demographic and socio-economic measures such as age, gender, education, socio-economic class (see Schlegelmilch et al, 1996) and personality characteristics such as locus of control, alienation, conservatism and dogmatism (Kinnear et al, 1974; Crosby et al, 1981; Balderjahn, 1988). Rather less have looked at the factors that affect
consumer buying behaviour. Studies that have looked at such influences have tended to concentrate on one issue of concern e.g. recycling (Hopper & Nielsen, 1991), container laws (Gill et al, 1986), or else their effect on one product category e.g. nappies (Follow & Jobber, 2000) cosmetics and toiletries (Prothero & McDonagh, 1992; Prothero, 1996) rather than taking account of all the important issues and the many product areas they may affect. It is therefore apparent that to date there has been no comprehensive investigation of the wide-ranging set of E&SR factors that may influence shopping in a particular context, and more specifically in grocery sector which is an essential activity for all households.

The purpose of this research is to begin to fill this gap by exploring the influences of shopping choice criteria on grocery shopping, building on the multi-dimensional nature of shopping motives. Motives affect behaviour, which in turn is moderated through attitudes, hence the study of consumer attitudes towards shopping in an ethical and socially responsible way will form the backbone of this study. In order to fully examine the influence of shopping choice criteria it is essential that the nexus between the individual shopper and the full range of store image and E&SR factors is considered. These fundamentally define the perceptions of shoppers and thus influence store patronage and product purchase intentions in this context (Dodds et al, 1991; Grewal et al, 1998). Set within the framework of grocery shopping, this thesis aims to investigate whether or not there is a growing number of consumers who are willing to trade the traditional retail image factors that make up the components of a store’s image (Kunkel & Berry, 1968; Lindquist, 1974; Zimmer & Golden, 1988), and a product’s attributes (de Chernatony & McDonald, 1992; Kotler et al. 1999), against the opportunity to 1) patronise an ethical and socially responsible store, or 2) purchase an ethical and socially responsible product. After initial identification of the influential elements of store
image and E&SR criteria used in store/product choice decisions, this study will explore
whether or not consumers elicit the same attitudes and concerns towards shopping in an
E&SR manner, and if not whether there is potential for small, but viable, market
segments within the wider context of E&SR grocery retailing.

The significance of studying the influence of ethics and social responsibility issues upon
consumer buying behaviour, in respect of shopping decisions, is clear. Identifying the
determinants of E&SR that affect store/product choice and their relative importance in
regard to traditional retail image factors will aid retailers' understanding of ethical
purchase behaviour, and assist in identifying their affect on consumer perceptions and
buying behaviour (Fishbein & Ajzen, 1975; 1980; Knox & de Chernatony, 1989). In
turn this has implications for retail positioning (Kohli & LaBahn, 1997; Marsden &
Littler, 1998), with traditional store and product offerings being enhanced to incorporate
E&SR elements. Differentiating their offering from competitors in this way will enable
a retailer to obtain a distinct identity, and so be able to communicate more effectively
with their target market.

1.2. Parameters of the study

The broad context of this work has several academic/theoretical strands. Its wider
setting is one of consumer behaviour, in particular consumer decision-making and
influences upon this process. It looks at these subjects in the context of consumers’
grocery shopping behaviour, so includes several contributions from the area of
branding, but it is particularly concerned with contributions from researchers focusing
on the nature of motivation and the role of decision-making relating to E&SR behaviour
of consumers. Finally, the role of attitude formation and possible ethical considerations
in decision-making is explored.
The concepts of ‘ethics’ and ‘social responsibility’ tend to be used interchangeably or under one ‘umbrella’ in much of the studied literature. However, a difference between the two can and should be established. Therefore, in order to delineate clearly the parameters of this present study, relevant aspects of the nature of ethics and social responsibility will now be discussed.

1.2.1. Ethics

Ethics, and what does or does not conform to ‘ethical’ behaviour, is one of the age-long debates of man. There is no universally accepted definition of the term ‘ethics’, as in the majority of situations it is personal values that decide what is right or wrong for the individual. Hence the study of ethics, especially in commerce, is not straightforward or ‘black and white’. This can leave businesses confused as to what action to take, highlighting the need for greater understanding and insight into consumer determinants of both ethics and social responsibility so that companies can account for their concerns.

There have been numerous attempts to define what the concept of ethics is about, but they often remain vague because of the term’s many nuances. Taylor (1975, p.1) identifies ethics as:

“inquiry into the nature and grounds of morality where the term morality is taken to mean moral judgements, standards, and rules of conduct.”

Robin & Reidenbach (1987, p.45) strengthen this and relate it to commerce by stating:

“Business ethics ... requires that the organisation or individual behave in accordance with the carefully thought-out rules of moral philosophy.”

The underlying themes throughout the studied literature on ethics are references to ethics being concerned about ‘moral principles’ (Crane & Ennew, 1995 p.185), the
'determination of right and wrong' (Ferrell et al, 1989 p.56) and the following of 'a set of moral principles and values' (Liedtka, 1998 p.255). By amalgamating these definitions it can be said that the area of ethics is concerned with the study of morality and human conduct with an emphasis on the determination of right and wrong.

There are several schools of thought or 'bases' for ethical reasoning that have relevance in ethical discussions, but only three main principles appear in the documented literature considered relevant to this study. They are utilitarianism; justice and fairness; and personal rights (Ferrell & Gresham, 1985; Robin & Reidenbach, 1987; Engel et al, 1995; Nantel & Weeks, 1996; Creyer & Ross, 1997).

Utilitarianism was argued for by Jeremy Bentham (1748-1832), and developed further by John Stuart Mill (1806-1873). The objective of this theory is that an action should be judged according to the results it achieves, with the purpose being to create the greatest happiness for the largest number of people, rather than just fulfilling the concerns of one individual or organisation. Although this theory does not always produce clear cut answers due to costs and benefits being difficult to calculate, it provides a helpful way of thinking, especially if considered in conjunction with elements of other ethical codes. Utilitarian principles can be seen to fit in with this scheme of research as retailers following it in their decision-making can aim to fulfil the needs of as many consumers as possible.

Plato (427-347 BC) and Aristotle (384-322 BC) are the two main thinkers traditionally associated with the ethical theory of Justice and Fairness – associated with the school of Egoistic Hedonism. The underlying belief here is that it is in a person's own best interest to act rightly, and that impartiality and fairness are the main criteria upon which
to base ethical decisions. It follows that everyone has equal rights, both in opportunities and treatment, and that justice is attained when benefits and burdens are distributed fairly to stakeholders. This school of thought can be seen to have implications for this study as it shares out problems, and means that no one individual should be far better or worse off than another.

The Theory of Personal Rights has come from the recognition that individuals are entitled to certain things, and that they should work together for mutual benefit – elements of which can be seen in the writings of Thomas Hobbes (1588-1679), John Locke (1632-1704) and Immanuel Kant (1724-1804). Rights can be reflected in the freedom people have to carry out certain activities: freedom of speech, freedom of worship, as well as rights protecting their person e.g. dignity and respect, and it can be down to government legislation to ensure these. Personal rights and ethical responsibilities can be taken from the Golden Rule that states ethical reasoning should be based on the highest principle, that is 'the rights of others should be paramount to our own’, so only do to others what you would want done to yourself. This fits into this vein of study as retailers need to recognise that consumers have individual rights – which can most prominently be seen through their right not to purchase if they are not satisfied – and therefore retailers’ decisions need to take these ethical factors into account.

The domain of business ethics and the areas of interest to study, to establish how ethical a company is, are suggested by Mahoney (1994) as being the internal workings of the business, and the relationships it has with its customers, other companies and society as a whole. He states that they interlink with each other and work outwards from the core of the company as illustrated in Figure 1.1.
How ethics are incorporated throughout business activities can be broken down further and related to specific areas of business practice, with the function of marketing being the main focus of attention for this study. The issue of 'marketing ethics' is of considerable importance as marketing provides the interface between organisation and consumer, so making any unethical activities from this department more prominent. Singhapakdi & Vitell (1990, p.4) extend Taylor's (1975) definition of ethics in order to relate it to marketing, hence defining:

"marketing ethics (as) inquiry into the nature and grounds of moral judgements, standards, and rules of conduct relating to marketing decisions and marketing situations."

Again the element of morality is highlighted, and emphasised further in Crane & Ennew's (1995, p.185) definition:
"the ethics of marketing refers to certain moral principles which define what is accepted (by the individual or the group) as being right or wrong."

Morality and the decision of what is right and wrong in marketing can be rather controversial as, although certain practices may not be illegal, they are considered by many to be unethical. Unethical practices stated in the literature are ‘false advertising’ and ‘discriminatory pricing’ (Nantel & Weeks, 1996), ‘unsafe or unsuitable products for the target market’ (Crane & Ennew, 1995), ‘price-fixing’ (Arlow, 1991) and ‘overpackaging and packaging waste’ (Schwepker & Cornwell, 1991). Therefore companies need to look beyond what they are ‘legally allowed’ to do, and concentrate on what is best for their stakeholders.

A suggestion of how to take heed of consumer concerns is for organisational decision-makers to consider Kotler’s (1972) Societal Marketing Concept. This would enable them to look beyond ethics and immediate harmful consequences to incorporate elements that have a positive effect on the well-being of society in the long term – in other words, observe social responsibility issues as well. By looking at the elements of ethics and social responsibility together the potential rights and wrongs of a decision can be placed in a clearer context.

1.2.2. Social Responsibility

Social responsibility relates to making decisions that will maximise the positive effects on society as a whole whilst minimising the negative effects, highlighted by Davis (1975, p.24) in the following definition:

"The socially responsible organisation behaves in such a way that it protects and improves the social quality of life along with its own quality of life."

This is upheld by Robin & Reidenbach (1987, p.45) who state:
“It is the set of generally accepted relationships, obligations and duties that relate to the corporate impact on the welfare of society.”

Social Responsibility can be divided into three main subcategories that have come about due to consumer movements: Consumerism, Environmentalism and Community Activism. These cover different areas of social concern, but still relate to the principles defined previously.

Consumerism is concerned with the interests and rights of consumers in relation to the activities of retailers and manufacturers. Concerns in this area are issues such as protection from faulty goods, valid product information e.g. displaying ingredients, and access to a variety of goods and services at competitive prices. The main point that led to this movement was that consumers wanted more information about goods and services in order that they could shoulder some of the responsibility of deciding what is right or wrong for them, rather than leaving it to a third party.

Environmentalism differs from consumerism as it focuses on the effect of business practices on the environment rather than the consumer. This movement aimed to protect and improve the natural environment, and hence people’s living environment. Areas of concern in this sector are matters such as acid rain, rain forest depletion, recycling, toxic waste and pollution (Peattie, 1990). This has led to an increase in the number of consumers demanding environmentally friendly products and services. Therefore organisations are being encouraged to look beyond just meeting consumers’ demands for quality goods and services, to maintaining the quality of the environment for society’s long-term well being, by behaving in a more environmentally friendly manner.
Community Activism calls for organisations to respect the local community that they work within, rather than just looking at concerns for the wider global marketplace covered by environmentalism. Topics covered here are concerns such as employment and training, traffic pollution, equal opportunities and an organisation’s impact on the local economy. This movement has tried to get organisations to work sympathetically within their local environment and to maintain and improve local facilities whilst encouraging economic growth.

Given the growing following for these movements, organisations cannot afford to ignore what consumers are demanding, so instead are starting to look for ways to incorporate such considerations into their business practices. One notion introduced by Kotler & Zaltman (1971) was that of social marketing, which developed into the ‘Societal Marketing Concept’ (SMC). Kotler (1972) defined this as follows:

"The societal marketing concept calls for a customer orientation backed by integrated marketing aimed at generating customer satisfaction and long-run consumer welfare as the key to attaining long run profitable volume." (p.54)

There has been much debate both for the validity of Kotler’s Societal Marketing Concept (Abratt & Sacks, 1988; Prothero, 1990; Sirgy & Lee, 1996) and against it (Gaski, 1985; Crane & Desmond, 2002). However, the distinction to be made here in order for it to be beneficial, according to Prothero (1990), is between a consumer's 'needs and wants'. By following this concept organisations can produce the everyday products consumers ‘need’ for survival, as well as the products and services they ‘want’ (albeit for the short-term), as long as their production is viewed as a long-term process, the effects of which are not detrimental to the environment or society.

Crane & Desmond (2002) feel that although the SMC is based on ‘more solid terrain’
than the traditional marketing concept, rather than trying to articulate what societal marketing should be, academics would be better off researching decision-making processes in relation to their product/consumption contexts. This should aid understanding of the different moral bases from which decisions are drawn, and so help develop an understanding of complex cultural and social processes. A reference to decision-making is now also found in Kotler et al’s (1999) definition of societal marketing, which has evolved over time to state:

"Societal marketing (is) a principle of enlightened marketing which holds that a company should make marketing decisions by considering consumers’ wants, the company’s requirements, consumers’ long-run interests and society’s long-run interests." (p.62)

This study recognises that this extended definition of societal marketing can be interpreted as a way of encompassing social responsibility into business practice, and hence is viewed as a positive step forward. Additionally it also acknowledges the need for further research into decision-making in this area and will incorporate this as one of its key aspects.

1.2.3. The Context of Ethics and Social Responsibility in this Study

The previous two sections have defined the differences between ethics and social responsibility. However there are strong links between the two, and it is possible for a particular issue to be both ethical and socially responsible. This overlap needs to be recognised in the context of this study as illustrated in Figure 1.2.
Therefore the term Ethics and Social Responsibility (E&SR) will be used to encompass both individual and linked issues within this thesis.

1.3. Market Forces

A succession of environmental impact issues raised over the past three decades has caused the change in both consumers and society's expectations of, and beliefs about, business conduct. These concerns can be related to recycling and pollution issues in the 1970s, energy conservation and legislative issues in the 1980s, and institutional behaviour issues in the 1990s. In turn this has led to an increase in the amount of consumers whose behaviour is reflecting their concerns as they incorporate ethical, social and environmental considerations into their purchase decisions (Prothero, 1990). This is seconded by Ottman (1992, p.3) who says

"Consumer environmental concerns are shaping a trend called environmental or green consumerism, generally defined as individuals looking to protect themselves and their world through the power of their purchasing decisions."
Empirical evidence to justify this comes from the fact that 79% of adult consumers allow their concern for one or more ethical issues to affect their purchasing behaviour (Mintel, 2004), with 29% of consumers stating they have bought a product based on ethics, and 44% stating they have avoided buying a product based on ethics (Worcester, R.M. MORI 17-12-2000). Peattie (1990) found 73% of UK consumers to have a strong or average concern about the environment, with the amount of consumers who chose between products on the basis of environmental performance rising from 19% to 42% in 1989 (MORI in Prothero, 1990). The environment is still the area of highest concern today (Mintel 2004), with recycling being the most performed environmentally friendly behaviour, carried out by one in two consumers on a regular basis (Keynote, 2002).

The ethical food market was valued at £1.75 billion in 2003, up from £1.5 billion in 2002 (Mintel, 2004). Organic food has the largest share of this at 66% with the number of consumers regularly purchasing organic food increasing from 24% in 2000 to 32% in 2003 (Mintel 2004). Patrick Holden, Director of the Soil Association stated that ‘our new report shows not only that more people are buying organic but they are buying more frequently and spending more when they buy’ (MORI 26-03-2001). This statement upholds the rapid growth in value of the organic food and drink market from £390 million in 1998 (Mintel 1999) to an estimated £1.07 billion in 2003 (Mintel, 2003a). Fair Trade purchases increased from 12% to 27% from 2000-2003 (Mintel, 2004), to become the greatest ethical food growth area over the time. 56% of Mintel’s (2004) consumer sample stated that they bought free-range products.

Corporations need to take heed of these changes in consumer concerns and purchasing behaviour, and to adopt new strategic approaches to managing their businesses. This is not a completely new notion as Buehler & Shetty pointed out as long ago as 1975 (p.5):
"it is no longer a question of whether firms should get involved in social problems, but how."

This trend is also reflected in the increased volume of research carried out and literature published on the subject, as many authors respond to the rising practice of ethics (Ferrell et al, 1989; Creyer & Ross, 1997; Crane, 1997; Shaw et al, 2000), social responsibility (Henion, 1972; Parket & Eilbirt, 1975; Hines et al, 1986), and environmentalism (Kinnear & Taylor, 1973; Ottman, 1992; Prothero, 1996; Minton & Rose, 1997; Menon & Menon, 1997; Kilbourne & Beckmann, 1998; follows & Jobber, 2000) in business. Environmentalism has been one of the fastest growing areas of research, with a rise from just 15 articles dedicated to the subject in the 1970s, to 25 in the 1980s, and an upsurge to 55 articles from 1990-97 (Kilbourne & Beckmann, 1998).

Though differences of opinion may occur between authors as to the definition and difference between ethics and social responsibility, the underlying fact is that these figures indicate the subject is of great importance to academics, consumers and corporations alike. Therefore further research that can help understand and define these areas more clearly in order to aid responsible global consumption and prosperity, is surely in a just cause.

1.4. Thesis Structure

The following three chapters of this thesis examine the literature relating to consumer behaviour and decision-making, with particular relevance to ethical and social responsibility (E&SR) influences in the context of grocery retailing. Chapter 2 summarises needs and motives, before looking at their role in shopping activity; then discusses the growth and development of the grocery retailer as a brand; and explores the objective characteristics of store image and product attributes which may or may not
influence consumers in their choice of store and/or product. Chapter 3 examines the
effect of consumers’ attitudes on behaviour and purchase intentions, and aims to
identify those factors most influential in decision-making. Chapter 4 highlights the
characteristics of market segmentation and identifies a selection of relevant shopper
typologies; a profile of the ethical and socially responsible consumers (E&SR
consumer) is drawn from the past literature and any shortfalls in respect of society today
which need to be explored further, are examined; factors affecting E&SR shopping
choices are highlighted; and finally a model of E&SR grocery shopping behaviour is
proposed.

Chapter 5 explains the methodological approach adopted, samples and methods used
during fieldwork, and discusses the rationale behind their use. Chapter 6 then takes a
qualitative approach to the investigation of the influences of E&SR on consumer
behaviour from the consumer’s perspective. Chapters 7-9 present the findings of a
regional quantitative study of E&SR consumers, as developed from the qualitative
research. Chapter 7 explores the factors of greatest importance to E&SR consumers
when making grocery shopping decisions, in respect of store image, product attribute
and E&SR considerations. Chapter 8 presents the findings of an analytical investigation
of the role of attitudes and beliefs in influencing E&SR decisions, and examines the
factors that contribute to this process. Chapter 9 then explores whether consumers can
be grouped into clusters according to their concerns for possible use in segmentation
strategies.

The final chapter summarises the main findings of this study as a whole. It presents a
series of research questions designed to identify connections between E&SR consumer
concerns and behavioural intentions, and evaluates the success of the research in
establishing these links. Also discussed are implications for theory, management, government policy and ethical organisations, along with the limitations of the study and some future directions for further research.

1.5. Summary

This chapter has introduced the topic of the study, set it into an academic context, and defined its parameters. It has offered brief backgrounds to, and working definitions of, ethics and social responsibility, the two areas of focus in this work. It concluded by outlining the contents of the following chapters.
Chapter Two

Shopping Behaviour in Grocery Retailing

Fundamental to the formulation of retail marketing strategy is a clear understanding of consumer needs, motives and patronage/purchase decision processes. Given the increasingly competitive environment retailers are trading in, the need for a well formulated marketing mix that is carefully attuned to a well defined consumer segment has never been more acute.

This chapter begins by examining shoppers’ needs and motivations at a basic level. It then continues to look at some of the specific motives associated with shopping activity, such as branding, components of store image and product attributes, before discussing how these factors affect shopping choices for patronage and purchase decisions. An overview of the changing nature of grocery shopping, and the rise of own-label brands is also given to set this study in context.

2.1. The Meaning of Needs and Motivation

Much consumer research has been devoted to studying how consumers behave: the processes of information search and decision-making, trial and repeat buying, and personal factors influencing these processes. In order to understand consumer behaviour more fully the question of why consumers act as they do also has to be answered: that is the fundamental motives underlying consumer behaviour.

A problem facing academics and practitioners is that there is no universally agreed description of human motivation. Several attempts have been made comprehensively to
describe the forces that strengthen and guide human behaviour, (Freud, 1901; Copeland, 1924; Maslow, 1954; Katona, 1960; McGregor, 1966) and there are overlaps in these typologies, reflecting general agreement as to the status of some human motives. Sheth et al (1999) define motivation as:

"the state of drive or arousal that impels behaviour toward a goal object." (p.342)

Any discussion of motivation is inevitably related to the study of needs; human needs and motives are inextricably linked; motives actuate and direct actions to be taken in satisfaction of identified needs. Needs can be seen as the precursor to motivation and achieving an objective (behaviour), as illustrated by the simple model in Figure 2.1.

**FIGURE 2.1. MOTIVATION LINKS NEEDS AND OBJECTIVES (BEHAVIOUR)**


Needs can be of many kinds – from basic survival needs such as food, to sophisticated needs deriving from social/cultural origins. A need is activated and felt when there is a sufficient discrepancy between a desired or preferred state of being and the actual state. Motives initiate behaviour and direct it towards specific types of activities. For example, hunger is a need for food, and hunger is the motivating force that causes people to seek a means of satisfying that need. However, certain factors e.g. climate, age, social group, can affect precisely how a person’s appetite is quelled. Behaviour may also be modified due to strong personal motives that have redirected their energies; not eating due to being overweight, or for reasons of religious observance. What this
example shows is that people who have a similar basic need may not necessarily display identical behaviour.

Additionally motivational forces may be either positive (attracting) or negative (repelling), depending on whether the identified goal is something to embrace or avoid. Marketers want to make their products and services positive and attracting to the consumer, and as often a trade-off is involved – the product contains some positive and some negative outcomes – it is their job to minimise repelling features while maximising the attracting features. This is made more difficult by the fact that motivation is a highly dynamic construct that is constantly changing in reaction to life experiences, with needs and wants altering in response to the surrounding environment, interaction with others and the individual’s state of being.

Although consumer motivation may seem simple to understand, problems often arise in its analysis due to the interrelationships between conditioning variables. The study of motivation in consumer research revolves around two fundamental problems: understanding the relationship between motives and specific behaviour; and, developing a typology of consumer motives comprehensive enough to capture the wide variety of forces that stimulate and shape behaviour (Foxall & Goldsmith, 1994).

One of the most widely cited motivational theories is Maslow’s (1954) hierarchy of needs. This displays a range of five need levels, from the basic physiological needs (thirst, hunger, etc) up to the self-actualization level (being the best of what you are). The theory follows that as needs at one level are met, needs at the next level become more important. Maslow's theory is useful in that it: makes a distinction between ‘physical/inherited needs’ and learned needs; is a valuable tool for understanding
consumer motivations; and is readily adaptable to marketing strategy e.g. advertising appeal. However, it has received criticism as it cannot be tested empirically and it appears to be both culture- and time-bound (Schiffman & Kanuk, 2000). Despite this the idea of a typology of motives/needs has been the favoured aim of many researchers (Murray, 1938; Dichter, 1964; Hanna, 1980). The work of Hanna (1980), a close replica of Maslow’s paradigm, is of particular interest to this study as it focuses on the needs consumers seek to satisfy through purchase behaviour.

Most theories of motivation applied to consumer behaviour suggest that a single product must meet a single need and only that need. A multi-dimensional perspective (Foxall & Goldsmith, 1994) to consumer motivation however, acknowledges from the outset that there is no hierarchy of needs, so that a single purchase may satisfy many needs/wants, more or less at the same time. This way of thinking aims to link the comprehensive theories of human motivation, such as those proposed by Maslow (1954) and Freud (1901), with marketers’ needs for a basic understanding of the evaluative factors that underlie consumer choice. The multidimensional model that Foxall & Goldsmith (1994) propose comprises of six broad categories of human need: physiological needs, social needs, symbolic needs, hedonic needs, cognitive needs and experimental needs. The key factor marketers and researchers have to establish, from a motivational perspective given that any single consumption activity may meet many or all of these dimensions simultaneously, is how much weight each dimension carries in a specific consumption decision process.

This study will look at the different weight or importance placed on factors that motivate consumers with regard to grocery shopping. Firstly it will discuss motives and the activity of shopping.
2.2. Motives and the Shopping Activity

Retailers spend large amounts of capital creating environments that will attract customers and entice them into spending money. In order to succeed they need to know how shoppers react to stores and products, and, if they are to motivate consumers as shoppers, to utilise their offering and make it in an attractive form that meets consumer needs. This again comes back to the question of "why do people shop?"

The fundamental motivations underlying shopping behaviour were examined by Tauber (1972), who encouraged strategists and researchers to focus their attention on the primary motivations that determine the shopping activity, rather than making the simple assumption that the need to purchase products is the only, or main, reason for shopping. He hypothesised that:

"people's motives for shopping are a function of many variables, some of which are unrelated to the actual buying of products. It is maintained that an understanding of shopping motives requires the consideration of satisfactions which shopping activities provide, as well as the utility obtained from the merchandise that may be purchased." (p.46)

Based upon exploratory in-depth interviews with both male and female shoppers, Tauber categorised responses to a number of motives, classified as either personal: role playing, diversion, self-gratification, learning about new trends, physical activity, sensory stimulation; or social: social experiences outside the home, communication with others having a similar interest, peer group attraction, status and authority, and pleasure of bargaining. Thus the tentative assertions (due to Tauber's methodology being directed at hypotheses forming rather than evaluation) are that shopping occurs when a consumer's requirements for particular goods justifies the allocation of the necessary time, money and effort, to travel to the store and get the item. However it can also occur when the consumer "needs attention, wants to be with peers, desires to meet
people with similar interests, feels a need to exercise, or simply has leisure time” (Tauber, 1972, p.48). Confirmation of the multiplicity of motives, which underpin shopping activity, is supported by Morris (1987).

Whilst suggestive of many distinct shopping motivations, Westbrook & Black (1985) found two potentially significant areas that Tauber’s theory neglects: anticipation of satisfaction before purchase may be an important motivational element in pre-purchase search; and, the omission of ‘choice optimisation’. Although finding support for the hypotheses of Tauber, Westbrook & Black identify seven dimensions of shopping motivation: anticipated utility of prospective purchases; enactment of an economic shopping role; negotiation to obtain price concessions from the seller; optimisation of merchandise choice in terms of matching shoppers’ needs and desires; affiliation with reference groups; exercise of power and authority in marketplace exchanges; and, sensory stimulation from the marketplace itself.

These extended typologies of motives underlying the shopping activity broadens the concept of shopping beyond its original functional or ‘provisioning’ (Miller, 1998) purpose, based on a simple process of economic exchange, and suggests that research into E&SR could provide useful insights into furthering an understanding of personal and social motives of shopping activity.

Giving a wider view than that solely of motivation, Woodruffe-Burton et al (2002) debate the theory of shopping, examining it from a number of different perspectives (historical, sociological, feminist, and marketing). They discuss many areas of past shopping research in order to propose a conceptual framework of a holistic view of shopping and shopping behaviour, with each piece of literature studied being ‘assigned’
to one of the three components in the model. The three main dimensions the conceptual framework is built on are: 1) the shopping environment – studies which encompass the changing shopping environment; 2) shopping in socio-cultural context – research which focuses on the socio-cultural aspects of shopping, feminist and other social critiques of shopping; and, 3) shopping and the individual: roles motivations and behaviour – research which examines individual shopping roles, motivations and behaviour. The authors' state that the aspects of retailing strategy and marketing strategy fall outside of this conceptual framework, and are regarded as external influences which impact on the shopping model. This model is illustrated diagrammatically in Figure 2.2.

**FIGURE 2.2. SHOPPING: A CONCEPTUAL FRAMEWORK**


E&SR issues appear to straddle all three dimensions of the framework that these authors present as a basis for the conceptualisation of shopping in a modern society: the shopping environment (place and space), the socio-cultural context of shopping, and the roles, motivations and behaviour of individuals. Exploring the critical interface between the reasons for shopping and retailers’ marketing behaviour in terms of E&SR
factors should provide a stronger platform from which to develop appropriate responses to customers’ concerns.

Despite the array of shopping motives discussed so far, they account for just one aspect of the consumers’ pre-purchase and purchase behaviour within the retail environment. Identifying the influences that shape behaviour is key, as products and services are seldom purchased for their functional values alone. Having looked at the theory of motivations in this section, it is necessary to move on and look at the different aspects that affect consumer decision-making, which motivate them to choose one particular store or product over another. Prior to exploring the concept of image in relation to store and product choice, a review of the changing nature of grocery shopping is needed to recognise the evolving environment that has impacted on shopping activity over time.

2.3. The Changing Nature of Grocery Shopping

The origin of modern supermarkets in the UK can be traced back to the beginnings of the Co-operative movement in the 19th century, begun by a group of independent local retailers who joined forces to sell food at affordable prices. The abolition of Resale Price Maintenance in the 1960s set the stage for supermarkets to proliferate and for consumers to benefit from the lower prices encouraged by competition, alongside the timesaving and convenience associated with a ‘one-stop’ shop.

In the 1950s housewives would shop everyday for what they required for that day’s meals at a number of different shops e.g. butcher, baker, greengrocer. This changed in the 1960s with the proliferation of self-service supermarkets encouraging one-stop bulk buying by offering everything under one roof. This in turn led to the late 1980s and 1990s producing large out-of-town superstores which not only offered food and
groceries, but also non-grocery items such as clothing, housewares and electrical equipment. This has resulted in immense power for the major supermarket chains in the UK, with 79.4% of all food and non-alcoholic drink expenditure going through supermarkets in 2001 (Keynote, 2003b).

The growth of supermarkets came at the expense of many smaller independent operators and as such changed the face of the high street, as many of these small retailers closed due to being unable to compete on price or range of merchandise. Even corner shops, which traditionally differentiated themselves by opening for longer hours, suffered as supermarkets extended their opening hours, with some moving to 24 hour opening. However, while out-of-town superstores are still flourishing, changing lifestyles are altering the way many shop. Although a large number of households still do a major shop regularly to stock up on essentials, an increase in the number of single households with little need to shop in bulk, increased pressure on leisure time, families eating at different times rather than traditionally all sitting down together, and an increase in snacking, have all contributed to a return to ‘top-up’ shopping (Keynote, 2003b).

Although ‘top-up’ shopping has traditionally been the role of the butcher, greengrocer, and the convenience store, increasingly supermarkets are encroaching on their territory by increasing their number of town and city centre shops. To compete more effectively Tesco have added the T&S chain to its portfolio, and the Co-op has bought out the Alldays convenience chain in response to a trend in the market that requires more frequent, smaller shopping trips to cater for immediate needs. However this convenience has come at a price, with a survey featured in The Observer (20th April, 2003) disclosing that seven London based supermarket convenience stores were charging between 4-7% more for products than their larger retail formats.
Despite steady growth in the ‘home-shopping’ sector, for the majority of grocery shopping purposes most consumers will still physically visit a shopping site or store. Given that today’s consumer has a wide variety of products and services to choose from as markets are rapidly growing along with competition, the various tangible and intangible elements of a store/product’s image are playing an increasingly influential role in consumer shopping decisions. A reduction in the cost of technology together with the advancement of production techniques has meant that many of the tangible differences between competing products and services are reducing, so forcing companies to look for other ways to distinguish their offering. This has heralded branding as an important strategic tool for gaining differentiation and competitive advantage in the marketplace.

2.4. Brands and Retailing

2.4.1. Definition of a Brand

Traditionally a ‘brand’ has been associated with the brand name. However nowadays brands are seen as the ‘overall offering’ which can tell the consumer something about the image of the company and its products or services. This has led to a variety of definitions, but a popular academic one is that of Kotler (2000, p.404):

"A brand is a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller, or group of sellers, and to differentiate them from those of competitors."

This definition shows that brands are one of the vehicles used to differentiate between products or services in the marketplace, and that they are a tool for consumers to distinguish between varying ‘quality levels’ based on their experiences of using the product or service, or indeed other offerings by the same organisation. However, what this definition does not do is contain a reference to one of the most important and
critical aspects of brands — that is the value and benefit brands can give to an organisation dependent on how they are perceived in the consumer's mind.

Ries & Ries (1998) argued that brands have a unique quality and identity which is different from a product or company's name. Brands are only names in the consumer's mind whereas it is the strength of associations with that name that can affect the buying decision process. Many companies have misunderstood this fact and believe that consumers buy products not brands. In fact consumers buy the product physically but the decision to buy may be based upon the brand's psychological value to them. This is encapsulated by Randall (1997) in his statement about brands:

"A brand ... has an existence separate from an actual product or service; it has a life of its own." (p. 12)

According to Keller (1998) the brand has the power to differentiate the product/service and separate it from other competitive options. Additionally it can help motivate consumers into choosing and purchasing the product, thus making them feel satisfied and loyal. He continues to state that the brand plays the following roles for the consumer: identifying the origin of the product; defining the responsibility of the manufacturer; diminishing risk; diminishing the cost of searching for a product; a promise, guarantee or contract with the manufacturer; a symbolic means and sign of quality.

Some authors have questioned whether or not a service can be a brand, but as much of what consumers buy today is a combination of product and service, the service element has become more dominant in their decision-making. Due to this it is the company brand rather than the physical product which is becoming the main discriminator, especially in grocery retailing, so this needs to be reflected when management are
building brand strategies. As Jones (1986, p.22) says, ‘branding is a form of non-price competition in oligopolistic markets’, a fact which supermarkets have recognised and taken on. Nevertheless, this does not mean that manufacturers without their own outlets cannot benefit from branding their products – it is still a way they can differentiate their products from competitors, especially the threat from ‘own-labels’.

In line with the growing number and variety of products and services on offer, consumers have become more critical and demand ‘more value’ from an offering. However, if branding is well implemented it follows that theoretically, when consumers have favourable brand perceptions of a company, customer loyalty, increased company turnover and profitability should follow. Creating and managing a brand is not only about the processes of choosing a name, logo and design for the product or service, but also adding value and ‘personality’ to the offering.

Organisations not only use brands to build consumer awareness of their products or services but also to develop their knowledge and understanding of other areas of the business, such as corporate ethics, environmental responsibility, employee relations, politics and corporate behaviour and image. With organisations needing to be more transparent and accountable, and an increase in the availability of information through advanced technologies, consumers are becoming more and more educated to their workings. This means they know more about businesses and brands than ever before, and as such are expecting more from them. Linda Wolf, Chief Executive of the advertising agency Leo Burnett in Chicago, USA, stated (in Drawbaugh 2001, p.6):

"Consumers today, I think, are going to be a lot harder on brands than they ever have been in the past when they don't deliver on their promise because they just know so much more. The Internet is making everyone a savvier consumer ... Companies, marketers have to be a lot more diligent and careful about how they are handling their brands."

"
The changing behaviour of consumers is an indication of their increased knowledge, but also the competitive nature of the market. This means that companies are striving to offer the best for their customers, as well as fulfilling what they offer or promise without having a negative effect on their financial position. As long as a brand can deliver on its promises, consumers will continue to support it (Murphy, 1990). However before this can be done, a company has to be aware of exactly what a brand entails in order to be able to develop suitable offerings and implement appropriate supporting strategies.

2.4.2. Components of a Brand

As a consequence of the increasing recognition of the importance of brands, so models of the components that make up a brand have gained more attention among academics and practitioners alike. The strength of such models is that they simplify brand complexity into smaller more manageable parts. However, there is a lack of consensus as to the components that make up a brand, and their relative importance.

Many authors have argued that a brand is more than just a name, and that there are several integrated factors that make up and represent the so-called brand (King, 1991; Davies, 1992). These were found to consist of tangible elements such as symbols and slogans (Aaker, 1992; Bailey & Schechter, 1994), name (Biggar & Selame, 1992; de Chernatony, 1993), functionality (de Chernatony & McWilliam, 1989; O'Malley, 1991) and physique (Grossman, 1994; Kapferer, 1992); and intangible elements such as communications (Aaker, 1992; Biggar & Selame, 1992), symbolic value (de Chernatony, 1993; O'Malley, 1991), relevance (Dyson et al, 1996; Young & Rubicam, 1994) and identity (Aaker, 1992; Upshaw, 1995).
Models that depict the constitution of a brand range over the tangible/intangible spectrum from simplified representations of the brand concerned solely with the tangible, visual elements of name, logo and product design (Bailey & Schechter, 1994), to those predominantly concerned with the emotional and representational intangible components (Kapferer, 1992). A model that took the middle road of this spectrum was that of the ‘atomic model’ developed by de Chernatony (1993) which was grounded in branding literature and aimed to show the integration of the relationships between both the tangible and intangible elements. However criticisms that these types of model were static in nature and therefore did not take into account factors such as entry into new environments, which could cause the importance of the various elements to change, led to de Chernatony & Dall’Olmo Riley (1998) developing the ‘double vortex brand model’, illustrated in Figure 2.3.

FIGURE 2.3. THE DOUBLE VORTEX BRAND MODEL

Ref: de Chernatony & Dall’Olmo Riley, 1998, p.1085
This representation no longer implies that the brand's elements (shown in the top ellipse on the left) are equal. While they are in the same plane when the vortex forms, when different types of product field and consumer segments are encountered the importance of each of the elements will vary, resulting in their being closer to or further from each other. As brands are conceived inside organisations, but their success is decided by consumers' perceptions, this model helps to give a clear focus on the perspective of a brand. The left hand side of the model focuses on managers' building brands, and can be used to identify the elements needed to develop their brand. Nevertheless, consumers are unlikely to deconstruct the vortex; they would consider it as a whole, so the overall offering has to be considered. On the right of the model are consumers' perceptions of the brand. Their assessment would be considered in terms of confidence that it was right for them, evaluated through both functional and emotional dimensions, based on brand positioning and personality objectives.

The importance of this model is that it recognises that the strategy employed has to be relevant to the target market and adaptable to the environment. Be that as it may, there are many brands in the market place with different names, logos or symbols, each competing for a share of the consumer's purse. So why would a consumer choose one brand over another, especially in homogenous markets?

From an analysis of the literature it can be seen that one particular construct plays a major role in the overall success of a brand and has become increasingly important. That construct is known as brand personality or identity. It has been mentioned many times by the various authors quoted earlier as forming an important part of the overall offering in the eyes of the consumer, and will now be discussed in further detail.
2.4.3. The Importance of Brand Identity

The key to creating a brand is to provide the product or service with 'unique entities that certain consumers really want' (King, 1991, p.5), which develops a 'lasting personality based on a special combination of physical, functional and psychological values'. Herbig & Milewicz (1995) add that this 'assists the user in the recognition and decision-making process'. Much of the studied literature refers to a brand's 'personality' as differentiating it from others (Davies, 1992; Knox et al, 1994) giving benefits or added values to the consumer (de Chernatony et al, 1992) and making them feel they are not only buying the good, but also an assurance of quality and worth (Burt, 1992; Davies, 1992; Richardson et al, 1994; Hutcheson & Moutinho, 1998). This is of importance to consumers as it helps them to reflect their self-image, especially in the eyes of their peers.

Kapferer (1997, p.91) defined brand identity as:

"the common element sending a single message amid the wide variety of its products actions and slogans."

A brand's identity is used to differentiate between products/services, to create a meaning for the brand and to communicate the benefit the brand offers. Again the success of this process depends on how the brand is managed.

Brand identity itself is formed through the amalgamation of many factors. Upshaw (1995) identifies brand identity as two concentric circles. Central is brand essence, which contains brand positioning – the strategic genesis of the marketing mix; and strategic personality – the set of external qualities of each brand, its public face, which is a direct extension of its positioning. These have a two-way relationship with, and are surrounded by, tools that are used by a company to form the brand essence: brand name,
Randall (1997) stated that brand identity is what organisations transmit to the marketplace, and this is within their control provided they understand the essence and expression of their brands. This ‘transmit’ element is representative of elements of Upshaw’s thinking, however Randall does not go into great depth as to what factors the company needs to consider in order to understand and express their brand.

A model that does look at the strategic questions of how these areas work is one of brand dimension developed by The Leo Burnett Brand Consultancy, the central focus of which is brand essence. Their model, illustrated in Figure 2.4, denotes that essence is formed by the four dimensions of function, personality (or image), source and differences surrounding it. The identity of the brand is strong when there is consistency between the quadrants as they support each other. Any weakness or imbalance in a particular quarter can cause confusion in the brand’s position. Therefore this model can guide management to view their strategies in a well-rounded, balanced manner.
In a similar vein Kapherer’s Prism of Identity model (1992) advanced this notion of exploring brand identity through the use of further dimensions - namely physique, personality, culture, relationship, reflection and self-image. He stressed that there is interaction between these different dimensions, and as with the Burnett model, states that the dimensions must be in balance with each other. Furthermore he suggests that a company should find out the detailed identity of the brand, and ensure it is coherent across the dimensions, so it can be communicated effectively to the target audience.

The similarity between these models is that in order to form brand essence, and hence brand identity, there must be a match between the company’s perspective and the consumer’s perspective. This is related to how the company communicates its brand message and how the consumer receives it. As each brand identity has a personality which suggests the type of consumer who buys or uses it, it follows that the more
clearly the associated attributes and values are displayed, the greater the benefits provided for both the company and consumers. However, as de Chernatony & Dall’Olmo Riley (1998) state, many components are inter-related and differ across product fields (as well as consumer segments). Therefore managers need to consider the type of relationship they want their brand to build with their customers, and hence which dimensions are important on different occasions.

2.4.4. The Rise of the ‘Own-label’ Grocery Brand

Although the general practice of product branding began in the late nineteenth century, the concept of nationally distributed and aggressively marketed grocery brands is a product of the inter-war years (Davies et al, 1986). The development of the grocery retail store being seen as a brand, rather than just the products that are sold within it, has been brought about by the growth of own-label products over the last three decades.

To aid understanding, own-label products can be defined as products that carry the retailer’s name, as opposed to the name of the manufacturer, on the product label. They are also sometimes referred to as own brands, private labels, house brands, or retailer brands, but for this study they will be referred to as own-label. Euromonitor (1986) identified four strategic options for developing own-label brands which have commonly been used in grocery retailing. They are:

1. Use of the retailer’s own name e.g. Tesco
2. Use of a propriety name which becomes associated with the retailer e.g. St Michael, the brand for Marks & Spencer
3. Improved own brands e.g. Safeway ‘The Best’
4. ‘Generic’ own brands e.g. Tesco’s ‘Value’ range.
The first own-labels appeared in the 1970s in the form of price cutters sold under names such as 'extra' and 'low price'. Many of these products were seen as low price and of low quality (Davies, 1992; Burt, 1992; Richardson et al, 1994) which led to a decline in their sales. However, in the early 1980s retailers such as Tesco and Sainsbury began to realise that their store names had power and drove forward the development of own-labels through advertising.

Concentrating on providing greater service to the customer, but emphasising low price to generate competitive advantage (Hutcheson & Moutinho, 1998), resulted in consumers perceiving own-labels as reasonable quality at a much lower price – on average own labels are 10-30% cheaper than national brands in grocery product classes (Baltas, 1997). The mid to late 1980s saw stores introducing new and extended ranges that offered the consumer both exotic produce and high quality merchandise to fit it with the emerging affluent 'yuppie' lifestyle. However a recession in the early 1990s, and competition from discount retailers, saw the re-emergence of price as a primary competitive strategy, albeit that in many cases it was in addition to, rather than at the expense of, quality and service. The mid to late 1990s saw the introduction of innovative own-label products followed by premium-quality own-label products, which retailers developed themselves rather than copying brand leaders as they had in the past. Companies such as Marks and Spencer initiated new product categories such as their chilled meal range. These evolutionary factors highlight the need for retailers' to recognise that price is important to consumers, but it is not the sole strategy that will increase their market share and retain loyal customers.

Grocery retailers have also used innovation to increase their sales by following consumers' trends. In the mid 1980s Tesco responded to a rise in health awareness by
producing and promoting its ‘Healthy Eating’ range which was low fat and gave in-depth nutritional information on the packaging. Over recent years, due to several food scares, the call for more locally sourced and organic produce has required retailers to rethink their offering once again. Iceland stopped the use of Genetically Modified (GM) ingredients in all their own products after scares over the safety of GM foods. These reactions are summed up by de Chernatony & McDonald (1992, p204) who say ‘retailers are increasingly attentive to changing environmental circumstances, launching innovative own-labels to capitalise on new consumer trends’.

Since the late 1990s retailers have placed greater emphasis on premium quality own-label products which has led to the creation of premium own-label sub brands such as Tesco’s ‘Finest’ and Sainsbury’s ‘Taste the Difference’. This trend has been in response to a steady increase in the number of consumers falling into the ABC1 socio-economic group, up from 48.5% of adults in 1999 to 53.3% in 2003 (Keynote, 2004), whose increased levels of disposable income means they are more able to afford premium-range products. Additionally their growing sophistication in eating habits has increased demand for more unusual foods; busier lifestyles has meant higher demand for convenience products; and a higher level of education in this group means a greater awareness of health and ethical issues relating to food, and as such, a demand for higher quality, healthy products. This focus on quality and premium own-label ranges is part of the retailers’ push to create a quality image and so enhance their brand identity – an important element in encouraging own-label sales – and the aforementioned factors are symptomatic of the extent to which retailers are seeking to exploit sales opportunities to different target groups.
The UK own-label market is the most developed in all of Europe according to Keynote, and although their value share fell from 43.6% in 1998 to 38.5% in 2002 it is forecast to increase slightly and settle at around 39% by 2007 (Keynote, 2003a). Additionally Mintel (2003b) found that 94% of consumers buy own-label products of some sort, and this high level of penetration will give retailers the impetus to continue to develop and broaden their own-label offer.

Two significant factors brought about these changes in the nature of grocery shopping and own label growth, namely: the transformation in structure of the grocery supply chain, with the average retail organisation increasing in size - by 1986 large multiple chains (with 10 or more outlets) held 58.6% of the grocery retail trade (McGoldrick, 1990); and the abolition of resale price maintenance (RPM), so swinging the balance of power from the manufacturer to the retailer. The emergence of vertically integrated organisations, where both production and retail areas are owned, replaced the previously fragmented nature of the retail industry, and the development of new technologies enabled retailers to personalise their offer, so helping them improve their ability to monitor and control levels of quality and service. This in turn has meant that retailers are able to successfully compete with manufacturers’ brands and be seen as a brand themselves.

The Leuven Gent Management School (in Keynote, 2003a) believes that when creating a retailer brand the organisation should initially concentrate on the store as a whole, rather than specific products and categories. Their reasoning behind this is that communicating the overall in-store experience is more important than just directing traditional advertising at own-label brands. Once the basis of a clearly positioned store experience is developed, it makes it much easier to develop credible product brands,
especially if an ‘umbrella’ branding technique is used. If a retailer lacks a good store brand identity or image then it is likely to hamper the effectiveness of its targeting strategy. In order to be able to assess the overall offering, the factors that make up both a store’s image and a product’s attributes must first be typified.

2.5. A Store’s Personality or Image

A major finding of past research is that creating a brand’s personality or image is the all important element for success (King, 1991; Davies, 1992; de Chernatony et al, 1992; Dennis et al, 2002). In order to do this in grocery retailing the elements that go to make up a store’s personality or image have to be identified before their importance in consumers store selection criteria can be established.

Martineau (1958) was the first author to conceptualise a retail store image construct after he started questioning what drew a shopper to one store rather than another. He stated:

“clearly there is a force operative in the determination of a store’s customer body besides the obvious functional factors of location, price ranges, and merchandise offerings.” (p.47)

and concluded it was down to the ‘personality’ of the store – the factors of which he named as layout & architecture, symbols & colours, advertising and sales personnel.

However Doyle & Fenwick (1974) point out that:

“...many of the examples of successful image creation cited by Martineau and other studies depend upon physical, but non-price aspects of the store ... Thus rather than classifying image as part of the ‘non-logical basis of shopping behaviour’ as Martineau suggests, it is reasonable to view the customer as rationally evaluating the store on a multi-attribute utility function.” (p.40)
The birth of the store image concept has led to many academics and consultants trying to identify and classify its components. Kunkel & Berry's (1968) study on behavioural concepts and their relationship to store image led them to find that 'retail store image is the total conceptualised or expected reinforcement that a person associates with shopping at a particular store' (p.22). Therefore they believed that an image is acquired through experience and thus learnt. Their study, based on existing literature and a previous study done by the authors, found twelve image components associated with the retail store, namely: price of merchandise, quality of merchandise, assortment of merchandise, fashion of merchandise, sales personnel, locational convenience, other convenience factors, services, sales promotions, advertising, store atmosphere and reputation or adjustments. An illustration of these components, together with their forty-three sub-components can be seen in Appendix I.

Subsequently Lindquist (1974) proposed the concept of an all inclusive attitude and image attribute consisting of nine categories based on the hypothetical assertions and empirical findings of 26 authors, namely: merchandise, service, clientele, physical facilities, convenience, promotion, store atmosphere, institutional factors and post-transaction satisfaction. These nine categories break down into thirty-four sub-attributes, which can be seen in Appendix II. The three factors he found to be dominant from this study and consistently over past studies were merchandise, service and location, with merchandise (selection, quality, pricing and styling/fashion) being the key image factor.

Many different approaches have been used by researchers to measure the construct of store image and establish how it is placed in the consumer's mind. The most popular have been semantic differential scales (Dornoff & Tatham, 1972; Lessig, 1973;
Schiffman et al., 1977), multidimensional scaling (Doyle & Fenwick, 1974; Stanley & Sewall, 1976), and unstructured measurement techniques (Kunkel & Berry, 1968; Dash et al., 1976a and b; James et al., 1976). However, a problem that has occurred with these methods is that the measurement focuses on the parts of the image, rather than the whole, so making results incomplete.

A study that took a different approach was that of Zimmer & Golden (1988) who focused on consumers' unprompted descriptions of image without directing the respondent toward affective dimensions or specific attributes. This approach was adopted in order to overcome the limitation that rating researcher-specific attributes when defining store image components may only partially capture the consumers' image of a retailer. The results showed a list of seven categories containing forty-seven subcategories (see Appendix IIIa). The authors argue that when compared to the more traditional measures the results of their study capture more deeply the evoked retail store image than those of past studies. The authors compiled a typology containing image descriptors used in previous research (see Zimmer & Golden, 1988 for list of reviewed articles) and highlighted which of the factors were contained in their findings. The outcome was eleven general types of image descriptor encompassing sixty-six categories, which are displayed in Appendix IIIb. From this Zimmer & Golden state that 'there appears to be a reasonable number of image descriptors used or discussed in previous research that may not represent how the consumer thinks of a store' (p. 284), although they do recognise that this does not mean they cannot be useful, merely that they may represent images for stores other than the three they surveyed (Sears, K-Mart and, Wards). Given their more recent creation, Zimmer & Golden's image descriptor lists will be used as a starting point for this study's investigation into such factors, but it will heed their statement and recognise that all elements may not be specific to a
Price and quality are the two most important elements of store image according to a later study by Dodds et al (1991) whose work found that price has a positive effect on perceived quality, as does reputation (Herbig & Milewicz, 1995), but a negative effect on perceived value and willingness to buy. These findings were upheld by Grewal et al (1998) who found that store image has a direct positive relationship with purchase intention, and perceived quality of the brand has a positive relationship with store image. So concluding that 'retailers who understand how these components (store image, quality and price) and the role of external cues that represent them can influence store patronage decisions and improve their competitive situation' (p.332). However Dickson & Sawyer (1990) found that in cases where the good was at a perceived low price then the image of both the brand and the store was lower. Due to external and individual circumstances, perceptions of the same price stimulus may alter across consumers, and for one consumer across products, purchase situations and time. This must be recognised in future research.

The research method applications of several authors have helped to enhance the validity and depth of store image understanding. James et al (1976) incorporated the use of Fishbein's Multi-attribute model in their study on store image by simply replacing the use of brands with stores. They found through open-ended questions that the attributes most important to consumers were quality, price, and assortment of goods respectively. In addition they discovered that different groups of consumers varied in their beliefs about which store attributes were most important, so highlighting that segmentation is important in store image studies. With regard to the methodology, the authors found the
multi-attribute attitude model a powerful tool for the description and prediction of store image as it gave deeper insight into store preferences. It has definite advantages over the semantic differential due to the depth and quality of data collected, so aiding managers to develop store images suitable for the store type and target market, through quantified retail strategies and segmentation. Aspects of this methodology will be used in this study to explore the important components of both store image and E&SR issues to consumers.

Mazursky & Jacoby (1986) utilised pictorial and verbal information to explore how environmental cues are used in forming store images. The inclusion of pictorial information was found 'to reflect a better simulation of realistic image development situations' as it provided a richer source of information than verbal compositions alone. This enabled the process of store image to be modelled in a hierarchy effect, showing the different levels of cues with respect to image formation, namely the areas of price, merchandise, interior and location, and policy and service. An important factor that came out of this study was that characteristics of store image are formed in relation to others, so finding that these cues should not be viewed as independent. Aspects of pictorial representation will be included in the research design to stimulate respondents.

Research has shown that the importance of components may vary between markets, sectors, competitive situations and customer segments (de Chernatony & Dall'Olmo Riley, 1998). Hirschman et al (1978) found no support for the notion that images are consistent from one market to another when asking respondents in seven different locations to rate the importance of ten store image dimensions, and concluded that a retailer should determine what the major dimensions are within each market the store is operating. This finding is in parallel with the work of Tigert (1983) and Arnold et al
(1983) who both noted differences in the importance of attributes for shoppers in geographically separated markets. Amirani & Gates (1993) applied the image variables of clientele social class, global impressions of the store, merchandise quality and merchandise pricing & value for money in an attribute-anchored conjoint approach to study the concept of store image across three different types of store - speciality, mass merchandise and discount department stores. They found that the important attributes differed across store type. In addition attributes differed in their contribution to the formation of overall impressions within the same category of stores i.e. between three department stores. Dholakia (1999) studied motivation and shopping behaviour and concluded that although the female patron takes the main role in grocery shopping, and therefore will continue to be the main target of store layout and design, the increased level of male participation (45% of household grocery shopping is carried out by males as the primary or joint shopper) needs to be considered in these areas. These points should be recognised in the dimensional analysis of store image, and will be accounted for in the present study’s methodology. Included will be different locations, segments of consumers and types of grocery shop e.g. supermarket, local grocer, farm shop, etc. used on different occasions e.g. main shop, top-up shop, to see whether or not the importance of store image issues differs.

2.6. Identifying Product Attributes

The product plays a central role in the company and in business management, therefore understanding what it represents is crucial to both effective product and brand management. It is not only imperative to establishing the areas of importance a product/service manufacturer needs to consider, especially those without their own retail outlet, but also helps set the parameters for answering the question ‘does a consumer patronise a store for the store itself, or the products it sells?’
Kotler et al (1999) defined a product as:

"Anything that can be offered to a market for attention, acquisition, use or consumption that might satisfy a need or want." (p.561)

Although this definition continues to state that this can include physical objects, services, persons, places, organisations and ideas, in this instance we are looking at the attributes of a physical product, representative of a grocery item.

A product was described by de Chernatony & McDonald (1992) as a ‘problem solver’, in the sense that it solves a customer’s problems and is the means by which an organisation achieves its own objectives. When a consumer buys a product he is buying a bundle of benefits which he perceives as satisfying his own particular needs and wants, and can be represented visually as a set of concentric circles as depicted in Figure 2.5.
The central problem-solving aspect of the product is usually referred to as the 'core product' (Kotler et al, 1999). Around this is the area known as the 'actual product' which incorporates the tangible attributes that combine to deliver the core product benefits. These physical aspects can then be built upon to form the 'product surround' constructed from two further layers of attributes, one of services and one of intangibles, to complete the offering (de Chernatony & McDonald, 1992).

According to de Chernatony & McDonald (1992) the product surround can account for as much as 80% of the added values and impact of a product, but often only 20% of the costs. The reverse is often true of the inner circle. This is because, as discussed earlier
in relation to branding, these added values are often emotional values consumers attach to products, and the more distinctive a product brand is positioned, the less likely a customer is to accept a substitute.

The significance of such retail image factors to a study of this type must be recognized as they are intrinsic to store and product choice decisions, and can be closely linked to shopping motives. In order to develop the concept of E&SR grocery shopping further these traditional store image components and product attributes need to be explored in conjunction with E&SR factors.

To obtain a clearer idea of how these elements of shopping choice fit together, a discussion of store choice and factors affecting patronage decisions is given below.

2.7. Store Choice

Shoppers' motivations to use a specific store are in part a function of their motives for undertaking shopping activity. Therefore a major objective of many academics and practitioners alike is to obtain a clear understanding of why consumers patronise one store over another. Ordering by importance the elements of a store's personality (image) salient to the consumer's decision-making process facilitates a measure of the factors determining store choice. Retailers can utilise this information to effectively enhance or alter aspects of their offering in keeping with the target markets requisites. Embodying a measure of ethics and social responsibility with traditional elements will determine the areas most likely to bring about E&SR consumer behaviour. This will allow retailers to distinguish between consumers acting in a socially conscious or non-socially conscious manner and differentiate their marketing strategies accordingly.
2.7.1. Store Selection Criteria

Grewal et al (1998) state that ‘the role of merchandise and brand names that retailers carry are important for a better understanding of store patronage decisions’ (p.331). Their study looked at the effects of store name, brand name and price discounts on consumers’ evaluations and purchase intentions with regard to two stores, one with a low store image and one with a high store image. They found that the three components most important in store patronage decisions were; store image, quality of merchandise/brands, and price/promotion - which explained 41% of the variance in purchase intention. The authors conclude that although these are not the only cues consumers are likely to use in assessing intentions to buy, they are key variables to be included when assessing the effectiveness of retailing strategies.

Evidence has shown that store-selection criteria can be situation-specific, and that the importance of factors can change over time. Arnold et al (1983) found differences between the most important attributes for shoppers in four different countries. Convenience of location was the primary attribute for shoppers in Toronto and Cleveland (USA), whereas it was price in Birmingham (UK), and ‘shopping environment’ in Amsterdam. Bates & Gabor (1987) compared store selection criteria at two moments in time (1967 and 1984), and found that there had been a reduced emphasis on cheap prices, but an increased shift towards quality, choice and convenience over the seventeen year time span.

More recently Keynote (2003b) asked 1,010 adults the importance of certain factors when doing their weekly grocery shopping. Table 2.1 illustrates their answers.
### TABLE 2.1. FACTORS INFLUENCING DECISION WHERE TO DO WEEKLY GROCERY SHOP

<table>
<thead>
<tr>
<th>Factor</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide range of choice</td>
<td>94</td>
</tr>
<tr>
<td>Low prices</td>
<td>86</td>
</tr>
<tr>
<td>Proximity or location of retailer</td>
<td>84</td>
</tr>
<tr>
<td>Availability of car parking and/or petrol facilities</td>
<td>80</td>
</tr>
<tr>
<td>Availability of cash machines</td>
<td>56</td>
</tr>
<tr>
<td>Promotions and loyalty schemes</td>
<td>51</td>
</tr>
<tr>
<td>Availability of recycling schemes</td>
<td>48</td>
</tr>
<tr>
<td>Large and varied selection of organic goods</td>
<td>41</td>
</tr>
<tr>
<td>Assistance with packing</td>
<td>41</td>
</tr>
<tr>
<td>On a public transport route</td>
<td>40</td>
</tr>
<tr>
<td>Retailer is within a multi-shopping complex</td>
<td>32</td>
</tr>
<tr>
<td>Availability of catering facilities</td>
<td>30</td>
</tr>
<tr>
<td>Availability of mother and baby rooms</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: BMRB Access April 2003 (Keynote 2003b)

The results in this table show that a wide range of choice is the most important aspect when making a decision of where to go to do a weekly grocery shop, followed by low prices. The results differ from those of 1998 when a similar survey was conducted, and found that low prices were by far the most important issue. This questions the food industry's claim that consumers are driving demand for cheap food, and instead indicates that consumers are accepting that quality and choice must be paid for.

Given the importance apportioned to the factors of price and quality in the aforementioned studies, a brief discussion of the importance of each to grocery shopping is felt necessary at this point. This is linked to the selection of E&SR stores/products where possible.
2.7.2. The Importance of Price in Grocery Shopping

Household expenditure on food increased by 12% between 1992 and 2002 in real terms (Mintel, 2003c). The level of disposable income obviously has an effect on which products are bought and how much is spent on food and groceries for home consumption. In households where income is low food and groceries account for the major part of the household budget, whereas in more affluent households the food budget does not increase greatly, instead higher amounts are spent on leisure goods and services. Keynote (2003b) found that overall 86% of consumers felt low price was an important factor, with 79% of ABs stating it was an influencing factor in their shopping decision, compared with 90% of C2s and 92% of Ds.

Price has varying degrees of importance to different consumers when looked at in conjunction with other store image elements. Dickson & Sawyer (1990) used a conceptual model of price, modified from Jacoby & Olson’s (1977) information processing model, to test consumer responses to price and other point-of-purchase information. The product categories selected represented low (coffee and toothpaste) and high (margarine and cold cereal) turnover products, and infrequently (cold cereal and toothpaste) and frequently (margarine and coffee) price promoted products. They found that supermarket shoppers usually spend only a brief time selecting their purchases and frequently do not check prices, mainly due to the low involvement factors of the goods being bought. Only 57.9% said they checked the price and just 21.6% reported checking the price of an alternative brand. Less than half (47.1%) of the shoppers questioned could recall the price of the good they had just selected, the principal reason given for this by most (67.8%) was that “this was a case where price was not important” (p.47). This was emphasised by the fact that over half the shoppers purchasing a product on special offer were unaware of their saving. Strachan (1997)
surveyed the attitudes and behaviours of 1,000 British shoppers and found that nearly half do not visit the supermarkets they believe to offer the lowest prices.

A Mintel survey conducted in June 1989 concluded that 27% of UK adults would pay up to 25% more for environmentally friendly products, showing that there is a segment of UK consumers willing to buy on the basis of environmental concern rather than price (in Prothero, 1990). However, Pearce (1990) stated that whilst consumers said they were willing to spend more for ‘green’ products, the same consumers later stated that British supermarkets were overstocked with such products and that they were too expensive. These results could be taken as an indication that there is a ceiling to the premium price consumers are willing to pay to be environmentally friendly.

In support, and with regard to socially conscious behaviour, Schwepker & Cornwell (1991) point out from their findings that consumers seem willing to buy environmentally sound products, but this may be within certain constraints – price, convenience, etc. A study carried out in the USA by Creyer & Ross (1997) found that there were consumers willing to reward ethical behaviour by paying higher prices, but that they would still buy unethical products, albeit at a lower price. It has to be noted though that as their study was of USA consumers we have to be careful not to generalise across cultures, and so need to establish if consumers in the UK feel the same.

2.7.3. The Relationship between Quality and Price in Grocery Shopping

A factor that has been consistently discussed through the past literature is the relationship between quality and price and its importance in consumer shopping decisions. Hutcheson & Moutinho (1998) established quality of goods and value for
money as being important to most consumers. In support of this the findings of a study by the Hartman Group of California (Wasik, 1992) found higher prices and lower quality to be two of five major barriers to buying ecologically safe products – the others being effectiveness, convenience and availability. Richardson et al (1994) stated that ‘consumers may care less about value than quality’, but ‘where a number of stores have acceptable levels of quality and value, decisions about which to frequent may be made on the basis of other factors’ (Hutcheson & Moutinho, 1998). Vranesević & Stančec (2003) found similar results for the purchase of food products stating that consumers do not value products based exclusively on their physical characteristics, but during a purchasing decision will first perceive the brand ‘as a sign of quality’ then use other evaluation criteria (physical appearance, packaging, price, reputation of retailer).

This study will aim to find out whether these ‘other factors’ could include ethical and social responsibility issues associated with the store/product, or whether the price premium present on many ethically produced products has the effect of pushing socially conscious but price sensitive consumers, into cheaper, less environmentally friendly alternatives.

2.8. Influences upon Selection Criteria

The motivational structure for the activity of shopping has been found to be different depending on whether the customer was undertaking a main shop, a top-up shop, a multi-store shopping trip, or a single store trip (de Chernatony & Dall’Olmo Riley, 1998). Therefore it is inappropriate to generalise about customers’ patronage motives across all types of shopping activity. A brief discussion of general influences on the selection process (perceived risk, satisfaction, loyalty) will follow in this chapter. Further influences specific to store and product choice relating to certain shopping
activities will be investigated through the methodology. This will enable the study to look at situational factors in much greater detail, whilst avoiding the pitfalls and bias of over generalising.

2.8.1. Selection Criteria and Perceived Risk

The perceived risks associated with the products to be purchased clearly influence patronage motives and behaviour. Mason & Mayer (1972) found a close relationship between the tendency to shop around, and the level of perceived risk in the purchase. Korgaonkar (1982) concluded that the selling of well-known brands at reasonable prices (in catalogue showrooms) reduced the level of perceived risk, and gave retailers an advantage over some competitors.

The level of perceived risk is a function of both the purchase type, and the shopper characteristics. Prasad (1975) established relationships between the store type and socio-economic variables of the shopper, but also highlighted the dangers of forming to narrow an appeal which could lead to over-sensitivity of customers. He suggested that over-promoting low price could lead to customers not patronising the store due to the social risk that visiting the store may lower their status.

Dash et al (1976a) explored how self-confidence, perceived product risk and product importance affected store choice, looking at a speciality store and a department store. They found that consumers who purchased a product (audio equipment) from a speciality store perceived lower levels of risk than those consumers who purchased such items from a department store. The authors suggest that different strategies should be used by different stores to appeal to their consumers, such as selling well-known brands in department stores to lessen risk perceptions. Using the same study but relating it to
information search and store choice, Dash et al. (1976b) found that consumers who buy similar merchandise in different types of outlet might profitably be treated as unique market segments.

2.8.2. Store Patronage and Satisfaction

Several authors have referred to Kahneman & Tversky's (1979) Prospect Theory as a way of explaining consumer behaviour in relation to risk and store expectations and satisfaction (Dickson & Sawyer, 1990; Richardson et al., 1994; Creyer & Ross, 1997; Hutcheson & Moutinho, 1998). The theory focuses on the reality of choice behaviour rather than the anticipatory process of consumer choice, and finds that the costs of negative effects or dissatisfaction from an experience will be greater than the benefits of positive effects or satisfaction from such an experience. Therefore retailers should look at minimising consumer dissatisfaction as well as maximising their satisfaction.

Hutcheson & Moutinho (1998) studied store choice and satisfaction using factor analysis to determine the distinct constructs regarding choice behaviour, and regression analysis to determine the exact extent of the relationship between the perceived importance of the constructs and the level of satisfaction felt by respondents. They proposed a model (see Figure 2.6) of six distinct factors that aid supermarket choice, drawn from their conclusions.
Of these factors the two consumers rated particularly highly were quality and value for money, and their importance is reinforced by the strength of their relationship with satisfaction. A limitation of this model is that its predictive power is low as the relationship between satisfaction with a particular store, and global statements about which things are important is not direct – it depends on the store choice. Nonetheless it is useful for the analysis of competition in a given area and therefore modified elements will be considered when constructing the proposed model in this study.

2.8.3. Satisfaction as a Precursor to Loyalty

The branding theory discussed at the beginning of this chapter states that if customers are satisfied with a brand they are more likely to be loyal to that brand. So the theory follows that if a customer is satisfied with a store/product then they will display store/product loyalty. Osman (1993) investigated the area of store loyalty and found that loyalty to a store results from a consumer’s favourable perception of a particular store, formed by their perceived importance of store attributes which are moderated by their past purchasing experiences. If, as these findings suggest, shoppers place a
particular value on certain store attributes, which in turn influences their patronage behaviour and hence loyalty, it is crucial management correctly identifies the most important attributes to their target market in order for a favourable image and store loyalty to be achieved.

2.9. The Patronage Decision Process

The development of store choice models as an offshoot from the study of the consumer's patronage decision process is beneficial as it simplifies understanding, and enables retailers and marketers to influence the process more precisely. Models within the general field of consumer behaviour have become more comprehensive over time, with those of Nicosia (1968), Engel et al (1968) and Howard & Sheth (1969) being the most notable. Whilst these offer useful insights into the patronage decision process, especially in relation to single item, major purchases, they do not recognise the important differences between the process of selecting a store and selecting a product.

2.9.1. Models of Store/Product Choice

An early model that aimed to establish a sequence of the effects that lead to store choice was that of Monroe & Guiltinan (1975), developed through the use of time-path analysis (see Figure 2.7.). This model highlights the many household and buyer characteristics that influence both perceptions of attributes and the importance attached to them, and echoes the reasoning of Lancaster (1966). Additionally it establishes the important distinction between the store decision, and the product choice decision, so enabling the strategist to recognise the distinction between the factors that influence store choice and those that maximise sales within the store; that is they represent related but different elements of retail marketing strategy. Furthermore it upholds Korgaonkar
et al's (1985) findings of the important intervening role of attitude between the marketing mix variables and the store choice decision.

FIGURE 2.7. SEQUENCE OF EFFECTS IN STORE CHOICE

Elements of this model will be incorporated into the model proposed in this study.

An element of the overall decision process that has received considerable consideration is that of the role of attitudes in decisions. The approach of Fishbein & Ajzen (1975) has been widely applied to the modelling and measurement of overall attitude; this holds that ‘an individual’s attitude towards any object is a function of his beliefs about the object and the evaluative aspects of those beliefs’. James et al (1976) used Fishbein’s approach, termed a ‘multi-attribute attitude model’ (discussed further in Chapter 3), in a store image study. This involved the summation of attribute ratings, each weighted according to its importance as rated by consumers. James et al (1976) rated only six attributes in their study: assortment, personnel, atmosphere, service,
quality, and price; although Fishbein claimed that it was possible to research about
twelve attributes in this way.

Given the difficulty of handling multi-attribute judgements effectively with large
numbers of attributes, Louviere & Gaeth (1987) suggest a solution of ‘hierarchical
information integration’. That is individual attributes (e.g. parking, travel time, width of
aisles) are combined to form higher-order constructs (e.g. convenience). The authors’
claim that this procedure offers an insight and explanation of how consumers may
simplify their complex decision-making; but warn against using it just to produce
manageable research designs or to satisfy preconceived ideas of researchers or
practitioners.

2.10. Summary

This chapter provides an overview of the research context in which the examination of
E&SR shopping behaviour is set. It ascertains that motivation is the energising force
which stimulates consumer behaviour, including buying behaviour. Therefore
understanding consumers’ needs and motives is an essential prerequisite for successful
retail strategy and long-term profitability.

Within the field of shopping it has been established that the components of store image
and product attribute are intrinsic to both store and product choice decisions, with past
research showing that a shopper chooses the store or product whose image is most
congruent to the image they hold of themselves. Therefore unless an organisation has a
clear personality/image with which the consumer can relate, it becomes an alternative in
their mind (Martineau, 1958). This has meant that grocery retailers have had to re­
evaluate and amend their offering in order to keep in line with changing consumer
 demand and behaviour. However 'the development of a store (or product) image consistent with the needs of the target market segment can lead to increased sales and profit' (James et al., 1976). Hence a study of motives within the shopping activity may help provide a framework for why shoppers act and react in certain ways, and research into store/product image components and E&SR issues should further insights into the personal and social motives for shopping (Tauber, 1972).

To establish a basis for determining the domain within which our initial research should be undertaken, the characteristics of store image and product attributes were identified from previous research (Zimmer & Golden, 1988; de Chernatony & McDonald, 1992), and used as a 'starting point' for further exploratory research.

Past research has established that consumers are willing to behave in an E&SR manner when grocery shopping (Schwepker & Cornwell, 1991), and pay more for certain environmentally friendly products (Prothero, 1990). However many of these studies have been carried out in the USA making it difficult to generalise them to cover a UK-based investigation. Hence the sample for this study will represent a cross-section of UK society in order to avoid any misrepresentation that generalising across cultures might elicit, and further the research on UK E&SR consumers.

Additionally evidence has been provided that shows consumers’ motivations and influences on shopping choice may differ across types of store outlet and product category (Dash et al., 1976b). This study will investigate this area further to establish if there are differences in how consumers view different types of grocery retail outlets e.g. supermarket, independent retailer, farm shop etc., and if so what products they choose to purchase from each and why. Several models have been proposed and used to
explain areas of store choice (Fishbein & Ajzen, 1975; Monroe & Guiltinan, 1975; Hutcheson & Moutinho, 1998), modified elements of which will be considered for the model proposed in this study. The inclusion of 'hierarchical information integration' will be considered if the number of constructs resulting from the data collection stages becomes too large.

A consumer's perception of an image forms part of a process of information transformation that leads to action, an important element of which is the formation of attitudes. Understanding the process by which attitudes are formed and patronage/purchase decisions made is key for retailers wishing to form a favourable image that will appeal to their consumers. Various formulations such as the 'multi-attribute attitude model' (Fishbein & Ajzen, 1975) have been suggested as ways in which individual attribute evaluations may be combined. Therefore this study will move on to look at the process of attitude formation and its effect on consumer shopping behaviour.
Chapter Three

Attitudes to Ethical and Socially Responsible Shopping Behaviour

An examination of the nature of attitudes and how they can influence both purchase intentions and behaviour is necessary to academics and retailers alike, as it provides a basis for understanding consumers and target markets by answering the question ‘How do consumers choose?’ If this is not understood retailers may alter attributes of their store make-up that appeal to the market rather than altering those that dissatisfy them, or alternatively target products at the wrong group of consumers. This chapter begins, therefore, by examining the theory of consumer buying behaviour, and the decision-making models proposed by leading academics. It moves on to examine the formation of consumer attitudes and influences upon the process, particularly insofar as these affect behavioural intention. After overviewing various attitude theories it ends with a detailed look at the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB) and how these theories may be modified for use in a study of ethics and social responsibility.

3.1. Theories of Consumer Behaviour

The complexity of consumer behaviour has led to the construction of decision-making models in order to show not only the stages the consumer passes through, but also the social and psychological forces that shape their actions along the way. These models are generally built from a set of conceptual premises and play two important roles in understanding what motivates consumer behaviour and drives behavioural change: 1) they provide heuristic frameworks for exploring and conceptualising consumer behaviour, which can help understand social and psychological influences on
mainstream and pro-E&SR behaviour; and, 2) they can and have been used as frameworks to empirically test the strength of different kinds of relationships in different circumstances. A good conceptual model needs a balance between parsimony and explanatory completeness to fulfil these two roles, with many aiming to help predict future behaviour by measuring relevant variables and explaining it in relation to theoretical paradigms. East (1997) defines three different paradigms that purchase theories fit within:

1. **The Cognitive Approach** – purchase is the outcome of problem solving or decision processes.

2. **The Reinforcement Approach** – purchase is a behaviour learned in response to a consumer’s situation.

3. **The Habit Approach** – purchase is a pre-established pattern of behaviour, evoked by given situations.

Paradigms within this area of thinking are not mutually exclusive – that is that one is right and the others wrong - more that one may be more applicable to certain conditions than another. Hence although all of the above paradigms help to frame ideas about consumer buying behaviour, there has been much debate over the weighting that should be accorded to each. Much supported are the predominantly cognitive problem-solving decision-making models of Engel, *et al* (1968), Howard & Sheth (1969) and Klein (1989). However Foxall (1990) argues that much of consumer behaviour fits the learning principles established from the experimental research of Pavlov (1927) and Skinner (1938; 1953), so favouring the reinforcement approach; whereas Ehrenberg (1988) believes the mathematical data collected by research agencies shows regularities that are consistent with the habit approach.
Chisnall (1995) identifies two types of buyer behaviour model – monadic and multi-variable. Monadic models were often based on microeconomic theory e.g. utility or satisfaction, which over simplified the buying situation, so failing to account for the complex social and emotional factors present. Examples of such models are psychoanalytic models, perceived risk models and ‘black box’ models. In contrast multi-variable models incorporate psychological, sociological and cultural factors as well as economic, and aim to show the extent of their interaction. As mentioned previously these models portray the consumer as a problem solver who interprets information from different stimuli in order to make a decision/purchase. Well-known multi-variable models are those of Engel, et al (1978); Howard & Ostlund (1973); Howard & Sheth, 1969; Nicosia (1968); and Andreasan (1965). However models such as these have been widely criticised, mainly for being ‘untestable’ and for ‘lacking specificity’ in their variables (Jackson, 2005), with Fishbein & Ajzen (1980, p.15) stating ‘theories that incorporate virtually every known social-psychological construct and process not only lack parsimony but, more important, they are likely to generate confusion rather than real understanding’. However elements of such models are useful in understanding consumer behaviour as they clearly illustrate the diverse range of influences considered by purchasers and aim to give an understanding of the relationship between external stimuli and internal constructs.

Many different types of model have been used to provide a conceptual and theoretical framework for carrying out detailed empirical research on the structure of specific behaviours and the role of interventions in influencing those behaviours, especially in the area of E&SR. Rational choice models such as the Attribute (Lancaster) Model (Lancaster, 1966) have been used to explore renewable energy investments (Bergmann et al, 2004); expectancy-value theories such as Means-End Chain theory (Gutman,
1982; Reynolds & Gutman, 1988) have been used to study pre-environmental consumer decisions in terms of underlying values; and, moral and normative conduct theories such as norm-activation theory (Schwartz, 1977) have been used to explore recycling (Bratt, 1999; Hopper & Nielson, 1991), car use (Bamberg & Schmidt, 2003) and water conservation (Harland et al., 1999). More recently models have evolved from the individualistic approach (most strongly embedded in rational choice models) to incorporate sociality as well: the Symbolic Project of the Self (Elliott & Wattanasuwam, 1998), Social identity Theory (Hogg & Vaughan, 2002); and integrative theories of consumer behaviour which incorporate both internal and external perspectives such as: Stern’s Attitude-Behaviour Context Model (Stern, 2000), the Motivation-Abilities Model (Ölander & Thøgersen, 1995), and Bagozzi’s Comprehensive Model of Consumer Action (Bagozzi et al., 2002).

Despite the array of consumer behaviour models present in academic literature, to be usable models must focus quite closely on a relatively limited number of specific relationships between key variables. Beyond a certain degree of complexity it becomes virtually impossible to establish meaningful relationships between variables or to identify causal influences on choice. As the conceptual complexity of models rise, their empirical applicability diminishes (Jackson, 2005), and designing, testing and corroborating a sophisticated multi-variable model such as Bagozzi’s Comprehensive Model of Consumer Behaviour is a daunting empirical task, which to date has not been carried out. Therefore despite criticisms that rational choice and expectancy value models run the risk of missing out key causal influences due to their simplicity, it is this factor that makes them easy to apply especially if their applicability to certain behaviours can be improved through ‘adjustment’.
Although no model can really offer a universally applicable explanation of consumer-buying behaviour there is a consensus on many of the elements considered relevant to the process. Thought to be one of the most influential aspects behind what drives consumer behaviour is the concept of attitudes. Attitudes are seen to influence and affect how individuals judge and react towards other people, objects and events either in a favourable or unfavourable way. Therefore an understanding of their formation and effect is needed if we are to gain further insight into E&SR consumer behaviour.

3.2. Attitude Theory

Attitude research and behaviour prediction occupies a central position in both social psychology and consumer behaviour studies. This has created a plethora of theories, and in turn many complex and confusing definitions. Drawing on general definitions and their own discussions Fishbein & Ajzen (1975, p.5) define attitude as:

"... a learned predisposition to respond in an evaluative or affective consistently favourable or unfavourable manner with respect to a given object."

An extension to this definition comes from Chisnall (1995, p.98), where in review of several researchers’ definitions, he summarises that:

"... attitudes are viewed as predispositions to specific kinds of behaviour related to certain objects, people, or events: they can be favourable or unfavourable and can be held with degrees of intensity (valence)."

From this it seems to be generally agreed that attitudes influence individuals to respond in a predetermined manner to given stimuli.

The origin of attitude theories can be traced back to two major schools of thought within social psychology – the stimulus-response approach of behaviour theory, and the cognitive approach of field theory. Although a distinction can be made between these
types of theory, Fishbein & Ajzen (1975, p.6) state this 'blurs the distinction between a theory's theoretical origin and the phenomena it deals with' and so suggest de-emphasising this distinction for greater interpretation.

3.2.1. Learning Theory and Attitudes

Learning theories of attitude are generally concerned with the ways in which attitudes are acquired. Behind this theory lies the two basic conditioning paradigms used to explain learning - classical conditioning and operant or instrumental conditioning. Their relevance as a basis for attitude formation is emphasised in the works of Staats & Staats (1958) and Lott & Lott (1968). One of the first people to apply learning theory to the study of attitudes was Leonard Doob (1947) who concluded that attitudes were a 'learned, implicit, anticipatory response', whereas Osgood, et al (1957) argued that attitude only refers to the evaluative part of the total response. This has been an acceptable explanation to behaviour theorists working in this area, as it demonstrates how two people with the same attitude towards an object can differ on other dimensions of interpreting the stimuli and hence elicit different behaviour. This stimulus-response process can be seen to establish what are classed as beliefs, as the conditioning paradigm implies that an attitude towards an object is related to beliefs about the object. This theory is central to further attitude work done by Fishbein & Ajzen (1975), which will be discussed later.

3.2.2. Expectancy-Value Theory and Attitudes

Expectancy-Value theories have mainly been concerned with the relationship between attitudes and beliefs and attempt to provide an understanding of overt behaviour. According to Edwards (1954) in his subjective expected utility model (SEU), a person will make a choice that yields the greatest utility or most favourable outcome; thus it
can be said that the SEU represents a person's attitude towards the behaviour. Expanding this line of thinking Rosenberg (1956) stated that the more an object was instrumental to obtaining positive goals or reducing negative ones, the more favourable an attitude a person would hold towards that object. This approach of treating attitude formation in terms of the functions they serve, and as a necessity for individuals to achieve their goals, is upheld by Katz (1960) and discussed further in section 3.2.3.

A range of 'adjusted' social psychological models of consumer behaviour seek to use the basic expectancy-value theory to go beyond assumptions of rational choice and so unravel antecedents of consumer preferences. In particular they attempt to account for the influence of other peoples attitudes on individual behaviour (e.g. TRA, Ajzen & Fishbein, 1975), and the influence of people's perceptions about their own control over performing a behaviour (e.g. TPB, Schifter & Ajzen, 1985).

3.2.3. The Functional Approach and Attitudes

Daniel Katz (1960) names the functional approach as a way forming attitudes. The four components are:

1. The utilitarian function – an individual will assess the utility of objects and choose the one that will achieve the attainment of his/her goals.

2. The ego-defensive function – in order to protect the ego or inner-self attitudes are used by the consumer to emphasise their place in their social world.

3. The value expressive function – these attitudes express the individual’s own values and self-image to others.

4. The knowledge function – attitudes are held that will add structure to an individual's life and help them order and make sense of information.
There is more than one attitude function due to humans having different motives for different responses: hence these functions operationalise the formation of attitudes in respect of varying motive areas. The origin of these expectancy value theories can be traced back to Heider’s (1944) principle of balance that is concerned with the interaction of attitudes and beliefs.

3.3. The Cognition-Affect-Conation Paradigm of Attitudes

One of the main problems with many classical theories of consumer behaviour is that they condemn the customer to a role of semi-passive reaction in the purchasing situation (Phillips & Bradshaw, 1994, p.51), with consumers being ‘portrayed as either the receptacles upon which an active world writes its message, the receptors of incoming information stimuli where the mind is seen as a storage bin of inaccurate copies of the real world, or as the impulses of inborn predispositions’ (Marsden & Littler, 1998). Modern perspectives of consumer behaviour credit consumers with the ability to assign meaning to their environment and to act upon this information so that they represent the things they feel are good in the environment, rather than giving passive responses (Hirschman, 1986; Calder & Tybout, 1987). Theories of attitudes such as the simple classical conditioning models which deal only with attitudes, and dissonance and attribution theories which are only concerned with beliefs, have thus been rejected in favour of others such as expectancy-value theories and balance theories which deal with both attitudes and beliefs.

Over time a generally accepted major framework of defining attitudes has been borne from the origins of psychology - that of the cognition-affect-conation paradigm. Attempting a review of the alternative models of consumer decision-making Hastings & Fletcher (1983) identify three models that suggest a ‘hierarchy of effects’ approach –
those of Strong (1925), Lavidge & Steiner (1961), and Rogers (1962). These different models identify that decisions are often of a problem-solving nature to consumers, and highlight the need to analyse the stages that consumers go through as they move from the state of unawareness to purchase. If semantic differences are ignored, these models can be summarised to portray decision-making as the same three-stage process psychologists propose, illustrated in Table 3.1.

<table>
<thead>
<tr>
<th>TABLE 3.1. BUYER STRATEGIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lavidge &amp; Steiner</strong> (1961)</td>
</tr>
<tr>
<td><strong>Awareness</strong></td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
</tr>
<tr>
<td><strong>Liking</strong></td>
</tr>
<tr>
<td><strong>Preference</strong></td>
</tr>
<tr>
<td><strong>Evaluation</strong></td>
</tr>
<tr>
<td><strong>Conviction</strong></td>
</tr>
<tr>
<td><strong>Purchase</strong></td>
</tr>
</tbody>
</table>

* Cognitive Component : Knowledge
Affective Component : Emotions
Conative Component : Motivation

Ref: Hastings & Fletcher (1983), p297

The three-stage process follows that the cognitive stage provides the consumer with pieces of information or knowledge about the product/service that is being offered. This knowledge creates a positive or negative response towards the offering through the emotional or affective feelings that create an attitude towards it. From this response the consumer is motivated to either purchase or not purchase the product/service, so producing the conative component. Each of these components may possess degrees of intensity or valence, which can range from positive/favourable, along a continuum through neutral to negative/unfavourable. Thus if a retailer can correctly identify the areas that will bring about positive feelings and attitudes, patronage/purchase and hence increased sales should occur. Although there are critics who feel that this logical
progression is oversimplified, and that the stages do not always occur in this order or are at times omitted altogether, it is still a model favoured by many in the commercial world.

3.4. The Formation of Attitudes

The formation and constellation of attitudes and how and if they affect behaviour, has been a topic of academic research for many years, with several 'models' being proposed. According to Chisnall (1995) the three stage framework of attitude is formed, acquired or modified through influences arising from four main sources: information exposure, group membership, environment, and want satisfaction. The cognitive element of attitude is influenced mainly by information exposure. This can be on two levels – firstly that of an individual's personal perception of information about objects that leads to specific beliefs, and secondly that based upon information other people have given e.g. peers or through the media. The influence of the opinions of others, or 'groups', makes a major contribution to the behaviour of an individual. This is because an individual will belong, or aspire to belong, to a group that elicits similar behaviour and attitudes to themselves; or alternatively actively not belong or disassociate themselves from others. The effect of group membership on personal attitudes is indirect and complex but the underlying theory is that an individual wants to feel like they 'belong' and will mirror chosen behaviours in order to acquire membership to the group.

Group influence is illustrated by Sherif (1935) who placed a number of people in a darkened room and asked them to look at a spot of light. In turn they were asked which way the light was moving. Initially opinions differed, but eventually one by one there was total agreement on the direction. The point is that the light was not actually moving
at all, so illustrating that when individuals are uncertain of first-hand knowledge they will tend to conform to group beliefs and attitudes. This conduct is closely linked to the learning process; as consumers acquire information they learn from it and develop an attitude towards the subject. Attitudes and behaviour can be learnt from an early age as children will learn and develop attitudes from family members' e.g. what grocery brands to buy, and these learnt behaviours in childhood are often carried through to adult status (Solomon, 2002).

In order to learn and form attitudes, individuals use information sources and group opinions to obtain knowledge. The level of knowledge a consumer has about an organisation’s offering can influence whether or not a consumer is willing to buy it. According to Amyx et al (1994) the knowledge decisions are based upon can be either subjective or objective. Subjective knowledge is constructed from self-evaluation and report of knowledge of a particular subject, whereas objective knowledge is based on the performance of a factual test. This knowledge then goes on to form beliefs which Creyer and Ross (1997) found to be formed in three different ways, 1) by direct experience, 2) by information provided by outside sources, and 3) inferential i.e. going beyond the information provided. Hence it can be seen that the more information consumers have the clearer and easier their decision-making becomes. Shaw & Clarke (1999) state that the previous research done on ethics neglected the area of beliefs as a formative stage of attitudes. Their study found that in decision-making there are ‘established concerns’ and ‘current concerns’ which are the result of influential past and present information sources, and it is these influencing sources surrounding beliefs that form an important role in actual behaviour. Therefore one aspect of the qualitative study will look at not only the factors that influence shopping behaviour, but also the information sources which consumers use to guide them.
Crane & Ennew (1995) stated that the content of the information received can vary in its impact, dependant upon two ethical attributions: 1) the message itself; and 2) who sent it; which can be formed from the whole experience an individual has had with a company and its products. Following on, King (1991) concluded that consumers are increasingly valuing non-functional rewards more, with the choice of what they want to buy depending less on evaluating the functional benefits of an offering to an assessment of the company behind it.

Hines, *et al*’s (1986) findings back this up, discovering that individuals with knowledge of environmental issues/how to take action are more likely to engage in environmental behaviour than those who do not possess the same level of knowledge. Knox *et al* (1994) expand this to say that the involvement a consumer has with a product can be regarded as the extent to which consumers’ product knowledge is related to their own values and beliefs - so highlighting the interaction of different internal and external influences on consumer behaviour. However, having said this, the same study showed that consumers strive to minimise effort in decision-making, especially when purchasing grocery products, but it still managed to measure significant differences in the sources and forms of consumer involvement with grocery products.

From this discussion it can be seen that the amount and type of information a consumer receives is very influential in the buying process. A retailer needs to recognise this need for detailed honest information and so provide their consumers with knowledge about their products/service to gain satisfaction, trust and build brand loyalty.

3.5. Attitudes and Values

Once attitudes are formed individuals tend to constellate them into a hierarchical ‘value
system'. Katz (1960) states that attitudes are closely related to the value system, as not only will an individual hold a specific attitude about an object/subject, but also have a value system that surrounds the whole area that contains many attitudes and beliefs related to it. The importance of such an attitude is reflected in the position it takes within the individuals value system; and as Katz notes, the centrality of an attitude is closely related to an individual’s self-concept, with those attitudes closest to the core of the value system being more resistant to change. King (1991) found that in many markets consumers have become more confident of their purchase decisions, and less tolerant of products and services that do not contribute to their own values.

3.6. Attitudes and Behaviour

Over time there has been considerable research into, and debate over, the relationship between attitudes and behaviour. Kahle & Berman’s (1979) overview of researchers found a variety of conclusions – McGuire (1976) found attitudes cause behaviour, Bem (1972) said behaviours cause attitudes, whereas Kelman (1974) found them to have a mutual causal effect, in difference to Wicker (1969) who found them to be slightly, if at all, related. Picking up on these findings and further analysing this area, Bentler & Speckart (1981) concluded that attitudes have a causal effect over behaviour, albeit via intention.

The inconsistency of methodologies employed in empirical studies has led to these conflicting results and different conclusions, so questioning the validity of the predictive power of particular approaches. Fishbein & Ajzen (1972) found over 500 different operations designed to measure attitudes in their review of literature between 1968 and 1970. They concluded that this was due to variances implied to the meaning of the term ‘attitude’, so recommending that an explicit definition of attitude is needed.
in order to identify what is being measured. As previously mentioned they define an attitude as 'a learned predisposition to respond in an evaluative or affective consistently favourable or unfavourable manner with respect to a given object'. Fishbein & Ajzen conclude that the major characteristic that distinguishes attitude from other concepts (e.g. habit, drive, trait, motive) is its evaluative or affective nature and thus suggest that attitude should be measured by a procedure that places the subject on a bipolar evaluative or affective dimension with respect to a given object. This definition implies a strong link between attitude and behaviour. Therefore if one could measure this attitude one could also explain and predict a person’s behaviour.

Early attitude measurements were based on scaling or rating procedures, such as the Thurstone scale, the Likert scale and Osgood’s semantic differential. These scales only produce a single figure to represent the favourability of the attitude object. It was only with the work of Allport (1935) and LaPiere (1934) that attitude came to be seen as a multi-component concept, and models and measurements had to change to accommodate these new dimensions.

3.6.1. The Theory of Reasoned Action

A pioneering multi-attribute attitude model constructed by Martin Fishbein (Fishbein & Ajzen, 1975) that recognised the faults of previous models, such as difficult and inconsistent measurements, and unsound predictive abilities, was the Theory of Reasoned Action (TRA) model. This model resulted from attitude research from Expectancy-Value Models, but departed from simple expectancy-value theory in one important respect – recognition of the influence of a person’s subjective norm on behavioural intention as well as attitude. The model was so-called as they argued ‘that people consider the implications of their actions before they decide to engage or not
engage in a given behaviour’ – so reasoning their actions. The birth of this model was brought about through Fishbein’s study of the psychological theory of the relationship between attitudes and behaviour, from which he drew three conclusions:

1. An attitude towards an object is not the same thing as an attitude towards the act of buying that object.
2. Measurement of attitudes had become inaccurate, with some researchers measuring likes/dislikes and beliefs instead.
3. Situational aspects and a person’s perception of what others think about an act can influence behaviour.

The TRA was designed to apply to commercial situations and therefore had the advantages over earlier models of being easy to operationalise, and comparable over time. The model can be represented diagrammatically as shown in Figure 3.1.

**FIGURE 3.1. FACTORS DETERMINING A PERSON'S BEHAVIOUR**

- The person’s beliefs that the behaviour leads to certain outcomes and his evaluations of these outcomes.
- The person’s beliefs that specific individuals or groups think he should or should not perform the behaviour and his motivation to comply with the specific referents.


It can also be expressed symbolically in the form of an equation:
Where $B$ = the behaviour

$I$ = the intention to perform behaviour $B$

$A_B$ = the attitude towards performing behaviour $B$

$SN$ = the subjective norm

$w_1, w_2$ = empirically determined weights representing the relative influence of $A_B$ and $SN$, respectively, on the behavioural intention.

Behavioural intentions are a function of the weighted sum of two variables: a person's attitude towards performing the behaviour; and their evaluation of their outcome. Thus:

$$B \equiv I = (A_B) w_1 + (SN) w_2$$

Where $b$ = the belief that performing behaviour $B$ leads to outcome $I$

$e$ = the person's evaluation of outcome $i$

$n$ = number of beliefs the person holds about performing behaviour $B$

The second component of the theory is the subjective norm, which regards the influence of the social environment on behaviour. It is determined by a person's motivation to comply with the perceived expectations of specific reference groups or individuals, and is expressed symbolically as:

$$SN = \sum_{i=1}^{n} b_i e_i$$
Where \( b_i = \) the normative belief that reference group or person \( i \) thinks s/he should or should not perform the behaviour

\[ m_i = \] the motivation to comply with referent \( i \)

\[ n = \] the number of relevant referents


Fishbein became aware that one of the factors that contributes towards the intention to act is the attitude towards taking that action, rather than the attitude towards the object of the behaviour. Hence he developed this basic model to take this into account by formulating the following equation:

\[
A_{act} = \sum_{i=1}^{n} b_i e_i
\]

Where \( A_{act} = \) attitude towards a specific act

\( b = \) the belief that performing behaviour \( B \) leads to outcome \( I \)

\( e = \) the person’s evaluation of outcome \( i \)

\( n = \) number of beliefs the person holds about performing behaviour \( B \)

This development has produced what is called the Extended Fishbein Model.

Similar to the ‘hierarchy of effect’ process models illustrated by Hastings & Fletcher (1983) and discussed earlier in section 3.3, the TRA model also incorporates cognitive, affective and conative components that make up the three-stage process. From the symbolic representation of the model it follows that:

\[
\sum b_i e_i = \text{cognitive component}
\]

\( A = \) affective component

\[
\sum l_i e_i = \sum B_i e_i = \text{conative component}
\]
Although individually these three components provide different approaches to assessing a person’s attitude, they are not always highly correlated. Hence in order to be able to reasonably predict behaviour a complete measure of attitude based on all three components has to be obtained.

The potential situational, group and individual factors whose affects and expectations are believed relevant will vary from behavioural situation to situation, with influences coming from more than one party. This is accounted for in the equation on the previous page as the $b \times m$ products are calculated for each relevant reference group and totalled, which produces a ‘generalised normative belief’ i.e. the subjective norm.

As a response to the critique of rational choice theory, the TRA has the virtue of making explicit the antecedents of preference or attitude, and more importantly acknowledges the social influence on personal behaviour (Jackson, 2005). Ajzen & Fishbein (1980) distinguish between four different elements involved in consumer behaviour: the target (brand or product), the action (buying, using, etc), the context (own use, gift, etc), and the time horizon (today, next week, etc), stating “Variations in each of these elements of consumer behaviour will similarly affect the consumer’s normative belief” (p.172). An advantage of the TRA over other models is its ability to address the attitudinal antecedents of these different elements.

However there have been critics of Fishbein and Ajzen’s model with limitations being found: consumption situations vary; it does not account for the variable time span between forming attitudes and acting upon them; an attitude towards an object varies from an attitude towards behaving; and there are debates about the influence of perceptions of what others think of actions. Additionally Jackson (2005) finds that
cognitive deliberation, the role of habit, and the influence of affective or moral factors are not specifically addressed by the model. Budd (1986) found that it does not account for the role of belief salience in the relationship between beliefs, evaluations and attitudes, and suggests the use of moderator variables to overcome this. Fishbein and Ajzen argue that this is not necessary as it does not improve the predictive power of the model. Nevertheless in general it has improved researchers' ability to predict consumer behaviour, especially in comparison to results obtained using earlier models such as the Howard and Sheth (1969) model, as it has the virtue of being able to explore specific aspects of consumer action and preference in some detail.

3.6.1.1. Past Studies using the Theory of Reasoned Action

Despite the previous criticisms, the TRA has been widely applied to a variety of different contexts to understand behaviours and to predict consumer's purchase behaviours, and has been widely used by academic researchers across different product ranges. Hastings & Fletcher (1983) studied it with relevance to insurance buying in the UK, upholding Fishbein's statement that the attitude towards the act has the most predictive power. In addition they found differences in the salient beliefs of different groups of consumers, so indicating where segmentation is feasible. Knox & de Chernatony (1989) carried out research to test the efficiency of the model in predicting consumer behaviour in the UK mineral water market. Again the model was shown to have good predictive power, of both behavioural intent and differences in user type.

Budd (1986) found that the perceived utilities of a behaviour vary from those that do carry it out and those who do not. In his study of smokers he found that salient beliefs are more predictive of the person's attitude than beliefs not salient to that person, and that intention is the best single predictor of self-reported behaviour. He states that due
to these findings it may be particularly important to incorporate measures of belief salience into Fishbein’s model especially when trying to identify those evaluative-beliefs that are important in changing a person’s attitude. This view of using personal belief salience rather than modal belief salience is upheld and modelled by Elliott & Jobber (1990), who state the model could also be extended for use in researching personal purchases and behaviours as well as organisational ones.

Evidence from Budd (1986) reveals that people revise their attitudes and perceptions of their past behaviour in order to maintain a consistent self-image. In some cases attitudes cause behaviour, but in others attitudes are revised so as to be consistent with behaviour. Oliver & Bearden (1985) show that one’s attitude toward a behaviour is enhanced to the extent that relevant others are thought to endorse it. They go on to say that the role of normative influence may have been largely understated in the popular conceptualisations of consumer buying and decision making. This will be investigated further in this study.

3.6.2. The Theory of Planned Behaviour

The TRA relates to voluntary behaviour, and stems from the assumption that behaviour is under volitional control. That is, the theory only applies to behavior that is consciously thought out beforehand. However subsequent research showed behavior was not always 100% voluntary and under control – in fact Jackson (2005) argues that cases of incomplete volitional control outnumbers those in which volitional control is achieved or even achievable - hence the theory could not explain irrational decisions, habitual actions or any behavior that is not consciously considered.
To overcome the shortfalls of the TRA, the Theory of Planned Behaviour (TPB) was proposed (Schifter & Ajzen, 1985; Ajzen & Madden, 1986; Ajzen, 1991), illustrated overleaf in Figure 3.2. This theory is the same as the Theory of Reasoned Action except for the addition of a component known as Perceived Behavioral Control (PBC). The new theory addresses the issue of behaviors that occur without a person's volitional control, and may be used to predict deliberate behavior, because behavior can be deliberative and planned.

According to the TPB human action is guided by three kinds of considerations, described by Ajzen 2002 as: 1) behavioural beliefs – beliefs about the likely outcomes of the behaviour and the evaluation of these outcomes – these produce a favourable or unfavourable attitude towards the behaviour, 2) normative beliefs – beliefs about the normative expectations of others and motivation to comply with these expectations – these result in perceived social pressure or subjective norm, and 3) control beliefs – beliefs about the presence of factors that may facilitate or impede performance of the behaviour and the perceived power of these factors – these give rise to perceived behavioural control. In combination attitude towards the behaviour, subjective norm and perceived behavioural control lead to the formation of a behavioural intention. As a general rule, the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger the person’s intention should be to perform the behaviour in question. Actual Behavioural Control is the non-motivational factors such as availability of requisite opportunities (e.g. time, money, skills) that may affect the performance of a behaviour, and the importance of this is self-evident. Therefore, given a sufficient degree of actual control over behaviour, people are expected to carry out their intentions when the opportunity arises, and as such, intention is assumed to be the immediate antecedent of behaviour and as East (1997) states ‘the closest prediction of
behaviour is provided by measures of intention' (p.132). However, as many behaviours pose difficulties of execution that may limit volitional control, Ajzen (2002, p.2) states it is useful to consider PBC in addition to Intention. This is because PBC can serve as a proxy for actual control and contribute to the prediction of the behaviour in question.

In order to quantify these constructs two possibilities are open to researchers. Firstly they may use direct (or global) measures, so employing a seven point semantic differential scale to elicit figures for intention, attitude towards the behaviour, subjective norm, and perceived behavioural control. Alternatively a researcher may choose to use indirect (or belief- based) measures for attitude towards the behaviour, subjective norm and perceived behavioural control. This method requires the multiplication of different measures in order to elicit a figure for the constructs. These beliefs are assumed to determine beliefs about the construct, not assumed to be a direct measure of that construct. Such that behavioural beliefs are assumed to determine attitude towards the behaviour, they are not assumed to determine the direct measure of attitude. Similarly normative beliefs determine the subjective norm, not the direct measure of subjective
norm; as control beliefs determine perceived behavioural control, not the direct measure of PBC.

To compute an indirect measure of attitude towards the behaviour, behavioural belief strength and outcome evaluation are multiplied together and then the resulting products are summed over all accessible behavioural outcomes, shown symbolically below in accordance with an expectancy-value model:

$$A_B \propto \sum_{i=1}^{n} b_i e_i$$

Where $A_B$ = attitude towards the behaviour

$b$ = behavioural belief strength

$e$ = outcome evaluation.

The assessment of subjective norm is computed in a similar fashion, this time multiplying normative belief strength by motivation to comply. An overall belief based measure for subjective norm is obtained by applying the expectancy-value formula to these measures as shown in the following equation:

$$SN = \sum_{i=1}^{n} n_i m_i$$

Where $SN$ = subjective norm

$n$ = normative belief strength

$m$ = motivation to comply.
Using the expectancy-value formula shown below, a belief-based measure of perceived behavioural control may be found. Control belief strength is multiplied by control belief power:

\[ PBC = \sum_{i=1}^{n} c_i p_i \]

Where

- \( PBC \) = perceived behavioural control
- \( c_i \) = control belief strength
- \( p_i \) = control belief power.

The construct of PBC has several similarities with – and its historical roots founded in – the concept of ‘self-efficacy’ (Bandura, 1977; 1982). Self-efficacy is concerned with ‘judgements of how well one can execute courses of action required to deal with prospective situations’, the belief of which is learnt in various ways, including personal experiences and the examples provided by others. The concept of perceived self-efficacy can determine whether an individual attempts a given task, the degree of persistence when the individual encounters difficulties, and ultimate success.

Ajzen (1991) uses evidence from the systematic investigations of Bandura which support the idea that people’s actual behaviour is strongly correlated with their confidence in their ability the perform the action in question to uphold the concept of PBC. However this equivalence is not universally accepted as Armitage & Connor (1999) found in a study of intentions to eat a low-fat diet that self-efficacy and PBC had distinct and independent effects on intentions.

The inclusion of PBC was found to improve the predictability of the model in a number of situations from problem drinking (Schlegel et al, 1992) to job searching (Van Ryn &
Vinokur, 1992), and a recent meta-survey of the use of the theory found applications in 154 different contexts (Armitage & Connor, 2001). However Notani (1998) found from a meta-analysis exploring the predictiveness of PBC in the TPB model that it depended on the type of behaviour being predicted as to how effective the model was. If it is conceptualized to reflect factors internal to an individual i.e. factors which pose control problems that are primarily under the control of the individual, rather than external it is a much stronger predictor. Such that it gives better predictions for behaviours such as gambling, smoking and drinking than it does for behaviours such as going out of town.

The TPB is also one of the models most frequently used in the literature to explore pro-environmental behaviour. Applications of the model have been used to explore ‘environmentally significant behaviour’ (Stern, 2000) which includes areas such as the purchase of ‘ecologically safe’ products, predicting recycling behaviour, energy consumption, food choice and ethical investment (Amyx et al., 1994; Staats, 2003; Wall et al., 2004).

Many of these studies fail to measure actual behaviour, and concentrate mainly on measuring the relationship between attitudes, intentions and PBC. Furthermore there are those who criticise it, saying it only explores beliefs in so far as they attempt to correlate influencing variables with behaviour, and therefore fails to examine the processes and behaviour underlying consumer choices (Shaw & Clarke, 1999). In addition such models are only partly satisfactory as they tend to emphasize hedonic, self-interested outcomes, in contrast with the more societal-centred viewpoint of ethical consumers (Shaw & Shiu, 2002). In respect of the environmental and social marketing literature there has been limited evidence of a relationship between attitude and behavior (Gill et al., 1986), and due to such findings Schlegelmilch et al (1996) called
for an investigation of how environmental attitudes – deemed to stem from beliefs – are formed. This said there are certainly come studies that support a strong correlation between pro-environmental intention and pro-environmental behaviour in the context of a high degree of volitional control (Boldero, 1995).

Several of the models outlined in section 3.1. stem from the basis of the TRA/TPB (Ölander & Thøgersen, 1995; Stern, 2000) suggesting that adapting this particular model may be worthwhile when looking at pro-E&SR consumption.

3.6.3. Modifications to the Theory of Planned Behaviour

The TPB distinguishes between three types of belief – behavioural, normative and control – as well as the related constructs of attitude, subjective norm and perceived behavioural control. However the distinction between these areas and the sufficiency of the TPB as a predictive tool has at times been questioned. Due to this Ajzen (1991, p.199) stated that:

"The theory of planned behaviour is, in principle, open to the inclusion of additional predictors if it can be shown that they capture a significant proportion of the variance in intention or behaviour after the theory’s current variables have been taken into account."

In respect of research into pro-environmental behaviour Jackson (2005) argues that although the TPB can incorporate normative influences on individual consumers via the concept of the subjective norm, this exhausts neither the range of normative influences nor the importance of altruistic or moral values in individual behaviour. As such some attempts have been made to adjust the TPB to incorporate moral beliefs explicitly.

One area suggested by other authors (Gorsuch & Ortberg, 1983; Schwartz & Tessler, 1972), and discussed by Ajzen (1991), was the need in certain contexts to consider not
just perceived *social* pressures, but also *personal* feelings of moral or 'ethical' obligations to perform or not perform a certain behaviour. Inclusion of such a measure would represent an individual’s internalized ethical rules, which reflect personal beliefs about right and wrong. Ajzen found through his own research into unethical behaviour (cheating on a test, shoplifting, and lying to get out of an assessment) that a measure of perceived moral or ethical obligation added to the predictive power of the model. The work of Randall & Gibson (1991) and Kurland (1995) upheld these earlier findings, concluding that including a measure of moral or ethical obligation helped to directly predict intent. As the focus of the original TPB tended to be on the self-interested concerns of respondents, it does not account for the increased importance of 'ethical' issues in society today, where much of the behaviour is centred around a concern for others. Therefore a measure that reflects concern for others is a necessary addition to the TPB when studying behaviour in an ethical context. Manstead (2000) reviewed several studies that incorporated moral additions to the TPB and concluded that the specific inclusion of moral beliefs improves the predictive power of the theory in a variety of applications in which pro or anti-social dimensions of behaviour are relevant.

A further proposed modification was the addition of self-identity (Granberg & Holmberg, 1990; Sparks & Shepherd, 1992; Sparks & Guthrie, 1998) with the rationale for its inclusion being, that as an issue becomes central to an individual’s self-identity, then behavioural intention is adjusted to account for these considerations. In the context of this study ethical consumers may make ethical purchase and consumption choices because ethical issues have become an important part of their self-identity. In the area of ‘green consumerism’ Sparks & Shepherd (1992) found that self-identity contributed more significantly to behavioural intention than the other TPB variables. From these
findings it is assumed that including a measure of self-identity in the current study will reveal an independent contribution to the prediction of behavioural intention.

An exploratory study that incorporated both a measure of ethical obligation (EO) and self-identity (Sld) alongside the TPB was that of Shaw et al (2000), building on earlier work in which they suggested that the TRA and TPB models failed to address the formation of behavioural beliefs (although the models considered normative beliefs individually as having an impact on behaviour), by overlooking the potential role of normative others in belief formation (Shaw & Clarke, 1999). They also suggested that insufficient consideration is given to broader contextual influences such as media or pressure groups which may play a role in the development of specific behavioural beliefs. Given that other exploratory work discovered by them suggested that ethical consumers do not just identify with one ethical issue, but with a range of ethical issues, this study will expand on these findings and incorporate a range of E&SR issues rather than looking solely at a single area i.e. Fair Trade (Shaw & Clarke 1999). The extended version of the TPB model they used in their later work incorporates the two additional measures of Sld and EO as well as the traditional TPB constructs, shown in Figure 3.3.

This figure shows not only the relationship between the various components of the model, but also the different areas of data that need to be collected and calculated when using this model in the field. These equations for attitude (A) subjective norm (SN) and perceived behavioural control (PBC) are the same as those for the TPB discussed earlier in section 3.6.2.
Despite acceptable results from their investigation into the purchase of Fair Trade products using the above model, Shaw & Shiu (2002) questioned the placement of ethical obligation and self-identity within a model of ethical consumer decision-making: are they antecedent to attitude, or behavioural intention? They used structural equation modelling to address the question, and found that both attitude and self-identity did not serve as antecedents to attitude as thought, so concluding that the role of ethical obligation and self-identity is better represented through the prediction of behavioural intention only.

Although Jackson (2005) initially criticises the TPB as “remaining an adjusted expectancy-value model ... which is capable of incorporating affective or moral antecedents of behaviour only in so far as these are modelled as attitudinal beliefs about
or evaluations of the outcomes of specific actions” (p.50) he does recognise that additions to the TPB have shown “results (that) suggest that there may be a key role for theories that focus explicitly on the moral and normative dimensions of human behaviour” (p.51). Furthermore in his recent critique of consumer behaviour models in the context of ‘sustainable consumption’ Jackson does not discuss the Extended TPB produced by Shaw et al (2000) so it is difficult to state whether it meets the moral and normative criteria he feels the TPB was lacking.

As far as this study is concerned past results confirm the predictive power of the model illustrated in Figure 3.3. for the purchase of various E&SR products and it is therefore found to be applicable in its current form to ethical decision-making. Hence it will form the basis for the attitude research into why consumers choose to shop where they do, and purchase the products they do, in the current research study.

3.7. Summary

This chapter has recognized a number of consumer decision-making theories highlighted in the past literature: cognitive, reinforcement, and habit. Of the three the cognitive paradigm has been most highly supported and influential in practice, and is the one most relevant to consumers involved in ‘new’ or difficult choices e.g. E&SR shopping choices. Therefore this study will follow most closely this paradigm.

Attitudes are defined as “predispositions to specific kinds of behaviour related to certain objects, people, or events”; they can be favourable or unfavourable; held with degrees of intensity (valence); and may be formed, acquired or modified through influence arising from four main sources: information exposure, group membership, environment, and want satisfaction. Information plays an important part in the
formation of attitudes, and the interpretation and impact of this information, especially in relation to E&SR issues, depends on the message and who sent it. The involvement a consumer has with a product can be regarded as the extent to which consumers' product knowledge is related to their own values and beliefs, and the greater the knowledge a consumer has the more likely they are to behave in a given way.

Attitude research has occupied a central position in both social psychology and consumer behaviour studies, with the way attitudes are formed receiving several suggestions relating to other theories and models: learning; expectancy value models; functional approach (Katz, 1960); and, the cognition-affect-conation paradigm. The cognition-affect-conation paradigm, borne from the area of psychology has been universally accepted over time, and will be utilised in this study.

Models for measuring attitudes are the focus of this chapter, in particular the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB). TPB is an extension of the TRA through the addition of perceived behavioural control; recognizing the fact that behaviour is not always under volitional control. These models were found to have good predictive values from which a starting point for measuring E&SR behaviour could begin. However, research into E&SR proposed the inclusion of the extra constructs of Self Identity and Ethical Obligation in addition to Attitude, Subjective Norm and Perceived Behavioural Control. This extended model has been found to further improve behavioural predictions in the area of E&SR. Hence the Extended TPB will be incorporated into the methodology for this research study.

Although considerable progress has been made in recent years in adapting measures of attitudes and beliefs to include ethical issues and ethical consumer behaviour, no
investigation to date has developed a basis for defining the ethical and social responsibility issues that affect attitude formation specifically. Neither has any research been applied to more than one specific area of E&SR concern at a time, or studied it in conjunction with more traditional store and product components. Forming a typology of E&SR issues and looking at the areas of E&SR and product/store components in tandem would be of interest to academics and businesses alike as it would enable a clearer picture of how consumers shop with respect to ethical issues. Identifying the importance placed upon each factor would enable a 'hierarchy' of concerns to be elicited, which retailers and manufacturers could use in segmenting, targeting and positioning strategies.
Chapter Four

Ethical and Socially Responsible Consumers

A review of the characteristics and personality of the ethical and socially responsible consumer (E&SR consumer) can be studied in order to determine the elements of ethics and social responsibility that concern them. Identifying the nature of these concerns enables further explorations to distinguish which areas are of greatest consideration and so influence consumers’ shopping behaviour. This in turn is beneficial for marketers in guiding their segmentation strategies.

After presenting a brief examination of shopper segmentation in retail markets, a discussion of shopper typologies is given. Then the conceptual background of the literary terms and areas studied in E&SR are reviewed, and a ‘usable’ term for the consumers being investigated defined. The chapter continues to examine each of the characteristics elicited from past research, to establish the E&SR consumer’s make-up, looking for example at differences in demographic and psychographic variables, and reviews the measures that have brought these conclusions about. An overview of the influences on consumer attitudes that relate to E&SR behaviour is then given. The growth of the E&SR grocery market is discussed, along with the considerations of consumers making E&SR shopping choices. Finally a model is proposed to take forward into the methodology stage.

4.1. Segmenting Retail Markets

A detailed discussion of the wide range of needs and wants that can motivate product purchase, store choice, and shopping activity can be found in Chapter 2. What will be
considered here is the way in which this may apply to the E&SR consumer. As previously mentioned each consumer has a different set of needs, wants and motives, which makes it difficult to tailor the marketing mix to the level of the individual in most retail markets. Hence the need to identify relatively homogenous groups or segments of consumers exists.

There are many possible bases from which to segment markets (e.g. demographics, geographics, psychographics), with the most important factor being that they should be directly or indirectly indicative of relevant need, preference, consumption or behaviour patterns. Bellenger et al (1976) studied thirty-seven characteristics, which may correlate with store selection, and concluded that the bases of education, age and income were the most useful and manageable, whereas life-style and social class were less so. However, the social class classifications of A/B/C1/C2/D/E (Monk, 1978) have been widely utilised in the UK, although much debate as to their use as predictors of consumer behaviour has been entered into. Hisrich and Peters (1974) concluded that the most appropriate variable was dependent on two factors: the product class; and the aspect of behaviour under consideration.

It is difficult to base segmentation on demographics alone, and it has long been recognised that psychographic segmentation can improve ones ability to predict and understand consumer behaviour. Yankelovich (1964, p.87) stated:

"We should discard the old, unquestioned assumption that demography is always the best way of looking at markets...markets should be scrutinised for important differences in buyer attitudes, motivations, values, usage patterns, aesthetic preferences or degrees of susceptibility."

This becomes particularly apparent when lifestyle trends cut across traditional classifications. One example is that of the environmentally conscious consumer who
may be 21 or 60 years of age, and may earn £8,000 or £30,000 a year (McGoldrick, 1990). Although such factors as age and income level will no doubt influence the level and type of consumption the consumer undertakes, it may be the lifestyle characteristics that forms the most suitable segmentation focus for the retailer. Therefore a more suitable segmentation system than that of social class (JICNARS) maybe that of ACORN (A Classification of Residential Neighbourhoods), which incorporates various demographic, geographic and lifestyle characteristics.

As well as segmentation approaches being based on consumer characteristics, they can also be based on shopping orientations. These define customer characteristics according to their shopping behaviour, motives and attitudes, and are known as shopper typologies.

4.2. Shopper Classifications of Shopping Orientations

Shopper typologies and taxonomies share the common goal of categorising consumers into a limited number of groups or types, which differ from each other in some way in relation to retail decisions. To differentiate between the two types of classification, typologies are theoretically derived, whereas and taxonomies are empirically derived. The appeal of such measures to marketers is their potential to improve retail strategy decision-making by enabling retailers to differentiate and target their offerings, locations, and promotional efforts according to the varying patronage responses of the basic shopper types (Westbrook & Black, 1985). Past studies in this area are diverse in how, or on what basis, shopper types are founded, and the focus of these studies have ranged from individual product classes (Moschis, 1976), or groups of products (Darden & Reynolds, 1971), to the retail marketplace in general (Jarratt, 1996).
Gregory Stone (1954) was one of the first researchers to offer a taxonomy of shoppers when he pointed out that some housewives viewed shopping as something more than just a rational, simple, economic buyer/seller relationship. From his study of Chicago housewives he put forward a four-item typology of shopper types, based on their varying orientations towards the activity of shopping, namely: the economic consumer, the personalising consumer, the ethical consumer, and the apathetic consumer. Support was found for these findings by Darden & Reynolds (1971), when studying general consumer shopping orientations in relation to product usage. Their results are of particular note as they employed a substantially different research methodology to Stone (structured questionnaires compared to in-depth interviews). However, Kenny-Levick (1969) used Stone's typology on housewives in Liverpool, UK, and found significant differences between the shopping motivations of housewives in Liverpool, UK, and shoppers in Chicago, USA. He concluded that whilst Stone's typology provided a useful starting point, it did not cover the whole spectrum of shopping motivations. Therefore he put forward a seven-item typology of motivations governing housewives' choice of grocery outlet: economic consistent with quality, personalising, ethical, apathetic/concerned only with survival, time saving/given more important motivations to be satisfied, enhancement of self image, and pleasure seeking.

Several authors have proposed taxonomies of grocery shoppers. Darden & Ashton (1975), found seven shopper types, based on their results of factor analysed consumer ratings of preference for supermarket attributes. They were: quality orientated shoppers; fastidious shoppers (who valued store neatness and cleanliness); convenience shoppers; demanding shoppers (who insisted on everything); trading stamp collectors; stamp avoiders; and apathetic shoppers. Williams et al (1978) found four shopper types, from cluster analysis carried out on the perceived attributes of preferred grocery
stores (rather than preference ratings for various store attributes): the low-price shopper; the convenience shopper; the involved shopper; and the apathetic shopper. Given the differences in methodologies it is difficult to directly compare these two studies, however they do suggest the existence of 1) the economic/price orientated shopper, 2) the convenience shopper, and 3) the apathetic shopper. Additionally the studies highlight a type of shopper with multiple patronage objectives, classed as the highly involved or demanding shopper. Chetthanrongchai & Davies (2000) segmented the market for food shoppers using attitudes to shopping and time, from which they found a significant relationship between the two, which linked in turn to shopping behaviour. The use of cluster analysis resulted in four segments: time-pressed convenience seekers; hedonists; apathetic, but regular; and convenience seekers.

These past studies show the emergence of a wide array of shopper types, but with only a few consistently appearing across the studies: economic, social and apathetic. This diversity may be due to the wide range of methodologies and analysis employed, or the different contexts across studies, but either way does little for generalisability. Refocusing taxonomic efforts away from direct ratings of attribute importance, or responses to predetermined statements, and instead looking at a typology based on shopping motivation may advance efforts to develop more comprehensive theories of shopping behaviour.

The approach for developing motivation-based typologies has been used in several prior studies. Westbrook & Black (1985) reviewed several of them, before hypothesising seven major dimensions of shopping motivation, derived from Tauber’s (1972) earlier research (discussed previously in Chapter 2), and using cluster analysis to propose a six-group typology of their own: shopping process-involved consumers; choice optimising
consumers; apathetic shoppers; economic shoppers; and two further groups that were less clearly defined. One segment that was difficult to define was similar in many ways to the apathetic shopper type, but scored more highly on the more product focused dimensions of choice optimisation and economic role enactment, and the other scored moderately on all shopping dimensions. They state that “the absence of demographic relationships suggests that the observed shopping motivations indeed constitutes a fundamental basis of shopper categorisation. They further suggest the conclusion that the shopping motivations suggested are not simply the product of consumers’ socio-economic standings or stage in life cycle” (p.99).

Jarratt (1996) confirms and extends the proposed motivational taxonomy of Westbrook & Black (1985) to produce a six-group typology of shoppers for retail strategy development. Westbrook & Black identified only the product offer and the environment in which the product offer was made as the basic dimension of the classification, whereas Jarratt’s study supports the separation of the environment in which the offer is made into: 1) the service component; and 2) aspects relating to the physical environment, as findings indicated that service and environment components of the total shopping offer were considered separately by consumers in their evaluation. She states that doing this enables identification of not only consumers to whom the product offer is important (‘product focused’ shoppers), and those to whom the offer, service and environment are important (‘experiential’ shoppers), but also those to whom the service is of key importance (‘service’ shoppers), those to whom the service and product offer are important (‘practical’ shoppers), those to whom nothing but value is important (‘have to’ shoppers), and those to whom all three are moderately important (‘moderate’ shoppers).
The current study is concerned with a shopper type first identified by Stone (1954): the ethical shopper, who accounted for 18% of his sample. He defined this type of shopper as ‘feeling strongly about the plight of the small shopkeeper; (who) was willing to pay slightly higher prices or to put up with less variety to support the little man struggling against the retail giants’. Although the definition of this type of consumers’ concern has no doubt expanded over time, there is still evidence that a significant segment of ‘ethical’ consumers exist (Balderjahn, 1988; Schwepker & Cornwell, 1991; Roberts, 1996). Therefore this study sets out to explore the depths of this shopper type, with reference to the typology of Jarratt (1996) to establish the factors of the total offering that are important to them.

4.3. Establishing a Term for these Consumers

In studies already undertaken a variety of terms have been used to classify consumers into ‘groups’ according to their specific E&SR concerns. Consumers concerned with the impact of economic activity on the natural environment have been classified as ‘environmentally conscious’ (Ellen et al, 1991), ‘environmentally concerned’ (Murphy et al, 1978; Van Liere & Dunlap, 1980; Samdahl & Robertson, 1989), ‘environmentally responsible’ (Berger and Corbin, 1992), ‘green’ (Prothero, 1990; Roberts, 1996), and ‘ecologically concerned’ (Kinnear and Taylor, 1973; Balderjahn, 1988; Schwepker and Cornwell, 1991). This is an area that boasts much literature and covers many variables such as pollution and recycling. Those consumers concerned not only with the environment, but also consumerism and community activism, have been categorised by the terms 'socially responsible personality' (Berkowitz and Lutterman, 1968), 'socially concerned' (Belch, 1982), and 'socially conscious' (Anderson and Cunningham, 1972; Webster, 1975; Murphy et al, 1978). Finally the term 'ethical consumer' (Strong, 1996; Shaw and Clarke, 1999; McEachern and McClean, 2002) reflects the concern
consumers have with the deep-seated problems of the world e.g. Third World poverty, in addition to general environmental issues. As this study is exploring all areas of concern, these profiles will be grouped together and treated as one group, and referred to as the ‘ethical and socially responsible consumer’ (E&SR consumer). Although some time has elapsed since its production, Webster’s definition (1975, p.188) of a socially conscious consumer may be used as a starting point to typify the E&SR consumer;

"... a consumer who takes into account the public consequences of his or her private consumption or who attempts to use his or her purchasing power to bring about social change."

But will be extended to include:

"and feels a moral obligation to improve the welfare of consumers, communities, and the wider environment"

4.4. Characterising the E&SR Consumer

On balance the literature identifies the ethical and socially responsible consumer as being younger, well-educated, with middle to upper class status (Kinnear et al, 1974; Arbuthnot, 1977; Van Liere and Dunlap, 1980), and predominantly female (Balderjahn, 1988; Prothero, 1990; Roberts, 1996; Minton & Rose, 1997). Culturally they tend to be more involved in community activities (Webster, 1975) and have a willingness to help others even if there is no personal gain to be had (Anderson and Cunningham, 1972). Their attitudes express concern for both the environment and society’s well-being (Kinnear et al, 1974), and their behaviour is strongly influenced by the belief that they can combat these problems (Kinnear and Taylor, 1973; Hines et al, 1986; Balderjahn, 1988; Ellen et al, 1991; Berger and Corbin, 1992). Political ideology of this segment has been found to veer towards liberalism rather than conservatism in their views (Van
Liere & Dunlap, 1980; Samdahl & Robertson, 1989). However despite these congruous findings other less congruent outcomes have been discovered that need to be reviewed.

Criticisms have been made of some reports that have tried to identify consumers’ concerned with ecological and social issues, due to them being of an exploratory nature and at times contradicting each other. For example, Reizenstein et al (1973) found that males are more likely than females to show concern for ecological matters, where as Webster (1975), Balderjahn (1988) and Prothero (1990) conclude the exact opposite. Anderson et al (1974) found education rather than income to be the better discriminator between socially concerned and non-socially concerned consumers, whilst Kinnear et al (1974), Reizenstein et al (1973), and Webster (1975) all determine income as the better predictor. Prothero (1990) and Roberts (1996) found the middle-aged to be among those most likely to be environmentally concerned; although in contradiction Arbuthnot (1977) and Van Liere & Dunlap (1980) found them to be of a younger age group, and Hines et al (1986), although suggesting a younger consumer, found no strong relationship between the two. In addition Prothero (1990) suggested that rural dwellers were most likely to show concern for the environment, whereas Lowe & Pinhey (1982) and Schwepker & Cornwell (1991) found a stronger relationship with those in urban surroundings, due to their closer proximity to pollution by traffic fumes and littering.

This dissensus of evidence led Van Liere & Dunlap (1980) to review five popular hypotheses asserting relationships between environmental concern and the demographic and social variables of age, social class (education, income & occupation), place of residence, political ideology, and sex. The evidence they provide shows that only the three hypothesised relationships of age, education, and political ideology should be considered empirical generalisations. Hence it can be said that environmental concern
is stronger among the young, well-educated, and liberal segments of society, although it is by no means limited to just these people.

Other areas for consideration come from new evidence since this review. One such area is that of lifestyle. Belch (1982) criticised the inconsistencies of demographic and psychographic based research, and instead focused on segmentation through lifestyle analysis. This analysis determined specific activities, interests and opinions, in order to reflect the life-style of the more socially concerned consumer and their consumption behaviour. The resulting profile still reflects elements of the traditional socially concerned individual:

"A physically active individual most interested in engaging in outdoor activities, as well as those of a philanthropic nature, this individual is more family orientated, liberal and self assured than his less concerned counterpart, though somewhat more rational and deliberate in respect to buying behaviours" (p.355).

Moreover the study showed their behaviour to be quite consistent with their espoused social concerns. A notable outcome of their purchase behaviour showed that although they bought some items based on price, they also exhibited brand loyalty – a fact that could be seen as a risk reduction strategy, and one that could be beneficial to the future strategies of retailers.

Despite Anderson & Cunningham (1972) finding no real significance between social consciousness and life-stage, Peattie (1995) found life-stage to have significantly more influence than lifestyle on E&SR behaviour, due to the ability for different events to occur at varying times of life. For example people tend to become more environmentally concerned when they have children, and as a person can be at the age of 20, 30 or 40 years when they have children, segmenting solely on the basis of age could be misleading. As there have been changes in family structure and lifestage
width, due to people having children at a later age or choosing not to have children, there is a need to alter segmentation strategies and promotional activities to reflect this. Mintel (2004) finding that the most ethically active consumers are in the ABC1 groups, especially those with children, justifies this decision.

Murphy et al (1978) found that there were racial variations between environmentally concerned consumers, with white middle/upper class women placing significantly more importance on being less ecologically destructive than their black counterparts. However significant differences between black and white women were only found for 7 attributes out of 27. The differences occurred for paper towels and soft drinks, but not laundry powder when selecting the ‘environmentally correct’ brand. The authors conclude that there is a difference between black and white consumers, with the implication for the well-off, middle/upper class stereotype applying predominantly to the white consumer. Ellen et al (1991) also found differences between blacks and whites for perceived effectiveness, need for government regulation, and perceived sacrifices of others, but not for levels of expressed concern. Therefore it is believed that distinct racial segments require different approaches in order to create a positive response to environmental concern.

Roberts (1996) suggests these differences in consumer characteristics may be the result of using ‘borrowed scales from other disciplines’, disparate use of the dependent variable, use of convenience samples, poor scale construction, and lack of replication. Therefore there is a need for the current study to ‘bring together’ all of these areas and explore them using an applicable set of data collection methods and data measures.
4.5. Identifying E&SR Consumer Measures

The earliest research that tried to define the 'socially conscious consumer' in the early 1970s (e.g. Anderson & Cunningham, 1972; Kinnear et al, 1974; Webster, 1975) addressed the characteristics of the individual, so trying to relate socio-demographic variables such as age, gender, education, and social class to environmental concern. The focus of questioning was on the symptoms of environmental decline e.g. pollution, recycling and waste disposal, and consumer attitudes and behaviour towards them.

Anderson & Cunningham (1972) were the first researchers to investigate the idea of the socially conscious consumer from a marketing perspective, and they provided the foundation for much future research. They used Berkowitz & Daniel's (1964) 8-item Social Responsibility Scale to test six demographic variables (occupation of the household head, total family income, education of household head, family socio-economic status, age of household head, stage in family lifecycle) and six socio-psychological variables (alienation, dogmatism, conservatism, status consciousness, cosmopolitanism, personal competence). They found that demographic variables were able to differentiate between high and low socially responsible consumers, but the socio-psychological variables gave much greater insight.

Kinnear et al (1974) extended this research and attempted to improve on the Social Responsibility Scale by including measures of actual behaviour – an area that was not covered in the previous scale. The result was the Index of Ecological Concern, which contained both attitude and behavioural measures constructed from highly interrelated components (shown in Kinnear & Taylor, 1973). They used twenty independent variables as predictors, of which seven were socio-economic (age of wife, presence of children, education of wife, education of husband, employment of wife, occupation of
principal wage earner, family income); twelve personality scales and one of perceived consumer effectiveness. Significantly, five of these variables had the strongest predictive value of ecological concern: namely perceived consumer effectiveness; the three personality variables, tolerance, understanding, and harm avoidance; and family income. In summary they also found, like Anderson & Cunningham (1972), that personality variables were generally better predictors of environmental concern than socio-economic variables alone.

Webster (1975) took this area of study further still with the development of the Social Involvement Model. This model used multiple measures with dependent variables of 1) subscription to local recycling service, 2) the Socially Conscious Consumer Index – constructed from questions on prior purchase behaviour, and 3) the Social Responsibility Scale. Independent variables used were measures of attitude, personality, social activity, and socio-economics and demographics. Again personality and attitude measures were found to be the best predictors of ecological concern – a fact reiterated by several authors in subsequent research (Schwepker & Cornwell, 1991; Minton & Rose, 1997) - with perceived consumer effectiveness being the only predictor significant for all three dependent variables. The model suggested in conclusion that the socially conscious consumer is more active and socially involved than the average consumer.

Although Webster (1975) recognised the superior predictive value of personality and attitude measures over socio-economic/demographic measures, he noted that they do not easily lead to segmentation strategies. Hence he recommended continuing to take socio-demographics into account when operationalising marketing strategies, so denoting that in the methodology constructs for this study, measures of demographic,
attitude and personality traits should be embodied.

4.6. E&SR Consumers and Attitude Measures

Underlying the profile characteristics outlined in section 4.4. are the consumer's E&SR attitudes and values that provide the main influence to following E&SR behaviour. Various attitude constructs have been related to socially conscious environmental behaviour using different methodologies in order to determine what aspects of social concern motivate consumers to act. Stepwise regression led Crosby et al. (1981) to find that preserving the environment, littering, unemployment and high prices due to environmental legislation are predictors of voting behaviour. Linear discriminant analysis related litter and ecological living to intentions to purchase ecologically packaged products (Schwepker & Cornwell, 1991); whilst multivariate analysis found a positive attitude towards improving the environment significant to purchasing environmentally safe products, recycling, donations to and joining of environmental groups, communicating with officials, and attending public hearings (Ellen et al., 1991).

Relating Fishbein's Theory of Reasoned Action (Fishbein & Ajzen, 1975) to attitudes towards environmental concern led Gill et al. (1986) to use causal modelling. They discovered a direct effect between environmental concern and behavioural intention when voting on container laws, as well as between the attitude towards voting and the subjective norm for voting on the behavioural intention to vote. In support Hopper & Nielsen (1991) found the subjective norm indirectly influenced environmental behaviour in respect of recycling through the personal norm, and that the consequences of a certain behaviour (recycling) moderated the personal norm/behaviour relationship. Minton & Rose (1997) continued this line of study and found their results of the personal norm having the primary influence on environmentally friendly behaviour.
supported these previous works. However, they do state that whilst attitude is a good predictor of behavioural intention to act in environmentally friendly ways, a sense of personal moral obligation is more likely to lead to the search for environmental information, purchase of environmentally friendly products, and recycling, as discussed in the previous chapter. They conclude that these results justify segmenting markets based on differences in attitude and personal norms, and that the most important message to convey is that individual contributions do make a difference.

Arbuthnot (1977) explored the relationship between attitudinal and personality characteristics, attitudes towards the environmental problems, environmental knowledge, and behavioural commitment (recycling). Multiple regression analysis was used to determine which combination of variables would best predict environmental knowledge and behaviour. It was found that the recycler was relatively well educated, knowledgeable about environmental issues, relatively liberal in political, social and religious beliefs, and believed his/her actions will help the environment. Although not differing in education or sex, recyclers were younger and tended to belong to higher social classes – a reiteration of the traditional E&SR consumer attributes. It was also noted that their behaviour could be generalised across various types of related behaviours, such as being more likely to belong to an ecology group, and being more likely to make high personal effort in order to obtain information about environmental issues. However, non-recyclers appeared to share many of the same concerns, but the recyclers felt more compelled to, and did, take action in response to the potential consequences of current policies. The results indicate that educationally-orientated information could gain behavioural commitment, but the content needs to be tailored to meet the needs and concerns of different target groups.
According to Grunert & Juhl (1995) 'values can be viewed as motivations as they are criteria used by individuals to select and justify actions, and to evaluate people, the self, and events'. Applying facet theory they conclude high involvement decisions and activities are more susceptible to value influence than those with low involvement. Also that the motivational domains of Universalism, Benevolence and Self Direction are the most relevant values for environmental attitudes, whilst those of Stimulation, Hedonism and Achievement are the least relevant (explained in Grunert & Juhl 1995, p.43).

Other streams of research have advanced the insight into actual behaviour, rather than just purchase intentions. Berger & Corbin (1992) found that large numbers of consumers indicate a willingness to make minor concessions in convenience in order to purchase environmentally friendly products, but few seem willing to make major behavioural changes. As Scherhorn (1993) points out it is a big step from growth of knowledge to change of attitude, and an even bigger one from change of attitude to change of behaviour.

In general it is assumed that preferences should be distinguished from matters of choice and analysed separately. However, as Uusitalo (1990) states, in reality individuals are creatures of contradiction and may desire $p$ and not $p$ simultaneously: such that when consumers want different things at the same time it is difficult for them to state complete and transitive preferences. From her study it appears that individual preferences, even for social goals, are not based on a general system of values, rather they are combined with considerations of individual utility. This understanding may help to identify differences in consumers' behaviour towards different purchasing elements and with regard to E&SR behaviour; although on the preference hierarchy in
her study, ‘environmental protection’ is considered relatively important.

A principal measure that has emerged as a dominant motivator of ethical and socially responsible behaviour in many studies is that of Perceived Consumer Effectiveness, which is conceptually similar to Locus of Control (Kinnear & Taylor, 1973; Hines et al., 1986; Balderjahn, 1988; Ellen et al., 1991; Berger & Corbin, 1992). Perceived Consumer Effectiveness is a domain-specific belief that the efforts of an individual can make a difference to the solution of a problem i.e. the more a consumer feels that by recycling s/he is helping to reduce the amount of solid waste produced each year, the more likely s/he is to follow that behaviour. Ellen et al. (1991) found Perceived Consumer Effectiveness to be distinct from environmental concern, and that it contributes uniquely to the prediction of pro-ecological behaviours. They continued to say that the motivation of consumers to express their concerns as behaviour is to some extent a function of increasing their perception that individual actions do make a difference. Furthermore Roberts (1996) believes that Perceived Consumer Effectiveness has been identified as the most promising variable in explaining variations in ecologically concerned consumer behaviour.

The level of Perceived Consumer Effectiveness can vary depending on how much knowledge an individual has about a given subject upon which to base their purchase decision. Hence the more knowledge people have about an event the more willing they are to act upon it by giving or withdrawing support (Roberts, 1996). This is seconded by Clasen (1967) who states that in order for success, strong, clear channels of communication are needed both to and from the consumer, and Ellen et al. (1991), who states that a person cannot effectively be environmentally friendly if s/he does not know what to do. It is believed this can be best achieved by promoting the positive results of
such actions in order to reinforce behaviour, rather than the negative aspects that increase the perceived futility of such actions. Hence Roberts (1996) advises that advertising aimed at this segment of consumers should stress the ability of the individual to fight environmental decline.

Nevertheless despite this wealth of information about the characteristics of the E&SR consumer segment and thus attitudes, there has been much debate over the variable(s) that are most influential in motivating consumers to take responsible actions. In order to rank the many measures that had been proposed in past studies into a utilisable model, Hines et al (1986) constructed a meta-analysis of environmental research behaviour. Their analysis of 128 studies found knowledge of issues, knowledge of action strategies, locus of control, attitudes, verbal commitment, and an individual's sense of responsibility to be most strongly associated with responsible environmental behaviour. The model of responsible environmental behaviour they propose is illustrated in Figure 4.1.

FIGURE 4.1. PROPOSED MODEL OF RESPONSIBLE ENVIRONMENTAL BEHAVIOUR

In support of earlier findings their study found that younger, better-off individuals exhibited more environmentally responsible behaviour than other sectors. However the authors state that the individual has to have the desire to act, as ability alone is insufficient to lead to action. Moreover, personality factors and the situational factors of economic constraints, social pressures, and opportunities to choose different actions may enter the frame, and either counteract or strengthen the variables in the model.

The development of this model from the findings of a meta-analysis serves to narrow the focus of the environmental behaviour picture by determining those factors which are most strongly associated with responsible environmental behaviour. However the model contains several areas which are amenable to change over time, such as the knowledge of issues, and situational factors. These issues, together with the fact that it only looks at responsible environmental behaviour rather than E&SR behaviour in total means it has rather a narrow focus for the current study. Therefore it will have a valued input into expanding our understanding of the area, but will not be utilised ‘as is’ as a model to test E&SR grocery shopping in this study.

4.7. The Growth of the E&SR Grocery Market

Much of the growth in awareness that human activities were having a detrimental effect on the environment and society can be attributed to the publication of Rachel Carson's book *The Silent Spring* (1962). The book apportioned a major part of the blame for environmental decline upon economic activities, so creating the catalyst for an increase of research on the subject. This, together with increased media coverage and much publicised exposure about environmental disasters such as Chernobyl, Three Mile Island and Exxon Valdez, has escalated consumer awareness to the heights it maintains today.
Early research which identified a segment of socially conscious consumers (Anderson & Cunningham, 1972) was initially dismissed due to ‘the existence of a substantial segment that exhibits little or no concern about the pollution aspects of products’ (Kinnear et al, 1974, p.23). However, consumers’ and researchers’ views have altered, and as can be seen from the prior literature review, evidence of an undeniable segment exists (Balderjahn, 1988; Schwepker & Cornwell, 1991; Roberts, 1996). This does not mean that the intensity of concern is universal for all consumers, a fact that the 1993 Roper Organisation’s Green Gague Study (Minton & Rose, 1997) recognised by characterising three environmentally active groups and two inactive groups. They are the ‘true-blue greens’ – the most committed group of environmentally active consumers who have considerably changed their behaviour; the ‘green-back greens’ – committed financially and philosophically to the environmental movement but have not completely changed their behaviour patterns; the ‘sprouts’ – beginning to change their behaviours to become more environmentally friendly; the ‘grousers’ – think companies rather than consumers should solve environmental problems; and the ‘basic browns’ – do not think that individual efforts will help. Nonetheless later research has shown that green and ethical criteria are beginning to play a greater part in purchasing patterns, with only one in five consumers buying any product with no reference to green or ethical issues (Keynote, 2002), a finding upheld by Mintel (2004) who state that 79% of adults allow their concern for one or more ethical issues to affect their purchasing behaviour.

E&SR consumerism has essentially been consumer led. Keynote (2002) shows that spending on green and ethical products rose by 18.1% in 2000, contrasting with growth of just 3% in the main economy. Many of the green market leaders have come from the ethical food market, which grew in value from just over £1.5 billion in 2002 to £1.75 billion in 2003, (Mintel, 2004). This reflected a substantial rise in the market for
ethicaly produced, or organic food as a result of scares over genetically modified (GM) foods, Bovine Spongiform Encephalopathy (BSE), E-coli and the 2001 foot and mouth disease outbreak. The UK organic food market was valued at £390 million in 1998 (Mintel 1999), and has grown rapidly since to a value in excess of £1 billion in 2003 (Mintel, 2003a). Over 80% of organic food is now sold in supermarkets (Keynote, 2002) with much of this growth in specific product areas, as Sainsbury’s stated:

"We find that when customers begin to buy organic food, they buy fresh fruit and vegetables followed by dairy produce and bakery goods." (Bullion, 2001, p.15)

Mintel (2003a) agreed with this, stating that fruit and vegetables accounted for 45% of the organic market in 2002, followed by dairy at 14%. However the call for prepared organic foods has grown dramatically by 80.1% from 2000-2002, due to consumers’ demand for convenience. Sales of organic meat and poultry also grew faster than the total organics market, likely to have been spurred on in part by many consumers’ lingering doubts and/or possible concerns about the safety and quality of non-organic meat (Mintel, 2003a).

The ethical label Fair Trade has also seen a considerable boost in its sales, with wholesale sales growing by 182% from 1998-2001 (Keynote, 2002). However the free-range standard is the most widely purchased food standard, being purchased by 56% of consumers (Mintel, 2004).

4.8. Factors Affecting E&SR Shopping Decisions

Prior research has established that knowledge of E&SR issues is likely to govern the elements that induce E&SR buying behaviour and the purchase of compatible goods. According to Nantel & Weeks (1996) and upheld by Peattie (1990), consumers are no longer just concerned with the satisfaction obtained from a product or service, they also
want to be satisfied with the way it is produced, so extending their interest and concern to the companies providing the good or service.

Knowledge about the environment appears to be a deciding factor as to whether or not a consumer will purchase a given product. Henion (1972) studied the effect of ecologically relevant information on detergent sales and found that consumers responded positively towards buying a lower-phosphate brand when given relevant information. Ottman (1992) found that consumers have educated themselves about environmental concerns and are acting on their values by choosing products that are perceived as environmentally sound and rejecting those that are not. However, in relation to other store elements, Amyx et al (1994) state that consumers who say they are more knowledgeable about the environment are more likely to pay a premium for an ecologically safe product, rather than those who really are knowledgeable. He says that this could be due to high-income individuals tending to have higher subjective knowledge than lower-income individuals, and hence being willing to pay a higher price. Such that ‘if it is a premium they want’ this is the group retailers should target.

The amount of knowledge imparted by an organisation about itself or its products, given it is fairly just, could be beneficial, according to the findings of Drumwright (1994). That is, in the USA 75% of consumers have said that their purchasing decisions are influenced by a company’s reputation with respect to the environment. Strengthening this are Creyer & Ross (1997) who ascertain that consumers prefer firms who give priority to ethical behaviour, and actually expect ethical corporate behaviour. Furthermore Owen & Scherer (1993) say that a company’s level of social responsibility can actually attract consumers, especially the younger segment. Consequently it can be suggested that if firms make clear their policies on these issues they have the potential
to increase patronage and loyalty.

Kinnear et al (1974) used an index of ecological concern to study its effect on brand perceptions when looking at detergent brands. They found that buyers have different cognitive maps for different brands in relation to environmental and other factors, which in turn affects their brand perceptions. The higher a buyer's ecological concern, the more important the ecological dimension is in the buyer's perception of alternative brands. However, when this is so the buyer perceives a greater similarity between brands that are ecologically non-destructive. This means that manufacturers and retailers need to differentiate their product in additional ways. Being environmentally friendly alone is not enough to make consumers purchase in a competitive market.

A study in a different area, but one that can be linked to behaviours and willingness to change is that of Foxall & Bhate (1993) on cognitive style and personal involvement as explicators of innovative purchasing of 'healthy' food brands. The main insight here is the recognition of the type of consumer who is willing to purchase new or 'different' products first and how they differ in their decision-making. This could be used to aid this research in who to target in order to set the 'trend' towards E&SR consumption, given its fairly 'new' status. Foxall & Bhate named less-involved Adapters, Innovators and more-involved Adapters as the three psychographically defined consumer segments in the market. Of these more involved Adapters and Innovators would be the best to target for this study due to their higher involvement, extensive information search and loyalty when satisfied.

Amyx et al (1994) investigated individual differences that affect the intention to purchase ecologically safe products, by looking at the effects of ecological orientation
(the degree to which one expresses concern for the environment); innovative purchase behaviour (a willingness to change); opinion leadership (a seeker and diffuser of information about new products etc); and subjective (based on self-evaluation and report of knowledge about a subject) and objective (based on performance of a factual test) environmental knowledge. The model they propose, illustrated in Figure 4.2 is built on Fishbein & Ajzen’s Theory of Reasoned Action, and focuses on purchase intentions as dependant variables.

**FIGURE 4.2. MODEL OF INFLUENTIAL VARIABLES ON CONSUMER PURCHASE INTENTIONS.**


Reflecting the quality-price relationship discussed before, this study also examined how individual factors of purchase behaviour differed as consumers were asked to pay more, or sacrifice quality, in order to purchase environmentally safe products. The authors also looked at how willing consumers were to accept non-traditional packaging (i.e. biodegradable, recycled) in order to reduce the amount of solid waste produced each year, and studied the product classes of aerosols, phosphate detergents, and paper products. They found a strong relationship between purchase intention and ecological orientation,
showing those consumers more concerned about ecological issues are most likely to follow ecologically responsible behaviour. Opinion leadership and objective knowledge correlated with purchase intentions even after portioning out the effect of ecological orientation. This finding indicates that if marketers and retailers can identify and target these opinion leaders they are likely to influence a larger audience to follow this behaviour, and supports the findings of Foxall & Bhate (1993). However, the results of this study are based on a relatively small sample from a narrowly defined population – 176 university faculty and staff – and only crosses three product classes in one area of concern (the environment) so limiting generalisability. Nevertheless, the implications are of interest to this study and hence certain variables may be examined in further detail.

Shaw & Clarke (1999) found that influences on ethical purchase behaviour and behavioural beliefs came from a number of sources: ‘established concerns’ which were issues which respondents had been concerned about over the longer term and were central to their decision making; ‘current concerns’ which were recent issues at the forefront of consumers minds; ‘information sources’ which were found to help form ethical beliefs, and came from areas such as available literature, interaction with ethical organisations, labelling and advertising; and ‘normative others’ in the consumers social sphere such as family, friends, etc, religion, and retailers.

In a study of the purchase of Fair Trade products Shaw et al (2000) found that, although consumers who acted in a rational self-motivated manner selected products such as coffee on the basis of price and taste, for those consumers concerned about ethical issues, precedence was taken by a sense of obligation to others and an identification with ethical issues such as providing a fair price for producers. For these consumers
their overall intention to purchase was driven by a sense of ethical obligation rather than self-motivated concerns, and a greater understanding of this behavioural context is vital for organisations who wish to participate within a growing market driven by consumer demand for brands with ethical and socially responsible credentials.

4.8.1. Product Attributes Consumers Look For – Is One Enough?

In order to be able to offer E&SR consumers the products they want retailers must first establish what their needs are. Prothero & McDonagh (1992) found that the attributes that consumers look for in environmentally acceptable products are no overpackaging, a recyclable packaging/container, CFC free, not tested on animals and not containing any animal-based substances. Many companies have responded to the increasing number of environmentally concerned consumers by developing greener products due to increased demand, most noticeably with the removal of CFC’s followed by introducing ‘cruelty free’ products. However, by looking at the UK cosmetics and toiletries industry Prothero & McDonagh found that organisations who are operating as ‘cruelty free’ may not be environmentally acceptable in other aspects e.g. over packaging or non-recyclable packaging. From their study of British Union for the Abolition of Vivisection (BUAV) approved companies and non-BUAV companies, Prothero & McDonagh concluded that non-BUAV companies ‘may find that one or two environmentally acceptable attributes are not enough to attract the newly-informed environmentally conscious consumer segment’. This shows both retailers and marketers the need to integrate E&SR per se into their organisation's strategy, rather than just respond to certain issues. At the crux of this discussion is that a consumer who is interested in helping the environment through his/her consumption choices must have viable ‘green’ alternatives to non-environmentally sound products (Ellen et al. 1991)
Shaw and Clarke (1999), although focusing on Fair Trade products, found that there were links between certain areas of ethical concern: such as health concerns with the purchase of Fair Trade products, and recycling with environmental concerns. This highlights the danger of studying ethical concerns in isolation - a fact seconded by Newholm (2005, p.108) who states that “specific consumer practices should not be seen in isolation” as “animal welfare, human rights, environmental sustainability and corporate responsibility combine, overlap, conflict and vie for attention” – and shows why this current study needs to focus on the larger picture.

Information was found to be an important factor in belief formation by Shaw & Clarke (1999) and although at times it was found to be ‘overwhelming’, it was viewed as essential to making informed conscious decisions. Information sources from independent companies such as the ‘Ethical Consumer’ magazine and ‘New Internationalist’ magazine were viewed with favour, whereas information provided by the majority of labelling and advertising was considered far from satisfactory. As information is very important to ethical consumers, this dissatisfaction with the current standards and comprehension of labelling was found to be closely related to a distrust of large companies. Retailers who stocked Fair Trade products were perceived more positively than those that did not. On the other hand, multinationals and supermarkets were poorly received with regard to their power over how food was produced, products stocked, and price. Behavioural control was found to be a problem for some consumers due to price, availability and location, and as such resulted in feelings of guilt and isolation. A deeper understanding of these specific beliefs and feelings are vital to any organisation wishing to appeal to the more highly-principled consumer groups, and is something this study aims to explore.
4.9. Proposed Model of E&SR Grocery Shopping Behaviour

With respect to the past research findings and recommendations, the model illustrated in Figure 4.3 is proposed, which offers an analytical framework for development and use during the empirical stage of the current research study. The model consists of three distinct, but interlocking stages:

Stage 1: Factors of influence on decision-making

Stage 2: Decision-making process and behavioural intention

Stage 3: Customer types/segments

Stage 1 aims to combine the substantiated areas of store image with the additional determinants of ethics and social responsibility to establish the influential factors on grocery shopping choice decisions. Doing this aims to overcome the problem of 'looking at factors in isolation' which has been a criticism of prior studies. Stage 2 then applies these conceptualised areas to the E&SR decision-making process. These areas are grounded in the TPB model, but also take account of more recent findings of Amyx et al (1994), Kurland (1995), Sparks & Shepherd (1992) and Shaw et al (2000) to include the areas of Ethical Obligation and Self Identity. Finally Stage 3 is used to construct profiles of the different segments of E&SR consumer. This aims to identify different types of consumer within the larger 'umbrella' segment of E&SR consumers.
The model is designed to tie together many of the ideas on shopping choice, E&SR, and consumer decision making discussed throughout the preceding literature review. It does not presume to provide an exhaustive picture of the complexities of E&SR grocery shopping behaviour, rather it is designed to synthesize and coordinate the relevant concepts into a significant whole.
4.10. Summary

This chapter recognises that in the majority of retail sectors it is appropriate to group consumers into segments of shoppers who are likely to share common characteristics in order to target marketing efforts effectively. There are many possible bases for market segmentation, although the relatively simple criteria of demographics and geographics often predominate. However, as many consumer trends cut across the traditional classifications, the use of psychographics, such as attitudes, values and lifestyle has increased, aided by the development of advanced classification databases such as ACORN.

Another approach to segmentation is the use of shopper typologies, based on attitudinal/behavioural shopping orientations. The value of segmenting markets in this way is that it directly relates to retail choice activity, although segments may be more difficult to measure and reach than by using demographic characteristics alone. However, categorising shoppers by their different motives, and recognising the elements of both store image and product attributes that are most influential to them should gain greater insight into their shopping choices. Correct identification and execution of these factors has the potential to increase the profitability of the retailer.

Past studies have used many terms to describe the type of consumers at the focus of this study (e.g. ethical, green, socially responsible, environmentally concerned), which have been compounded to form a useable term for this study: the ethical and socially responsible consumer (E&SR consumer), defined as: 'a consumer who takes into account the public consequences of his or her private consumption or who attempts to use his or her purchasing power to bring about social change, and feels a moral obligation to improve the welfare of consumers, communities, and the wider
environment'. E&SR consumers are characterised in past studies as being younger, well-educated, middle to upper class, and predominantly female, and are concerned with all areas of E&SR (environment, consumerism, community activism). Differences in subsequent studies have been noted (life-stage, gender, urban/rural divide) and will be explored further in this research project. E&SR consumer types characterised in the prior literature review will be reflected in the selection of individuals for the first stage of data collection (focus group participation) but will be widen to investigate whether changes have occurred since these studies took place, hence aiming to further the knowledge of 'modern' E&SR shoppers.

In specifying the influences on consumer behaviour in an ethical context, this chapter once again highlights the importance of attitude and belief formation in understanding ethical and socially responsible behaviour, which was discussed in greater detail in Chapter 3. E&SR consumers have been identified as being more complex than simple socio-economic and demographic variables can portray, which may explain some of the historical discrepancies between studies. It is also suggested that the different and inconsistent scales used in past studies need to be harnessed into a rational measure for the pursuit of effective assessment. Having discovered that attitudes play an important part in the consumer decision-making process, and as such influence behaviour, the use of an adapted TPB model is considered appropriate.

Perceived consumer effectiveness has been shown to influence consumers in their decisions. This concept is based on the acquisition of knowledge, which is important for informed decisions to be made. Specific to E&SR consumers is information relating to the ethical behaviour of companies, and the socially responsible way their products are produced. Giving consumers' greater information about company activities, and
informing them of how their actions can make a difference, has been seen as a way of potentially increasing customer loyalty.

The model proposed in this chapter aims to fit together the areas discussed in the prior literature review: store image, product attributes and E&SR factors; the consumer decision making process; and, market segmentation. It will be tested to discover the main influences on shopping choice decisions; the role these play in influencing attitudes, and hence behaviour; and, to recognise the E&SR shopper segments that exist within the grocery market.
Chapter Five
Research Methodology

5.1. Introduction

In light of the preceding literature review, it is clear that more specific investigation of E&SR issues in consumer shopping choice decisions is warranted. The purpose of this chapter is to discuss and present a comprehensive description, explanation and justification of the rationale, sampling and analysis of the research methodology adopted in this study. It details the philosophical position from which the research methodology is evolved, together with the considerations given to such an approach. In addition it includes a discussion and evaluation of the procedures embraced for use in data acquisition and analysis.

5.2. The Research Philosophy

The rationale for utilising the methodologies chosen for this research study was their perceived ability to address the specific research questions central to this study. The key question around which the discipline of social science revolves is ‘what comprises the proper understanding of society, and how that understanding can be achieved?’ Historically there has been much altercation about the best way of approaching social research i.e. the way in which social phenomena should be studied and the most appropriate philosophical position from which methods should be derived. The predominant view in the past has been an adherence to some form of Positivism, the key idea being that the social world exists externally and its properties should be measured through objective rather than subjective methods. An early adopter of this philosophy was Emile Durkheim (1951). He held the view that like physical phenomena following physical laws, social phenomena must follow underlying social laws and hence
concluded that there was little difference between physical science and social science except for subject matter. According to Durkheim this meant that sociologists could use the same methods employed in the physical and natural sciences to explain social phenomena. Therefore most positivists tend to use quantitative techniques and statistical analysis to test hypotheses, with the observer being independent from what is being observed.

Contrary to positivism is the phenomenological approach to social research. Phenomenology has received increased interest over recent years, and is modelled on an approach taken by Max Weber (1948). His view was that social phenomena were not just determined by social laws but were the product of voluntary human action, such that although humans have free will it does not mean their actions are totally random or unpredictable, but are expressed in a rational manner. Hence an understanding of this rational action can help predict human action. Weber’s opinion holds with a number of later researchers (Habermas, 1970; Reason & Rowan, 1981; Lincoln & Guba, 1986) who although maintaining differing opinions on phenomenology, still followed the belief that the world and ‘reality’ are socially constructed and given meaning to by people, and as such reacted against the positivist opinion that they are objective and exterior. Weber found scientific measures such as quantitative methods legitimate but inadequate when following this paradigm, a view shared by Easterby-Smith et al (1994, p.32) who state ‘they are not very effective in understanding processes or the significance people attach to actions’. Therefore although quantitative techniques are of value on occasion, qualitative methods and observation are predominantly used by sociologists, as they appreciate the different constructions and meanings that people place upon their experiences, and delve deeper than statistical techniques.
Phenomenology differs from Positivism as it aims to understand and explain why people have different experiences, rather than search for external causes and fundamental laws to account for their behaviour. This in turn affects the research methods employed as the relationship between the researcher and his/her data is different. Whereas the physical scientist will have nothing in common with what is being studied or observed, e.g. a gas or liquid, a sociologist may well have a common link with the data being investigated e.g. people, so having what Weber (1948) calls a 'direct relationship' with them. This enables researchers to be able to relate to their predicament and so generate a different depth and type of data. Clearly the fundamentally distinct paradigms of Positivism and Phenomenology represent two essentially polarised perspectives of the assumptions about the nature of reality (Morgan & Smircich, 1980). This situation lends itself to further investigation with respect to 'the best approach to take' when designing the methodology for this research study. This leads to the need for a discussion of the different distinctions of research available for use, and a critique of their uses with respect to the aforementioned paradigms.

5.3. Positivist vs. Phenomenology

Before entering a debate about different paradigms it is necessary briefly to return to the basics of social science research theory and reiterate the fundamental objective of research design. According to Easterby-Smith et al (1994, p.33) it is about,

"organising research activity, including the collection of data, in ways that are most likely to achieve the research aims."

Principally the 'ideal' choices for achieving this can be closely linked with the different philosophical positions of Positivism and Phenomenology, so an awareness of these areas is needed to ensure that the various methods used are compatible with each other and the approach being taken in order to achieve the research aims. Therefore a brief
discussion on how these two approaches differ is appropriate at this time in order to justify the methodology used in this research study. Easterby-Smith et al (1994) identified five key choices that are of particular significance to research design, as illustrated in Table 5.1. In addition another category (point 1, discussed in section 5.3.1) has been added to enable a discussion about which distinction of research to chose – qualitative or quantitative. The first five areas relate to the different use of positivist and phenomenological constructs, with the sixth area being predominantly associated with the positivist paradigm.

<table>
<thead>
<tr>
<th>TABLE 5.1. KEY CHOICES OF RESEARCH DESIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quantitative design vs. Qualitative design</td>
</tr>
<tr>
<td>2. Researcher is independent vs. Researcher is involved</td>
</tr>
<tr>
<td>3. Large samples vs. Small numbers</td>
</tr>
<tr>
<td>4. Testing theories vs. Generating theories</td>
</tr>
<tr>
<td>5. Experimental design vs. Fieldwork methods</td>
</tr>
<tr>
<td>6. Verification vs. Falsification</td>
</tr>
</tbody>
</table>


5.3.1. Quantitative vs. Qualitative design

Two different distinctions of research are widely recognised and understood in the world of social research, that of quantitative research and that of qualitative research. The application of methods and techniques used for these different approaches may vary, as does the type of data generated, therefore an awareness of their variances is needed before employing them in a research design. By definition quantitative means being measured by quantity, and therefore according to Denzin & Lincoln (1994) studies within this approach:

"... emphasise the measurement and analysis of large amounts of data relating to causal relationships between variables, not processes." (p.4)
with researchers tending to:

"(use)... mathematical models, statistical tables, and graphs, and often write about their research in impersonal, third person prose". (p.6)

If the meaning of 'qualitative' is interpreted it is understood to mean quality (in-depth) rather than quantity, and so in relation to research is defined by Denzin & Lincoln (1994) as being:

"... multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them." (p.2)

who continue to say that it involves:

"... the studied use and collection of a variety of empirical materials - case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts - that describe routine and problematic moments and meanings in individuals' lives." (p.2)

By its nature, there are implications that the methods used in qualitative research may not be as rigorously tested or measured in terms of quantity, intensity or frequency, as are quantitative ones. Consequently qualitative researchers highlight the value-laden nature of such inquiry, and the aim of discovering the processes of the creation and application of human meaning to substantiate its use.

The act of qualitative research has received criticism from traditional positivists as being a 'soft science', with researchers work termed as 'unscientific', 'only exploratory', 'entirely personal and full of bias' (Denzin & Lincoln, 1994, p.4) and as a 'value-free objectivist science' (Carey, 1989, p.104). In contradiction it has been characterised as 'natural rather than artificial' (Easterby-Smith et al 1994, p.32), to offer
'richly descriptive reports' (Hakim, 2000, p.34) and as being capable of 'intricate details ... that are difficult to convey with quantitative methods' (Strauss & Corbin, 1990, p.19). From this qualitative research can be seen to mean different things to different people; on one hand it is a critique of the truth and reason policies of positivism; on the other a commitment to the interpretive, naturalistic research approach of phenomenology. However Denscombe (1998) states that in the real world the deeper the differences are investigated, the less distinction there is between them. He found this was due to the approaches not being mutually exclusive, and the distinction too simplistic, with the true distinction coming from the way the data is analysed - a view shared by Strauss & Corbin (1990).

5.3.2. Researcher is Independent vs. Researcher is Involved

A researcher has to make the decision of whether or not to stay at a distance from the subject being researched, or get involved. Initially this choice is determined by the individual's philosophical view as to whether or not it is possible for the researcher to remain independent from what is being observed. Positivists hold the view that the researcher should remain independent in order for the results to be unbiased and valid. Hence a quantitative design is employed in order to produce numerical data that exists independently of the researcher, through the use of methods that have been tested for validity and reliability, with findings reflecting the event, not the researcher's influences. However, depending on the research area this may not always be possible, such that phenomenologists have turned the 'problem' into a 'strength'. By involving the researcher with the study subject this paradigm uses them as a 'measuring device' in order to improve the nature of data collected and interpreted. Qualitative research is used as it places emphasis on the role of the researcher in constructing the data, it can be used to gather in-depth information, and to generate theories.
5.3.3. Large samples vs. Small Numbers

Decisions have to be taken on how large a sample to examine. It can range from a large number of individuals/organisations/situations (cross-sectional research), to a small concentration over time, on a few subjects (longitudinal research). Positivists tend to employ a larger sampling technique through the quantitative methods of questionnaires and statistical techniques relative to this phenomena, in order to check how factors vary across different subjects. Sizeable samples are preferred, as statistics operate more safely in large numbers and are more reliable when a substantial percentage of the population is included. Difficulties in using this type of design can be 1) deciding how large a sample to use in order to be representative of the population, 2) it has very limited use in explaining why correlations exist, and 3) there can be problems in eliminating all of the external factors which could have caused the observed correlation. However phenomenologists suggest that focusing on a small number of subjects over long periods of time can overcome these problems (Pettigrew, 1985). It follows that by the focus being on variations within the broader environment over time rather than the immediate situation, patterns of change can be better explained. Although in its favour this approach can produce significant results from a small number of subjects and reduce the problems of gaining access to subjects, it is very time consuming, and highly skilled researchers are needed to implement and analyse the complex data.

5.3.4. Testing Theories vs. Generating Theories

Deciding which should come first - the theory or the data - affects the task of constructing and testing hypothesis or research questions, and again forms the difference between positivist and phenomenological paradigms. Bailey (1987) defines two different approaches, namely the classical approach and the grounded theory approach. Within positivist philosophy is the classical approach, which can be broken
down into three stages. The researcher's starting point is the theoretical knowledge taken from earlier literature or empirical findings, from which concepts will be taken and a proposition written stating a relationship between them. The second stage combines conceptual and empirical levels through the construction of empirical measures to be used to test the relationship between the concepts. This will involve writing a testable hypotheses based on the proposition stated in stage one, but including empirical measures. Finally in stage three data is generated and analysed in order to either confirm or disconfirm the hypotheses. This type of approach aims to produce representative data so that findings can be guaranteed across samples, and to break down complex relationships into distinct variables in order for them to be isolated and tested. In this situation theories and methods are established prior to the object of research, with conceptual, methodological and empirical processes being arranged in a linear model, as illustrated in Figure 5.1. Each of these stages can be treated individually, or in sequence. The advantages of this approach are: 1) the initial objective of what is to be investigated is clearly stated, so enabling research data to be collected straight away; and 2) it is easy for other researchers to replicate the methods used due to their clarity. However, it has some disadvantages, namely that results may only confirm rather than expand what is already known, and the approach gives little indication of why results are inconclusive or negative.
In contrast the use of qualitative research by phenomenologists requires a mutual interdependence of the single parts of the research process, with the theories being developed and tested as part of an ongoing process - an approach known as 'grounded theory', developed by Glaser & Strauss (1967) and expanded by researchers such as Turner (1983). As grounded theory is developed by entering the fieldwork phase without a hypothesis, describing what happens, and formulating explanations based on observations, it gives preference to the subject, data and field under study rather than theoretical assumptions. Glaser & Strauss say the theory should utilise concepts readily applicable to the data under study and be able to explain the behaviour being studied. It is the relevance of these areas to the research issue which determines how to select the study sample, rather than their representativeness, as with positivists. Unlike positivists, who aim to reduce the complexity of data by analysing it down into variables, this phenomenological approach sets out to increase the complexity of data by adding context to it. As Maykut & Morehouse (1994) state, the emphasis is on 'discovery' not 'proof'.

If these two approaches are compared it is seen that, in difference to the three stages of the classical approach, grounded theory amalgamates the second and third stages together. As the only hypotheses and variables being used are those arising from the data, which basically are those that are verified, verification as a separate stage is made redundant. Additionally where the classical approach moves from the conceptual level to the empirical level, grounded theory does the opposite i.e. starting at the empirical level and ending at the conceptual level. This is because grounded theory only uses concepts that are produced through the analysis of empirical data. Mixed reasoning can be given for using either approach. The classical approach has the advantage of it being a complete process that utilises the full benefits offered by theorising and data analysis, so having the ability to use any abstract concepts that can be generalised in order to create concepts, but needing to be weighed up against the disadvantage of possible measurement error occurring if tests used are limited in their representation of the abstract concept. Whereas the grounded theory approach has the advantage of reducing the chance of measurement error as concepts are based on empirically observed data, but with this comes the disadvantage that using this type of observed data can make employing abstract concepts difficult, and hence reduce the scope of theorising. Furthermore the accentuation of empirical data at a given location can make it difficult to generalise theories across a variety of times and places.

Qualitative research only fits the traditional linear style of research in limited ways. Rather, the central feature of the grounded theory approach is the circularity interlinking of its empirical parts, as illustrated in Figure 5.1. The advantage of this is that it makes the researcher constantly reflect on the research process as a whole, and on one step in relation to the others. Additionally it is possible to follow how relevant the methods and theories are to the subject matter.
In comparison to the positivist approach, the grounded theory approach is more flexible and can give further explanations and new insights into the research area. Nonetheless it has to be noted that it may take more time to implement and there is always the chance that no new developments will be made. Furthermore there may be a lack of clarity and standardisation of methods in this area, which can cause researchers difficulty when trying to repeat processes, but this would mainly be a concern of ‘pure’ positivists.

The grounded theory approach of Glaser & Strauss (1967) is a very ‘pure’ vision of generating theories. Whilst recognising the grounded approach, this study also recognises the concept of historical analysis (Gummesson, 1991) which is ‘not just a simple retrospective study but a reflection of the view that history is always in the process of being created from current social, political and economic reality’ (p.87), with Arbnor & Anderson (1977) arguing that human and social problems must be studied in their historical and social context. Therefore although this study will take heed of the essence of grounded theory – ‘beginning with an area of study and what is relevant to that area is allowed to emerge’ (Strauss & Corbin, 1990, p.23) - it will use past literature to ‘set the scene’ for its investigation, rather than following a purist grounded approach.

5.3.5. Experimental Design vs. Fieldwork Methods

Another choice facing researchers is whether or not they should be using experimental designs or fieldwork. Experiments are what underpin scientific methods and therefore are more of the positivist domain, although not essential to it. However, there can be some difficulty in the practicalities of producing pure experimental designs, thus leading to the development of ‘quasi-experimental’ designs (Campbell & Stanley, 1963). An example of this type of method is the ‘pre-test/post-test’ experimental
design, which takes multiple measures over time and has the advantage of reducing the effects of 'control' and 'experimental' groups not being fully matched. However a disadvantage of this type of design that must be noted is that it assumes nothing has affected the control group during the experimental period, which may not always be the case. An alternative to these types of research design is to use fieldwork, which can either use quantitative techniques in the positivist domain, or be open-ended and less formal for phenomenologists. One of the predominant styles within phenomenological fieldwork is that of ethnography. This type of research means the researcher getting involved with what is being observed in the study in order to develop a greater understanding of the subject(s) behaviour, their interpretations of their environment and external effects upon it. It can also involve tracing back certain 'group' experiences to their origins in order to follow how subjects have reacted to it, so widening basic knowledge and generating new insights.

5.3.6. Verification vs. Falsification

The sixth design issue is debated mainly within the positivist paradigm and involves the distinction between verification and falsification as introduced by Karl Popper (1959) as a way of dealing with 'the problem of induction'. The problem is that however much data is collected in support of a scientific law it is not possible to reach conclusive proof of truth of that law. Therefore Popper suggested that instead of looking for confirmation of the truth, one should always look for evidence that will disprove the theory and so disconfirm the hypothesis/law. The advantage of this style of hypothesis means that it only takes one negative result to falsify a claim, rather than the many confirmatory studies being undertaken that will still not conclusively prove it. Although this type of debate fits in with the positivist view of 'truth' and 'proof', it does not mean it holds no implications for the phenomenologist. 'Critical subjectivity' (Reason, 1988)
involves recognising one's own views and experiences, but not letting them cloud one's judgement by not looking for evidence that might confirm or disconfirm one's beliefs. An overall advantage of falsification is the time factor, as answers may appear much more quickly if disconfirmatory evidence is deliberately sought.

5.4. Integrative Research Paradigm - Methodological Triangulation

Although the six research design choices outlined before are relatively 'pure' they are not absolute, and despite the fact that there has been extensive theoretical debate about the relative merits of different theories, no individual method has been named as being universally acceptable for being 'best' in all situations. Due to this no method can be disregarded. Hence emerging schools of thought are proclaiming the strengths of the complementary use of alternative research paradigms in management research, and recommend that researchers draw upon designs from outside their immediate field (McGrath, 1982). This view is gaining some support among contemporary scholars, so ensuring that the richness of phenomenological enquiry is balanced with the ability to have a clear means of testing research questions and hypotheses (Marsden & Littler, 1998). By employing an integrated combination of data sources the research can check the external validity and internal consistency of the information collected (Burgess, 1982) and enables researchers to use methodologies that are best suited to both the aims and context of their inquiry. This use of multiple, but independent, measures is known as triangulation as a minimum of three reference points are used. Denzin (1989, p.237-41) distinguishes four categories of triangulation, namely: data, investigator, theory and methodological. Initially triangulation was conceptualised as a strategy for validating results obtained from individual methods, but more recently it has shifted towards:
"... enriching and completing knowledge and ... transgressing the (always limited) epistemological potentials of the individual method." (Flick, 1998, p.230).

Triangulation may also be used as a means of underpinning the knowledge acquired from qualitative methods, in terms of its potential to systematically extend and complete the potentials of knowledge production.

The use of mixed methods, and in particular that of methodological triangulation, which utilises a mixture of both qualitative and quantitative methods to collect data, is a generally accepted approach that allows the same phenomenon to be studied using a combination of methodologies (Todd, 1979; Brannen, 1992; Denscombe, 1998). Despite some dissenters to the use of multiple methods (Jick, 1979) there are many who argue in its favour. Support for this area is given by Flick (1998) who sees this use of triangulation as:

"the complementary compensation of the weakness and blind spots of each single method" (p.259).

A view which is backed by Wilson (1982, p.58) who states:

"qualitative and quantitative approaches are complementary rather than competitive methods ... (and the) use of a particular method ... must rather be based on the nature of the actual research problem at hand."

Methodological triangulation is advocated by Jick (1983) who sees qualitative and quantitative methods as complementary rather than rival methodologies. Denscombe (1998) agrees different methodologies can complement each other and be used to produce differing but mutually supporting ways of collecting data. His argument states that using multiple-methods produces different kinds of data on the same subject, so allowing the researcher to study the phenomenon from different perspectives and so understand the subject in a more rounded and complete fashion than would be the case
had only one method been used. If multiple-methods were not employed comparisons of data can not occur, so increasing the potential for pursuing a 'false' line of enquiry by putting too much emphasis on one data collection method, rather than being able to corroborate or discard data based on comparisons of different methodological findings. However, Oppermann (2000) heeds a note of caution with mixed method approaches, stating those which involve multiple qualitative methods may be difficult to replicate.

There is another debate here as to whether or not one true point of social reality can be found, as there can with the navigational use of triangulation from whence the term came. On one hand positivists believe that there is a single truth and reality and they would expect the use of triangulation to produce just one point of 'truth'. On the other hand differing views such as that of phenomenologists feel that this is too rigid and that there is an area around which the truth may be found, rather than just one point. Therefore, to diffuse this controversy, researchers should acknowledge that the use of methodological triangulation may point data in the same direction, but that it is unlikely to meet at an exact, unambiguous point of reality, and may be used to 'systematically extend and complete the possibilities of knowledge production' (Flick, 1998, p.230). However, if consideration is given to this point, and the arguments that multiple methods 'enhance the validity of the data' (Denscombe, 1998, p.85), and 'increase the reliability of the results' (Gummesson, 1991, p.122), the focus of the research design for this study should be on recognising the distinct perspective each method provides and using a combination of those most suited to the situation being investigated.

5.5. Research Methodology and Rationale

Developing from the aforementioned conclusions a methodological approach based on the principle of triangulation was followed. In this study the three data collection points
are: 1) the review of the existing literature; 2) focus group discussions; and, 3) face-to-face questionnaires. The results from each method are compared with the other two points to check internal consistency (how far does the researcher's presence influence the generation of data?) and external validity (can the data obtained in studying one situation be generalised to other situations?) (Burgess, 1984) by asking the question 'do the different data collection techniques produce results which are contradictory or comparable?' (Romano, 1989, p.40). The use of triangulation as a way of improving methodological procedures for measuring human motives is upheld by Schiffman & Kanuk (2000) who state:

"...using a combination of assessments called triangulation... (achieves) more valid insights into consumer motivations than ...by using any one technique alone." (p.89)

A mixed method approach avoids the study becoming method-bound, so achieving an unbiased perspective on the research question(s) by complementing the strengths and weaknesses of various qualitative and quantitative methods. However, Brannen (1992) identifies several factors that need to be considered during the structuring process of combining approaches and methods. She states firstly that consideration needs to be given to the relative importance awarded to each approach within the overall project. In this study the methods are given equal weight, with roughly equal resources being allocated to each, and play an equal part in the analysis. Secondly consideration is given to time ordering - whether the methods are carried out consecutively or simultaneously. As the nature of this study is exploratory, the use of past literature to 'set the stage' and focus it on unexplored areas is considered appropriate. Qualitative methods will be employed first to formulate the theoretical problem, which a quantitative survey will go on to address.
5.6. Phase 1 – Literature review

As has been identified through a review of the existing literature, no empirical definition of shoppers E&SR concerns has been developed. Neither has their role in shopping decisions, or contribution to establishing shopper types been investigated. Research into this area for the most part has concentrated around single item concerns of E&SR, or single product areas, rather than looking at the multiple aspects of E&SR and whether or not these areas are interlinked. The principal aim of this research study is to fill this gap. Specific research questions emerging from reflection on the literature are:

1. What factors including ethical and social responsibility issues influence consumers’ grocery shopping choice decisions and behaviour?

2. How important are ethical and social responsibility factors compared to other traditional store image / product attribute aspects in grocery shopping choice decisions?

3. How do attitudes to ethics and social responsibility issues influence grocery shopping behaviour?

4. Are there different buyer types within the sector of E&SR consumers which may be differentiated and segmented by their concerns?

As the research progressed the ‘over-arching area of research investigation’ (Strauss & Corbin, 1998), was defined as the influence of E&SR issues in consumer shopping
choices. The research objective was therefore to gain a greater understanding of this topic.

5.7. Phase 2 – Qualitative Research: Focus Groups

The second phase – that of qualitative data collection - was considered in line with a phenomenological research paradigm, with the design being primarily aimed at confirming and refining the research questions constructed from the literature review. Within social science there are two main ways of collecting qualitative data – individual interviews and participant observation in groups. Focus groups, as group interviews, incorporate features of both of these approaches, which enables them to fit in with existing qualitative methods whilst still maintaining their own distinctive identity. They are defined by Berg (1995, p.68) as:

"... an interview style designed for small groups. ... guided or unguided discussions addressing a particular topic of interest or relevance to the group and the researcher."

The use of focus groups as a means of qualitative research in social science can first be seen in the published work of Robert Merton and his colleagues (Merton & Kendall, 1946; Merton et al, 1956), when they used this method to examine the persuasive effects of wartime propaganda. This type of data collection method has evolved over time to be used by many other published authors in the social sciences (Morgan & Spanish, 1984; Merton, 1987), but most predominantly in areas of marketing research (Morgan, 1988; de Chernatony, 1993; Markwick & Fill, 1997), including fields related to the topic of ethics and social responsibility such as purchase intentions of ecologically safe products (Amyx et al, 1994) and the conceptualisation of marketing ethics (Thompson, 1995).

Focus groups cannot completely replicate the data generated by individual interviews or
participant observation, however they do produce a type of data that would be difficult to obtain using either of these other two methods. According to Morgan (1988, p.12) the 'hallmark' of focus groups is:

"the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group".

Berg’s (1995) statement helps to emphasise one of the main reasons of why focus groups are favoured over participant observation:

"... informal group discussion atmosphere of the focus group interview structure is intended to encourage subjects to speak freely and completely about behaviours, attitudes, and opinions they possess." (p.68)

a view seconded by Morgan (1988, p.17) who finds focus groups ‘better suited to topics of attitudes and cognitions, while participant observation is superior for studies of roles and organizations’. It must be noted though that the major disadvantage of focus groups compared to participant observation is that they are conducted in unnatural social settings and are limited to primarily verbal behaviour, which leads some practitioners to exclude them in their studies (Baker & Balmer, 1997; Dickson & Sawyer, 1990). However the ability to locate and gain access to ‘natural’ settings where a substantial amount of observations can be collected is often difficult, and in addition brings into question whether participant observation methods are ‘deceitful’ (Ditton, 1977). This in turn ‘raise(s) ethical dilemmas, particularly when conducted in a covert way’ (Easterby-Smith et al, 1994, p.97) where ‘confidential material might be disclosed inadvertently’ (Denscombe, 1998, p.152).

When comparing focus groups to individual interviews for their use in research design Denzin & Lincoln (1994, p.364) state that focus groups are:
"... an option that deserves consideration because it can provide another level of data gathering or a perspective on the research problem not available through individual interviews."

The main advantage of utilising focus groups is the ability to create and observe interaction between participants on a given topic, with 'a far larger number of ideas, issues, topics, and even solutions to a problem ...(being) ... generated through group discussions (rather) than through individual conversations' (Berg 1995, p.69). This is not to say that there is no benefit to carrying out individual interviews, as it is possible to pursue a more detailed content through this method, advocated through the work of several researchers in the area of ethics & social responsibility (Crane, 1997; Menon & Menon, 1997; de Chematony & Dall'Olmo Riley 1998). This does however come at the expense of being able to observe participant interaction, so obtaining greater information on attitudes, opinions and experiences. The fundamental point to recognise at the research design stage is that one method may be preferable to another depending on the topic and situation.

In order to help identify when focus groups are best utilised for collecting qualitative data it is best to first identify their strengths and weaknesses. This will assist in structure and approach taken in the research design. Focus group research is advantageous as it can be conducted relatively quickly and at a reasonable cost – especially if costs are measured in 'units of time'. They can take far less time to conduct than more lengthy procedures, such as individual interviews, to encompass the same number of participants. Focus groups have the ability to explore topics and generate research questions/hypotheses, which is an advantage when exploring a new topic, or putting a different focus on an old one, and enables the production of useful data with relatively little direct input from the researcher. In addition a major strength of focus groups is their ability to collect data through group interaction, with the scope
to generate information more individual than that of other techniques such as
preconceived questions. As the emphasis is on interaction between group members
rather than the individual and the researcher, greater prominence is given to the
participants’ viewpoint. The above points are confirmed by Morgan (1988, p.21) who
states that:

"... what focus groups do best is produce an opportunity to collect data from groups
discussing topics of interest to the researcher."

However in contrast to these advantages consideration has to be given to the fact that
ease of use has to be weighed up against the fact that they will not be conducted in
‘natural’ settings, and therefore could incorporate some uncertainty about the accuracy
of what participants say. By relying on group interaction it is not known whether it
really mirrors individual behaviour. Furthermore, trying to guide rather than participate
in the discussion may lead to the researcher having a lack of control over the data
generated, especially when compared to individual interviews. Hence there is a need
for clarity of issues to be discussed especially across separate discussion groups.

Although focus groups can be used as a self-contained means of collecting data, it has
to be recognised that there are benefits of combining them with different methods, such
as helping to develop interview schedules and questionnaires, and getting participants’
interpretations of results from earlier studies (Morgan, 1988). In the case of this
research study, focus groups are to be linked with both questionnaires and a literature
review. The purpose of the focus groups is to elicit preliminary, exploratory data, with
regard to the research questions identified from the literature review. In respect of this
they were deemed a suitable method to assist in the item and scale construction of
measures necessary to assess consumers shopping choice criteria of store image and
E&SR factors. Additionally they will be used to generate bi-polar scale measures for
the Extended Theory of Planned Behaviour model which will be employed to identify consumer attitudes to E&SR issues in the third phase of research. A semi-structured guide was employed to ensure standard topics were covered i.e.

- Nature of respondents shopping behaviour patterns e.g. stores used; frequency; transport, etc.

- Background of influences on respondents shopping behaviour e.g. store image factors; product attributes; E&SR factors.

- How these influences affect their decision-making and grocery shopping behaviour.

- Respondents’ perceptions on the role of grocery retailers in respect of E&SR, and their evaluations and experiences of patronising these outlets, and the information they provide.

Sources of past literature were used to operationalise the focus groups and form a basis from which to introduce and clarify existing concerns, as well as elicit new ones. These can be viewed in Table 5.2.


<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience/location</td>
<td>Fisk, 1961/2; Kunkel &amp; Berry, 1968; Lindquist, 1974; Louviere &amp; Gaeth, 1987; Hutcheson &amp; Moutinho, 1998; Zimmer &amp; Golden, 1988; Erdem et al, 1999</td>
</tr>
<tr>
<td>Other facilities/services</td>
<td>Fisk, 1961/2; Kunkel &amp; Berry, 1968; Hutcheson &amp; Moutinho, 1998; Sirohi et al, 1998</td>
</tr>
<tr>
<td>Reputation</td>
<td>Fisk, 1961/2; Kunkel &amp; Berry, 1968; Zimmer &amp; Golden, 1988; Erdem et al, 1999</td>
</tr>
<tr>
<td>Product design/packaging</td>
<td>Kunkel &amp; Berry, 1968; Lindquist, 1974; Amyx et al, 1994</td>
</tr>
<tr>
<td>Food &amp; drink safety</td>
<td>Hill &amp; Lynchehaun, 2002; Keynote, 2002; McEachern &amp; McClean, 2002; Mintel, 2003a</td>
</tr>
<tr>
<td>Animal welfare</td>
<td>Prothero &amp; McDonagh, 1992; Owen &amp; Scherer, 1993; CWS, 1995; Mintel, 2003a</td>
</tr>
<tr>
<td>Ethical trading</td>
<td>Lill et al, 1986; Owen &amp; Scherer, 1993; Creyer &amp; Ross, 1997; Strong, 1997; Shaw et al, 2000</td>
</tr>
<tr>
<td>Human rights</td>
<td>Lill et al, 1986; CWS, 1995; Mintel, 2000</td>
</tr>
<tr>
<td>Honest labelling</td>
<td>CWS, 1995; Wright, 1997; CWS, 2000</td>
</tr>
</tbody>
</table>

Respondents were screened through a filter questionnaire (see Appendix IV) to ensure they had some knowledge of E&SR factors before being invited to participate in the focus group. The focus group structures were free flowing and respondent led, with the interviewer introducing a few main themes so allowing respondents to address these themes in their preferred order and with individual emphasis.

The advantage of using focus groups prior to questionnaires is that it gives the
researcher a comprehensive insight into the participants' minds, but also enables them to express it in their terms of diction. It is easier to detect if participants misinterpret or do not understand the question in the context it was meant, and if needed, find an appropriate solution then and there (Knodel et al, 1984). Group interviews can be used for triangulation purposes (Denzin, 1989; Denzin & Lincoln, 1994) and in this research plan focus groups will be triangulated with the literature review and questionnaires, so strengthen the overall research project.

5.8. Phase 3– Quantitative Research: Face-to-face Questionnaire Survey

Phase three of data collection integrates the Positivist paradigm into the research design through the use of a quantitative survey aimed at addressing the research questions constructed from initial data sources. Questionnaire surveys are widely used as an empirical measure in research methodologies which span many subjects, and their basic form can be traced as far back as the 17th century. A split between the methods used in the areas of psychology and social science from those used in philosophy started in the 19th century through the development of instruments used to measure mental and social events, whose birth was accredited to the likes of Adolphe Quetelet, Gustav Fechner and Sir Francis Galton. The formal use of paper-and-pencil questionnaires and related information seeking methods as we recognise them today began with the first formal personality inventory – the Woodworth Personal Data sheet – appearing in 1918 (Woodworth, 1919).

Surveys may be implemented in a variety of ways, each of which has been employed in the reviewed literature on E&SR and store patronage factors. Approaches include postal questionnaires to typify the socially conscious (Anderson & Cunningham, 1972) and ecologically concerned (Kinnear et al, 1974) consumer, and shopping behaviours
and motivations (Dholakia, 1999); face-to-face questionnaires about the relationship between store image, satisfaction and loyalty (Bloemer & de Ruyter, 1998); and telephone surveys to measure the role of perceived consumer effectiveness as a motivator to be environmentally conscious (Ellen et al, 1991), as well as perceived consumer effectiveness as a moderator of environmental responsibility (Berger & Corbin, 1992).

As has been discussed with any research design needs to consider the strengths and weaknesses of a particular approach in order that the chosen methods complement each other and that the purpose and objectives of the research is met. The data that is collected in these ways is used to examine the research questions and therefore consideration of the advantages and disadvantages of the different ways of implementing them is needed before deciding which best suits the research purposes.

Face-to-face interviews have been used throughout the reviewed literature, due to them possessing many strengths of interviewer control, depth of question and high response rates compared to other methods. Taking these factors one by one and comparing them with postal or mail questionnaires elicits the following factors: when collecting data there needs to be some sort of control over who the respondent is in order for the findings to be valid. Face-to-face interviews allow the interviewer to have control over who fills in the survey, which is not the case with postal surveys, meaning that untrue or biased results may occur.

Depth of inquiry is also a factor of importance to data collection, as the researcher would like to get as much detail as possible for the costs that are being incurred. With face-to-face interviews the length of the survey may be longer, with more complex
questions being asked, as the interviewer may clarify misunderstandings; whereas with postal surveys the respondent is likely to give up, or omit the question if they do not understand it. Additionally visual aids may be used with face-to-face interviews which is not as easy for other types of survey. The costs involved with face-to-face interviews may be higher than those of postal surveys, but the quality of data is likely to be higher. However postal surveys are widely used in both industrial and academic research studies, given their major advantage of being low cost as the need for trained interviewers with their travelling expenses is redundant. This means that postal surveys can still be viable even if the sample population is spread over a wide geographic area, a fact that would make other interview methods such as face-to-face interviews prohibitive due to costs. However as this research study is concentrating on the South West of England, the slightly higher costs of face-to-face street interviews were not considered prohibitively excessive given the enhanced quality of data that would be gained.

Face-to-face interviews can cause a problem in their implementation with respect to obtaining experienced and suitable interviewers. Differences can occur in the style of interview when using multiple interviewers and so affect the results. Postal surveys on the other hand can be said to reduce this chance of biasing error as no interviewer is involved. To omit this potential problem from this study, given the small geographic coverage, it was feasible to use only one experienced interviewer, therefore reducing the chance of bias as much as possible.

Response rates are an important factor in obtaining the data needed, and with face-to-face interviews response rates tend to be higher than those for postal questionnaires, due to the interviewer being present and the questionnaire being completed then and there.
The nature of the topic under study has to be considered as it may affect the response rate. Certain sensitive subjects may be more suited to the privacy of a mail survey, as they provide a greater level of anonymity for the respondent. In respect of this research study there is no such material and therefore this concern was not raised.

Given the previous discussion, face-to-face interviews were chosen as the data collection method for the third phase of the research design. A structured questionnaire was developed to measure factors of concern taken from the interpretation of focus group findings, and to establish their generalisability to a larger population. Questionnaire construction took into consideration the guide on ‘Constructing a TPB Questionnaire’ (Ajzen, 2002) to ensure standard topics and measures were covered to be able to run this model. Aims of the survey were to establish:

- Nature of respondents shopping behaviour patterns e.g. stores used; frequency; transport, etc.

- Importance of individual store image, product attributes and E&SR factors as influences on respondents grocery shopping behaviour.

- Attitudes and intention to behave in an E&SR manner whilst grocery shopping.

- Respondents perceptions of the effect of ‘influential others’ and ‘influential factors’ on their behaving in an E&SR way.

Sources used to operationalise the questionnaire came from past sources of literature (see Table 5.2.) and concerns raised and refined in the focus group discussions.
Respondents were screened through a filter questionnaire (see Appendix Va) to ensure they had some knowledge of E&SR factors before completing the main questionnaire (see Appendix Vb). Pictorial representations were used to aid consumers, shown in Appendices V(c) and V(d) - a technique which has been found to assist respondents interpretation of the subject in question (Mazursky & Jacoby, 1986).

5.9. Sampling

The basic principle of sampling according to de Vaus (1991, p.60) is to:

"Collect information from only some people in the group in such a way that their responses and characteristics reflect those of the group from which they are drawn."

This has the benefit of providing a cheaper, faster, and in general easier way of collecting the views of a particular large population, which would otherwise be too costly and impractical. In addition, sampling not only involves decisions about which people need to be interviewed or observed, ‘but also about settings, events and social processes’ (Miles & Huberman, 1994 p.37), the importance of which, they state, increases with multiple site studies.

The two main areas of sampling are probability sampling – where each person within the population has an equal chance of being chosen; and non-probability sampling – where certain people have a greater chance of being chosen. Under each of these sample types fall several different methods of acquiring your sample, the choice of which may be dependent on the research problem, finance, desired level of accuracy, and data collection methods.

5.10. Focus Group Sampling Frame

For the focus groups in this research study non-probability sampling was used, as this
form of data collection was an exploratory source of people's attitudes, opinions and behaviours towards ethics and social responsibility issues and grocery retailing. Using probability sampling to find out what people's actual concerns were would have been very difficult; and it would have been expensive to obtain a sample large enough to be meaningful. Also due to the subject matter, people might be dishonest about what their concerns and behaviour were, through feeling they should be more concerned. Hence a bias would be produced, meaning that the sample would not be representative. The use of such a sampling form is upheld by de Vaus (1991, p.77), who states:

"Some research is not all that interested in working out what proportion of the population gives a particular response but rather in obtaining an idea of the range of responses or ideas that people have. ... we would simply try to get a wide variety of people in the sample without being too concerned about whether each type was represented in its correct proportion."

For this study the non-probability method of quota sampling was chosen, as its aim is to produce representative samples without random selection. In addition using this type of sampling frame enables the interviewer to select cases with particular characteristics, which allows for the incorporation of findings from previous studies, discussed earlier in the literature review, so aiding the inclusion of people whose characteristics indicate they are more concerned with ethics and social responsibility. This then enables the identification of certain concerns and behaviours of the sample population to be taken forward to the quantitative data collection stage to be checked against a larger population.

Further to the decision on what type of sampling to use comes the decision on how large the sample size needs to be. Again this is dependent on 'the nature of the population and the purpose of the study' (Bailey 1987, p.95) and 'the degree of accuracy we require for the sample' (de Vaus 1991 p.70). Bailey (1987 p.96) goes on to state that
'around 30 cases seems to be the bare minimum for studies in which statistical data analysis is to be done' a number that is agreed by Denzin & Lincoln (1994 p.225) who state 30-50 interviews. Focus group size in comparison to the overall sample size is relatively small, although different researchers put different figures on the numbers needed - 'seven to nine respondents' (Gordon, 1999; Kent, 1999), 'six to twelve' (Hague, 1995).

As was mentioned previously, consideration has to be given to the purpose of the study when looking for the characteristics that need to be included in order to define the quota sample. Research into the past literature showed that similar characteristics were found amongst those people shown to be more concerned about ethics and social responsibility issues. The findings outlined in Chapter 4 are taken into account when following the approach of the Phenomenological research paradigm, so developing the profiles for the focus groups from the findings of past literature. That is (demographically speaking) socially conscious consumers tend to be female (Balderjahn, 1988; Prothero, 1990; Roberts, 1996; Minton & Rose, 1997), younger, well educated, with a middle to upper class social status (Kinnear et al, 1974; Arbuthnot, 1977; Murphy et al, 1978; Van Liere & Dunlap, 1980), involved in community activities (Webster, 1975), and holding the belief that the way they behave will have a positive effect on the environment and society's well being (Kinnear & Taylor, 1973; Hines et al, 1986; Balderjahn, 1988; Ellen et al, 1991; Berger & Corbin, 1992). In addition, with regard to lifestage people with children are more likely to be environmentally concerned (Peattie, 1995). The literature also revealed some debates on certain characteristics: 1) Reizenstrin et al (1973) found males to be more concerned for ecological matters than females; 2) Prothero (1990) and Roberts (1996) found middle-aged consumers most likely to be environmentally concerned rather than
younger people; and 3) Prothero (1990) found rural dwellers most likely to show concern for the environment; whereas Lowe & Pinhey (1982) found a stronger relationship with those in urban areas. To take these differences into account, a sample that includes these areas as well as those aforementioned was constructed.

5.10.1. Market Town Classification

One of the main characteristics that needed to be classified in order to decide on where the multi-sites for the focus groups would be, was the difference between a rural (market town) and an urban (city) area. This consideration was needed in order to be able to distinguish between the concerns of those who lived in each.

The historical significance of market towns and their trading activity can be traced back over many centuries. The word ‘market’ stands for the permission given by the lord of the manor to a community allowing ‘the meeting together of people for the purchase and sale of provisions or livestock, publicly exposed, at a fixed time and place’ (Chamberlin, 1985, p.8). The Department of the Environment (1994) states that:

"Market towns have long been places to trade, and though in many cases the old agricultural markets are closed, most still retain regular outdoor general markets, with a strong emphasis on food".

Whereas the Countryside Agency (2000) define ‘market towns’ by:

"... their capacity to act as a focal point for trade and services for a rural hinterland. (and) cover towns with a wide variety of backgrounds, not just those that host a traditional agricultural market, or are historic. They include seaside resorts and fishing ports as well as mining and manufacturing towns."

Characteristics of a market town verge on the size of the population living there, which according to Chamberlin (1985, p.12) is 35,000 people or less, as he argues ‘population size has an immense significance in determining the character of a community’. He
continues to say that many market towns of a significantly small smaller size are flourishing today, such as Ludlow in Shropshire (population 7579), Wells in Somerset (population 8374), and Barnard Castle in Co. Durham (population 5016). In agreement are the Rural Development Commission (1996) who found that market towns had small population sizes, identifying them as being between 3,000 – 25,000 people, and the Department of the Environment, Transport and the Regions et al (1998) found them to have a population of between 5,000 – 30,000 people. However, the Countryside Agency (2000) believes that population size is less important than the town’s potential to act as a hub for it’s local rural economy, and states that it considers market towns to broadly have a population of between 2,000 and 20,000 people. All of the aforementioned researchers agree that the majority of smaller towns tend to be in more remote rural areas of the country.

Many market towns have retained original features such as their historical street pattern (Department of the Environment, Transport and the Regions et al, 1998), ancient buildings (Rural Development Commission, 1996), ‘shambles’ (Colwell, 1983; Chamberlin, 1985), with the market often remaining ‘on the same day of the week for five or six hundred years’ (Colwell, 1983, p.12). However the town itself offers a ‘narrowing range of services’, which are ‘generally anchored on food and convenience retailing’ (Rural Development Commission, 1996).

Past studies by Sainsbury (Williams, 1995) found that this type of town had a lower percentage of ABC1 categories than the national average, and C2DE categories formed the larger part of the population. In addition the population tended to be older, and attract those in the retirement life-cycle stage. However, small market towns that are easily accessible and relatively close to larger cities have seen an increase in the number
of well-off families moving to them, with the preference to commute to work, so expanding once small populations. These characteristics were taken into account for the focus group quota construction.

5.10.2. City Classification

In contrast to the rural ‘market town’ is the urban area that can be defined as a ‘city’. A city requires an Order in Council, an order from the monarch, for a community to be upgraded to a city, and in addition it has a cathedral. Both of these factors are detailed in the Oxford Dictionary’s definition of a city as being a:

“large town, strictly one created by charter, and containing a cathedral.”

5.10.3. The Focus Group Sample

A profile of the sample compiled for the focus groups in the first data collection stage is illustrated in Table 5.3. In addition to considering the demographic, lifestyle and location findings from the studied published literature, this research design is concerned with the choice of store and E&SR issues. Therefore the factor of ‘competition’ was also included to try and minimise the effect of people shopping at a certain store due to it being the only one in the area. So as much as possible areas were chosen that contained more than one grocery store, albeit generally of different sizes.

<table>
<thead>
<tr>
<th>GRP</th>
<th>JICNARS</th>
<th>ACORN</th>
<th>GENDER</th>
<th>AGE</th>
<th>TOWN/CITY</th>
<th>DEPENDENT CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>students</td>
<td>C.8.22</td>
<td>Mixed</td>
<td>20-24yrs</td>
<td>City</td>
<td>No children</td>
</tr>
<tr>
<td>2</td>
<td>AB(C1)</td>
<td>B.4.11</td>
<td>All male</td>
<td>25-34yrs</td>
<td>City</td>
<td>No children</td>
</tr>
<tr>
<td>3</td>
<td>ABC1</td>
<td>A.1.5</td>
<td>All female</td>
<td>35-44yrs</td>
<td>Market town</td>
<td>Dependent children</td>
</tr>
<tr>
<td>4</td>
<td>C1C2</td>
<td>D.10.30</td>
<td>All female</td>
<td>20-34yrs</td>
<td>Market town</td>
<td>Dependent children</td>
</tr>
<tr>
<td>5</td>
<td>ABC1</td>
<td>B.5.15</td>
<td>All female</td>
<td>45-54yrs</td>
<td>Market town</td>
<td>Dependent children</td>
</tr>
<tr>
<td>6</td>
<td>C2DE</td>
<td>E.11.33</td>
<td>All female</td>
<td>35-44yrs</td>
<td>City</td>
<td>Dependent children</td>
</tr>
<tr>
<td>7</td>
<td>ABC1</td>
<td>C.6.16</td>
<td>All female</td>
<td>55-64yrs</td>
<td>City</td>
<td>NO Dependent children</td>
</tr>
</tbody>
</table>
These criteria were then looked at in comparison to market towns and cities in the South West of England to find suitable locations that closely matched the requirements of the research study. The resulting locations were: Plymouth, Exeter, Bristol (cities); and, Chudleigh, St Austell and Westbury (market towns). Further substantiating evidence for their choice can be found in Appendix VI.

The number of respondents participating in this study area totalled forty-two, so averaging 6 per focus group, which falls within the sample size figures of six to twelve recommended by Hague (1995).

5.11. Questionnaire Survey Sampling Frame

The grid shown in Table 5.4. shows the sampling frame used for each of the six questionnaire locations. The forty-two white squares indicates the type of respondent required per location, and represents similar respondent characteristics found in the focus groups and the previously studied literature.

<table>
<thead>
<tr>
<th>Table 5.4. Questionnaire Survey Quota Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Table 5.4. Questionnaire Survey Quota Sample" /></td>
</tr>
</tbody>
</table>

**KEY:**

- **F** = Female
- **M** = Male
- **DC** = Dependent Children i.e. Children in the household age under 16yrs, or 19 years and under and in full time education
- **No DC** = No dependent children, or no children of any age

160
A face-to-face questionnaire based survey was carried out in four cities (Bristol, Exeter, Plymouth, Truro) and two market towns (Yeovil, Totnes) within the South West of England.

5.12. Summary

This chapter compares and contrasts different types of data collection methods to establish both the strengths and weaknesses of each. These discussions are then overviewed to decide which methods are best suited to the current study by evaluating which criteria is most significant to the research objectives, taking into consideration practicalities such as time, cost, availability and experience of any interviewers being used, together with the detail of information that needs to be gathered to fulfil the research objectives.

After the literature review a phase of exploratory research is required to establish the factors influential in shopping choice decisions; the objective being to find out the concerns of a representative E&SR consumer sample, with discussions eliciting more information. Personal interviews in the form of focus groups are considered the best approach to achieve this. For the second data collection stage, where answers are required to detailed, structured questions along with a good response rate to clarify findings from the focus groups, an individual face-to-face questionnaire survey is deemed appropriate. The chapter then moved on to discuss how samples were to be obtained for both of the data collection stages.
It is clear that a review of the store image elements is vital in order to update attributes of importance given the market changes that have occurred over the past few years. Discrepancies found in the profile of the E&SR consumer over past studies warrants a detailed investigation in order to advance this field of research.

Over the next three chapters an extensive analysis of the data collected by the research methodology aforementioned in this chapter is presented, which commences with an analysis of the focus group discussions.
Chapter Six

Qualitative Research Results:
Grocery Shopping Behaviour and Influences

6.1. Introduction

Reflecting the orientation of this study as a whole, the use of qualitative techniques in this chapter was designed to be exploratory. Although aspects of the past literature are drawn upon to form a ‘starting point’ for developing a typology of E&SR concerns, as previously discussed, these past studies have only considered such factors in isolation and not in comparison to other E&SR or store/product image influences. Therefore this first phase of data collection is used to address the nature of respondents’ shopping behaviour patterns and explore the factors that influenced them in terms of both E&SR and store image. Once these factors are established, the focus turns to explore the effect these factors have on shopping behaviour and whether they vary by shopper type.

The aim of this initial stage of data collection was to answer the first of the research questions identified in section 5.6:

*RQ1: What factors including ethical and social responsibility issues influence consumers’ grocery shopping choice decisions and behaviour?*

6.2. Overview of Content Analysis

Krippendorff (1980) defined content analysis as “a research technique for making replicable and valid inferences from data to their context” that has “an important place
in the methodology of investigative tools”. It was considered an appropriate method due to the transcript nature of the data and one that Malhotra & Birks (2003, p.248) identify as “well suited for the observation of communication”. Content analysis is widely used in the social sciences and humanities and can be employed for many purposes, including identifying the intentions and other characteristics of the communicator and reflecting patterns of groups (Weber, 1990). It is advantageous over quantitative techniques in this part of the methodology as it has the ability to accept unstructured material, i.e. conversation. This means that a more accurate interpretation of the situation being studied is gained, as there is no need to rely on structured material from quantitative methods. As interview schedules and mail questionnaires have predefined responses, they limit respondents’ ability to answer ‘in their own words’.

A central idea to content analysis is that many of the words or themes in the text are coded and classified into much fewer content categories. The words, phrases or other units of text in the same category are presumed to have similar meanings. This similarity may be based on the precise meaning of the word, or words sharing similar connotations. In this particular study this will relate to the coding and grouping of issues of E&SR and store image into categories. In order to make valid inferences from the text the classification procedure (coding) has to be reliable in terms of being consistent i.e. similar items are uniformly coded. Additionally the classification procedure should generate variables that are valid, in the respect that they measure/represent what the researcher intended them to measure. These areas are seen as the most crucial aspects of content analysis by Berelson (1971) as ‘categories contain the substance of the investigation’.
Reliability of the coding procedure was achieved by using only one human coder for the entire content analysis so overcoming the problem of inconsistencies, which could constitute unreliability, arising from the use of multiple coders (Weber, 1990; Neuman, 1994). Construct validity (Krippendorff, 1980) was achieved through justification of the analytical constructs being found in prior content analytical research (Kunkel & Berry, 1968; Lill, 1986; Zimmer & Golden, 1988).

At this point the option of using a computer-aided analytical package was considered and rejected. Whilst some of these are highly compatible with grounded analysis (Richards & Richards, 1994), they have been criticised for leading to rather 'narrow and exclusive' approaches to the data (Seale, 2000), which were considered inconsistent with a highly exploratory approach (Coffey & Atkinson, 1996; Denzin & Lincoln, 1998).

6.3. Methodology

Data was collected through the implementation of seven focus groups. A summary of the groups’ characteristics was discussed earlier in Chapter 5. The first focus group was a pilot session to check and clarify that there was no bias or misinterpretation of the material to be used. Given that no misinterpretation was recorded, and that the data collected from this session was on a par to that of the following six groups, it was included in the overall analysis.

Several structured questions initiated discussions in the focus groups, developed following the guidelines of Krueger (1994), to establish respondent shopping behaviours such as frequency, location, etc (see Appendix VIIa). After this the discussion became less structured, but with questions directed towards eliciting
influences on shopping behaviour in the form of both ethics and social responsibility factors (derived from the broad literature base) and traditional store image factors (derived from the Zimmer & Golden (1988) classification). Sessions were designed to be relatively unstructured after the initial questions in order to encourage respondents to raise and discuss any issues they considered to be of importance. However this 'looseness' of structure has been criticised by some as not assisting in the generation of a list of attributes (Claxton et al., 1980) and potentially resulting in respondent dissatisfaction due to a feeling of incompleteness and a lack of accomplishment (Van de Ven & Delbecq, 1974). To overcome this at the end of the session respondents were asked to fill out a short grid (see Appendix VIIb) ranking the ten most important considerations to their shopping decisions from those that had been discussed in the session. These issues, which referred to both store image and E&SR issues, had been written on a flip chart during the session. The implementation of the grid was designed to clarify the factors of concern to respondents and their importance, and was a method that had been used for clarification of similar issues by Shaw & Clarke (1999) in prior research.

Each focus group session took approximately one and a half hours, and was tape-recorded and transcribed.

The data collected from the focus groups was manually coded using the techniques of Manifest Coding: counting the number of times a phrase or word appears; and Latent Coding – looking for underlying implicit meaning in the text. Employing both rather than just one of these techniques strengthens the final results (Neuman, 1994) as both specific and implicit responses are studied. This led to the formulation of two typologies, one of store image factors and the other of E&SR issues, all of which were
mentioned by one or more respondents as being central to their grocery shopping decisions.

After this, further analysis was done on the transcripts for wider interpretation of shopping behaviour patterns, factors of store image and E&SR, their effect on shopping behaviour and their effect on different types of shopper.

6.4. Shopping Behaviour Patterns

Throughout the qualitative findings a uniform range of grocery shopping behaviour patterns appeared in terms of frequency of shopping, distance travelled and whom respondents shopped with. Additional analysis discovered a link between these areas and the type of shopping that was being undertaken. Consumers appeared to go to a larger store, which in many cases was some distance from home, between once a week and once a month to do a big or 'main' shop and between once a day and once a week to a more local store for a small or 'top-up' shop:

"... if I'm trying to do a big shop I try to aim for like a big supermarket ... We go about once every three weeks, once a month but then for other goods like bread and milk and stuff we get almost daily, every other day, from Alldays, Spar, maybe Tesco Metro in town - so the smaller shops" (FG1)

"(I go to) ... Tesco's as it appears to be the closest big store. I only go to Tesco's about every two weeks so I usually top up quite a bit in Chudleigh." (FG3)

"(I go to) ... Tesco's... I go there about once a fortnight and then I get all the other bits that I need from down the local shop." (FG4)

"Big shopping once a month ... and that is mainly done in the local supermarket, but a top up about once a week." (FG5)

"A big shop about once a month and a smaller shop about once a week for bits and bobs at local shops." (FG6)
This led to the conclusion that consumers' behaviour may vary depending on the type of grocery shopping experience they are undertaking – defined as a *Shopping Occasion* for the purposes of this study. This aspect will need to be incorporated for greater consideration in the next stage of data collection. However this analysis was used to create definitions for the terms used to describe the two different shopping occasions 'main shop' and 'top-up' shop which will be used in further investigations:

- **Main shop** - the largest single shop that is done in a given period e.g. week, month
- **Top-up shop** - the smaller more regular shop(s) done in a given period e.g. for bread, milk etc

The majority of groups mentioned using a supermarket to do at least part of their shopping, although the frequency and type of products bought at this type of outlet did vary between groups:

"I really hate going shopping so I do go to Tesco's occasionally but probably only about three times a year." (FG3)

"I would mainly say I buy the cleaning stuff and soap powder and stuff at Tesco's" (FG6)

Respondents also tended to frequent farm shops and health stores to either purchase products not found in supermarkets, or to purchase fresh items such as meat, fruit and vegetables due to them being seen as 'specialist' outlets and/or of a higher quality:

"I try not to buy their (supermarkets) meat – I go to a butcher in Tavistock or Bodmin ... it's organic" (FG2)

"I go to my veggie man because I can get ... different things, and if he doesn't have something then he will order it for me, like Kafé leaves, which Sainsbury's do not do." (FG6)
"I go to ... Powderham Farm Shop ... (for) the meat, I usually get it from the butchers department. And vegetables and yoghurt. I don’t like the meat at Tesco’s, I don’t buy supermarket meat. I find it expensive and usually tough." (FG6)

"(I go) ... out to Western Hoe for free range eggs and fruit and veg. I get them from the farm source so I know they are free range. Also the fruit and veg there is much cheaper and much fresher." (FG7)

In addition to the fact that respondents tended to go to particular types of shop for the products they offered, there were also those that frequented a store because they liked the store itself or what it represented, be it a supermarket or independent:

"I go to Tesco’s or Asda because it’s convenient and I like the space, you don’t have to fight with queues." (FG2)

"(I use) ... the GP store in Chudleigh and the Co-op because I try and support local businesses." (FG3)

"(I go to) ... Tesco’s because I like their policies." (FG5)

This led to the question of whether consumers actually went to a store for the store itself, or for the products that were in it - defined for the purposes of this study as a Shopping Consideration. This finding will also need to be explored further in the next stage of data collection.

The newly defined aspects of Shopping Occasion and Shopping Consideration are seen to have the potential to influence a respondent’s shopping behaviour in several combinations, making the understanding of patterns of shopping behaviour more complex than first thought. Given the nature of this inter-relationship it was no longer considered possible to study one aspect of shopping in isolation, and therefore a 2x2 matrix of shopping behaviour was proposed, as illustrated in Figure 6.1.
This structure will be taken forward into the next stage of data collection and investigated further through quantitative techniques.

6.5. The Classification of Influences on Shopping Behaviour

Inspection of the transcripts from the focus groups led to the identification of two main areas of influence on shopping behaviour – store image factors, and E&SR factors. Store image factors relate to those aspects of functionality as well as the 'personality' of a given store, whereas E&SR factors relate to those factors of moral concern, which affect both individuals and the well being of society. These will now be discussed further in turn.

6.5.1. Classification of Store Image Factors

Past literature has identified from seven (Zimmer & Golden, 1988) to twelve (Kunkel & Berry, 1968) attributes of store image, and findings from this research have kept in line with this by revealing the existence of eleven attributes. Although a similar structural basis of classification is shown between the current study and those past, this research has revealed that several of the sub-areas differ from prior research. These differences could be accounted for by two facts: 1) the time elapsed since the last study (15 years);
and 2) technological advances altering the retailer’s offering. Due to these differences it was felt necessary to ‘update’ the attributes of store image classification to include current issues identified by today’s consumers. A full listing of the store image factors derived from the qualitative research is shown as a typology in Table 6.1.

**TABLE 6.1. A TYPOLOGY OF STORE IMAGE ATTRIBUTES**

<table>
<thead>
<tr>
<th>1. <strong>Convenience of Location</strong></th>
<th>2. <strong>Convenience of Accessibility</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Close to work</td>
<td>• Car parking</td>
</tr>
<tr>
<td>• Close to home</td>
<td>• Opening hours</td>
</tr>
<tr>
<td>• Close to other stores/facilities</td>
<td>• Store layout – ease of use</td>
</tr>
<tr>
<td>• Close to where you are at the time</td>
<td>• Convenience in general</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. <strong>Quality of Merchandise</strong></th>
<th>4. <strong>Assortment of Merchandise</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Taste of produce</td>
<td>• Breadth of grocery merchandise</td>
</tr>
<tr>
<td>• Freshness of produce</td>
<td>• Range of non-grocery merchandise</td>
</tr>
<tr>
<td>• Presentation of produce</td>
<td>• Speciality areas</td>
</tr>
<tr>
<td>• Good or poor quality of merchandise</td>
<td>• Stocks recognised brand names</td>
</tr>
<tr>
<td>• Good or poor departments (not including assortment)</td>
<td>• Good or poor own label brand assortment</td>
</tr>
<tr>
<td></td>
<td>• Availability of merchandise</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. <strong>Price of Merchandise</strong></th>
<th>6. <strong>Promotions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low prices</td>
<td>• Advertising</td>
</tr>
<tr>
<td>• Fair or competitive prices</td>
<td>• Special offers</td>
</tr>
<tr>
<td>• High or non-competitive prices</td>
<td>• Loyalty cards</td>
</tr>
<tr>
<td>• Value for money (not including promotions etc.)</td>
<td>• Vouchers &amp; Coupons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. <strong>Store Atmosphere</strong></th>
<th>8. <strong>Sales Personnel</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cleanliness &amp; smell of store</td>
<td>• Knowledgeable &amp; helpful sales personnel</td>
</tr>
<tr>
<td>• Design of store</td>
<td>• Polite &amp; friendly sales personnel</td>
</tr>
<tr>
<td>• Customer type</td>
<td>• Number of sales personnel</td>
</tr>
<tr>
<td>• Queues/congestion</td>
<td>• Appearance of sales personnel</td>
</tr>
<tr>
<td></td>
<td>• Good or poor standard of service</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. <strong>Convenience of Other Facilities</strong></th>
<th>10. <strong>Convenience of Other Services</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cash Point</td>
<td>• Home Delivery</td>
</tr>
<tr>
<td>• Petrol Station</td>
<td>• Internet Shopping</td>
</tr>
<tr>
<td>• Restaurant/Cafe</td>
<td>• Cash back</td>
</tr>
<tr>
<td>• Toilets</td>
<td></td>
</tr>
<tr>
<td>• Children’s facilities</td>
<td></td>
</tr>
<tr>
<td>• Other sub-stores</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. <strong>Reputation on Adjustments</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Returns / exchanges</td>
<td></td>
</tr>
<tr>
<td>• Reputation of fairness</td>
<td></td>
</tr>
</tbody>
</table>
The following discussion will highlight the factors of greatest importance from the overall typology of store image, and their interdependence in the shopping decision process. Later on in the chapter an analysis of how these factors relate to E&SR factors will be viewed, as will a discussion of whether they discriminate between shopper types.

One of the most important issues to respondents was the location of the store, where it was in relation to home, work or other stores. Convenience of location was mentioned as an influencer by all groups:

"Location is the deciding factor ... because it is convenient, a close place to go." (FG1)

"(I go) ... mainly due to the convenience again, compared to where I live." (FG2)

"(I go for) ... the convenience and familiarity." (FG3)

"(Its) ... convenience really, just where I am at the time and what I need to get." (FG4)

"I use the local supermarket because it is convenient." (FG5)

"I shop at Lidl's because it's near to where I live, ... (and) it's convenient." (FG6)

"Well Tesco's is the most convenient store to me so I tend to go there the most." (FG7)

As well as convenience of location, many respondents also considered the convenience of accessibility, in particular the access to a free car park:

"Car parking (is important) ... free parking to be precise." (FG2)

"I think parking (is a consideration) ... it's free." (FG4)
Store layout (ease of use) was also influential in their decision of where to shop. Many respondents tended to keep going back to the same store due to its familiarity and their knowledge of the layout. They did not want to waste time looking for the items they wanted to purchase, and this was mentioned with particular regard to supermarkets:

"Convenience is number one, but I think familiarity as well, you get to know the layout." (FG2)

"Convenience and familiarity ... I don't want to spend two hours doing the shopping, I know that beans are there and whatever, I know where it is, go and get it and I'm done and it takes twenty minutes." (FG3)

What respondents found irritating in this respect was the fact that supermarkets tended to move items around which upset their flow and degraded the shopping experience:

"When I used to use Tesco's a lot they kept on changing things around so I couldn't find what I wanted, so I didn't go back for months. I couldn't stand it, I knew what I wanted but I couldn't find it." (FG5)

"It just makes the shopping experience less attractive, more convoluted and I think they are looking for impulse buying." (FG2)

The factors of location and convenience were applicable to both main shops e.g. where the nearest large supermarket was, and top-up shops e.g. the nearest place to get bread or milk. This was not an unexpected result as past research had indicated that these were important factors. This was taken into account when developing the research strategy with locations for the focus groups being chosen on the basis that competition was present, so that respondents had to choose to go to one store over another, rather than just make a decision based on the fact that there was only store in the area. The 'next level' of factors were therefore felt to be potential areas of competitive advantage to retailers if they could satisfy consumers on these aspects. The most important were issues relating to the quality, assortment (range) and price of merchandise:
"I go to the larger Sainsbury's at Marsh Mills because we drive and there's a bigger choice inside." (FG1)

*I think Sainsbury's is better quality than Tesco's ... the quality of their food and the bigger choice." (FG1)

"I find Tesco's cheaper than Safeway's ... that's why I go to Tesco's." (FG4)

"I go back to Waitrose a lot because they do a good range of Fair Trade products there, bananas, orange juice, coffee, tea..." (FG7)

In some instances these areas were considered together:

"I use a greengrocers on Mutley Plain partly for convenience and also selection and price ... I'm not too interested in whether or not a piece of fruit has a uniform shape or whether its polished, I'm more interested in how it tastes and how much it costs." (FG2)

And in certain instances quality was more important than price:

"The idea of fresh food from Sainsbury's is definitely a lot higher than Somerfield. You're prepared to pay that little bit extra, and it always tastes nicer." (FG1)

Nevertheless despite the fact that many respondents claimed they liked the range provided at larger stores there were also those that found it too great, and as such avoided going to these types of outlet:

"They (Sainsbury & Tesco) are both just so big, Tesco's especially, that I can't be bothered trying to get used to them. And I find the shops in Chudleigh quite good and the offers quite good." (FG3)

"We just shop in Tesco's because it's smaller and you don't get swamped." (FG4)

There were mixed attitudes to the range of non-grocery items found in stores, particularly supermarkets. Some respondents were against this expansion:
"I don't like the fact that they have gone to multi-everything - TV's, clothes and all that. Sainsbury's used to be a big food hall but they've sized that down taken on household wares, TV's and all that - you don't really need that in a supermarket." (FG2)

Whereas others were in favour:

"I go pass the CD's and I will pick up a CD. And the same if I see an offer on a TV, I have bought TV's from Tesco before - they have been very competitive. And it's very convenient, you just load up your car and off you go." (FG2)

And for some it even encouraged them to frequent that store over others:

"...the one (Sainsbury) at Marsh Mills has sub-stores as well, we've got like DVD's and stuff from there which attracts us to go to Marsh Mills Sainsbury's." (FG1)

Promotions were mentioned by many respondents as influencing what they bought, and where they shopped:

"Promotions - buy one get one free frankfurters the other day - very nice." (FG1)

"Occasionally they have special offers on, I think about every three weeks or so they will have a buy one get one free on a particular brand, so I'll have a mooch around and see what there is." (FG5)

"Well if they do promotions, then I do tend to stock up on those. I might not have gone in and wanted four of those, but I pick them up whilst they are there." (FG5)

"Iceland I go to because of buy one get one free really." (FG6)

Under the area of promotions was the relatively new area of 'loyalty cards', which replaced the 'trading stamps' of past literature. Many respondents mentioned that they tended to frequent a store based on owning a loyalty card, even though at times they felt it was worth quite little.

"I have a Sainsbury's reward card so I tend to stick with that one." (FG1)
"I go to Tesco's because ... the loyalty card gives you points – I have had three holidays this year." (FG2)

"... when I started doing the club card points I decided to stay with Tesco's ... as I've been saving up the club card points." (FG3)

"I do all my main grocery shopping at Sainsbury's because it is the closest decent size supermarket to the house. I have a reward card but that really counts for nothing to be honest" (FG1)

Although the general cleanliness of a store and the presentation of produce were considered by respondents when deciding which store to visit, it was the negative behaviour of not visiting stores thought to be dirty or smelly that was more influential in perceptions of stores.

"Cleanliness of the store ... that you're going to. How hygienic it is and whether it's nice and clean and things. Its nice in Sainsbury's that it's always clean." (FG1)

"I actually stopped going to Tesco's at Christmas because it was awful. It smelt, the car park was dirty, there were never any trolleys, there was paper blowing all over the place, and the undercover car park seemed to be a stock room." (FG3)

"I don't shop in there because I don't like the out of date stuff. ... you've got like tomatoes in there gone off. Like a brown colour. It's disgusting there really." (FG6)

Sales staff were also mentioned as influencing the perception of a store and led to frequenting or not frequenting it. Their appearance, manner and knowledge were all influencers in how the shop was perceived. In many cases the smaller stores were given more favourable reviews due to the greater level of personal service received, and in some cases overrode other store image factors such as price:

"Dale Stores is like a Londis, but the people that own it are really cool, ... it's a bit more expensive than obviously going to Sainsbury's, but its closer so that makes it automatically a lot easier but its also because the people that run it are really nice, and you can just go in and chat to the people that are running it and you feel that it is a lot more friendly." (FG1)
"I like the personal service (of local businesses) – I like seeing the face, having a bit of conversation ... it doesn't feel arduous." (FG6)

"I think Tesco's are more polite than Sainsbury's, which is why I go to Tesco's and not to Sainsbury's." (FG6)

Other facilities and services were mentioned by respondents; however there were mixed reactions as to how enhancing these were to the shopping experience. Many respondents said they made use of the cash point facilities and petrol station at a store, but did not go there specifically for that purpose. However the service of home delivery was seen as a reason to shop at a given store by some:

"(I go to) ... Iceland ... for home delivery ... because I'm a single parent like, it's easier for me to have the shopping delivered." (FG6)

All of the factors discussed could be related both to main and top-up shopping occasions, although some factors related more to the shopping consideration of store frequented rather than product sought. These findings will be incorporated into the questionnaire design of the second stage of data collection to test their validity and generalisability.

6.5.2. Classification of E&SR Factors

The qualitative research findings as a whole indicated the presence of seven sets of issues relating to ethics and social responsibility in grocery shopping. Table 6.2. identifies the complete list of E&SR factors in grocery shopping behaviour derived from the focus group research, and proposes a preliminary typology of E&SR factors that influence grocery shopping.
**TABLE 6.2. A PRELIMINARY TYPOLOGY OF E&SR GROCERY SHOPPING FACTORS**

<table>
<thead>
<tr>
<th>1. <strong>Food Drink &amp; Product Safety</strong></th>
<th>2. <strong>Advertising</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• BSE in cattle</td>
<td>• Unethical targeting of children</td>
</tr>
<tr>
<td>• GM foods</td>
<td>• False representation of products</td>
</tr>
<tr>
<td>• Additives, preservatives &amp; artificial colours/flavourings in food</td>
<td>• Unequal spend on healthy food adverts</td>
</tr>
<tr>
<td>• Salmonella</td>
<td>• Unequal promotions on organic/healthy produce</td>
</tr>
<tr>
<td>• Pesticides on food</td>
<td>• Intrusive advertising</td>
</tr>
<tr>
<td>• Product associated health concerns</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. <strong>Animal Welfare</strong></th>
<th>4. <strong>Honest Labelling</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Organically reared &amp; free range meat and poultry</td>
<td>• Nutritional content &amp; values</td>
</tr>
<tr>
<td>• Free range eggs</td>
<td>• Small print legibility</td>
</tr>
<tr>
<td>• Feeding antibiotics/hormones</td>
<td>• Unclear ingredients</td>
</tr>
<tr>
<td>• By products fed to animals</td>
<td>• Understandable use of language</td>
</tr>
<tr>
<td>• Travel to slaughter / live exports</td>
<td>• Allergy warnings</td>
</tr>
<tr>
<td>• Animal testing</td>
<td>• Country of origin</td>
</tr>
<tr>
<td>• Dolphin friendly tuna</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. <strong>Ethical Trading</strong></th>
<th>6. <strong>Human Rights</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Traceability of supply chain</td>
<td>• Fair trade price and working conditions</td>
</tr>
<tr>
<td>• Community involvement</td>
<td>• Equal employment opportunities &amp; pay</td>
</tr>
<tr>
<td>• Supporting the local economy</td>
<td>• Power of retailers</td>
</tr>
<tr>
<td>• Selling local and British produce</td>
<td>• Ease of access</td>
</tr>
<tr>
<td>• Parent friendly layout</td>
<td>• Employee welfare</td>
</tr>
<tr>
<td>• Consistent layout</td>
<td>• Child labour</td>
</tr>
<tr>
<td>• Fair pricing policies across stores</td>
<td></td>
</tr>
<tr>
<td>• Company responsibility</td>
<td></td>
</tr>
<tr>
<td>• Fair pricing of organic produce</td>
<td></td>
</tr>
<tr>
<td>• Fair pricing of healthy produce</td>
<td></td>
</tr>
<tr>
<td>• Fair profit margins</td>
<td></td>
</tr>
<tr>
<td>• Ethical practices</td>
<td></td>
</tr>
<tr>
<td>• Fair prices for suppliers</td>
<td></td>
</tr>
<tr>
<td>• Trustworthiness</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. <strong>The Environment</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sustainable forests</td>
<td>• Fair trade price and working conditions</td>
</tr>
<tr>
<td>• Intensive farming</td>
<td>• Equal employment opportunities &amp; pay</td>
</tr>
<tr>
<td>• Organically produced produce</td>
<td>• Power of retailers</td>
</tr>
<tr>
<td>• Over packaging</td>
<td>• Ease of access</td>
</tr>
<tr>
<td>• Distribution - pollution</td>
<td>• Employee welfare</td>
</tr>
<tr>
<td>• Recycling facilities</td>
<td>• Child labour</td>
</tr>
<tr>
<td>• Recyclable and bio-degradable / reusable products / packaging</td>
<td></td>
</tr>
<tr>
<td>• Greenhouse effect &amp; the ozone layer</td>
<td></td>
</tr>
</tbody>
</table>
The following discussion identifies the factors of greatest importance from the preliminary typology of E&SR, and their interdependence in the shopping decision process. After this an analysis of how these factors sit in relation to store image factors will be viewed and whether they may discriminate between shopper types.

Many respondents, when asked about their main E&SR concerns, highlighted the fact that they liked to support their local shops and local producers/suppliers rather than just use a multi-chain supermarket:

"I like to support local producers, defiantly national but more local than that if possible." (FG2)

"I generally try to support ... the local shops" (FG3)

"I do like to support local shops ... I try and support them, because if you don't use them they go eventually." (FG7)

"I do use the local fishmonger and butcher and chemist quite a lot, and the newsagent. I don’t go to Waitrose for things like that which I can get in the local shops up and down my street." (FG7)

It was not just the stores they supported it was also the type of produce purchased:

"I like to buy the English products." (FG5)

"I will always go for the thing that has been grown fairly locally." (FG7)

Many of the respondents stated that they did not want to purchase products that were not in season in this country:

"I only buy vegetables when they are in season. Don’t buy sprouts in the summer, don’t buy runner beans at Christmas." (FG3)

Although some realised the difficulty of this:
"I don’t tend to buy stuff out of season on the whole, but then of course we all have these awful dichotomy’s don’t we because we all buy bananas, and bananas and oranges don’t ever grow here, so beans from Kenya no, but oranges and bananas yes!" (FG7)

The reasoning behind some of these considerations also extended to include other aspects of E&SR:

"I also think we should support smaller businesses and businesses that source their stock on a local level – and reduces transportation costs and pollution." (FG2)

Environmental factors were a concern for many respondents from all groups, with all groups stating that they recycled at least bottles, and some much more:

"In Westbury we have paper banks, bottle banks, clothes bank, not I’m afraid plastic. Whatever I can possibly recycle I do." (FG5)

Additional concerns expressed related to GM foods, overpackaging and pollution. However in some instances these concerns were linked more strongly to certain product categories than others:

"I wouldn’t buy runner beans that have been transported in from Kenya when we have got English ones about." (FG5)

"It’s not so much over food but toiletries I tend to buy environmentally friendly." (FG1)

And resulted in the use of particular stores:

"I don’t really buy toiletries from a supermarket so I’d go to The Body Shop or something."

An area that respondents expressed concern about that linked into this was the need for clear labelling to alleviate their fears of product health concerns:
“Well when they were going on about all this GM stuff you couldn’t actually find out from the labels if it had it in the product or not ...I like to know what my little girl is eating.” (FG5)

And was an area generally thought to be under monitored with regard to its comprehension:

“Half the time they only give you enough information to confuse you they don’t give you enough to be able to make your mind up.” (FG3)

“...I just want to know how it’s been produced ... (but) there’s information like your nutritional information on the back it’s just like a foreign language.” (FG4)

“I think the fat content is misleading the way it’s laid out on the back of packaging. Supermarkets can be quite misleading and I think that is intentional.” (FG6)

Some felt that this should be made clearer in order to speed up the process of shopping and enable consumers to make more informed choices:

“I do (read labels) but I must agree ...it is a time factor, I mean some of us might have time to look at the labels and to do research on this and that, but many, many people haven’t and unless supermarkets make it much clearer we can’t examine the small print on every tin that we buy.” (FG7)

These health concerns were particularly obvious in relation to artificial additives and preservatives given to children, and the way different types of ‘junk food’ were pushed and promoted to children:

“I do think you have to think about all the additives and E numbers and things but luckily my children have never gone loopy with E numbers.” (FG4)

“Sunny Delight ...Its sold as a healthy drink for children full of vitamins, ...then I discovered it was not a good thing for them to have, and when I said they couldn’t have it there was complaints. They get the children hooked and then you have all the fuss and bother in the supermarket when you don’t want them to have it.” (FG7)
Many parents mentioned the problem of these ‘unhealthy’ products containing free gifts to further encourage consumption, which was seen as unethical:

"...cereal ...A lot of them are full of sugar ...Frosties are doing CD Rom’s at the moment ...If there is just six to collect you can guarantee they will limit one or two of them so you keep on buying it.” (FG6)

An off-shoot of this was the tendency to buy more organic and free range produce due to the perception it was healthier:

"I buy organic carrots because, ...you were meant to be getting certain pesticides on (non-organic) carrots. It was one of those things that was in the news for a little while and I picked up on the fact and I still buy organic carrots. Because it was saying you shouldn’t give your children normal carrots.” (FG3)

Which was strongly related to their concerns for animal welfare, both in food and non-food items:

"I buy tuna like all the time as that’s one of the main foods I eat and I won’t buy something that not dolphin friendly.” (FG1)

"I know Coopers their own brand ...their household cleaning stuff is ...not tested on animals ...if it has been squirted in a rabbits eye I don’t want to use it thank you very much.” (FG5)

As well as concern being shown for animal welfare, issues relating to human rights were also mentioned. A lot of respondents mentioned purchasing Fair Trade products or items that supported global causes:

"I would rather buy that and the chocolate that they sell in Oxfam, because of the moral stance it makes ...making sure there is a fair price going to the people that are actually producing it.” (FG5)

"Oxfam do a huge amount, and gifts. Normally if I buy a gift for someone I look there.” (FG6)
Other consumers were equally concerned about human rights, but their concerns were with matters more local to home:

"...employ(ing) people from, or to give people the opportunity in that community to be employed. Also to make sure they are being paid a fair days pay for a fair days work." (FG2)

What was overwhelmingly stated was the fact that all groups saw that the initial duty of being ethical and socially responsible as falling at the feet of the supermarkets and other multinational manufacturers. Many respondents felt that these organisations employed what they considered to be unfair practices, and as such powerful influencers should take more responsibility for their actions:

"Supermarkets actually giving fair prices to the suppliers – rather than squeezing them to make a bigger profit or to get a bigger market share for themselves and not actually taking responsibility for the price that they fix." (FG2)

"Producers. They (supermarkets) just want to make money out of them. It goes on all across the globe, being told what crops to grow, how to grow them, and no power for anybody except them." (FG3)

"Fishermen are exploited...Cornwall is the worst paid...I mean the fish prices, my husband gets less now for his fish than he did like fifteen years ago – but its not gone down in supermarkets... who's making all of the money on the fish, the middleman or the supermarkets?" (FG4)

"...the supermarkets have the monopoly these days so they can more or less dictate what they put on their shelves ... they are out there to make money, so I guess they go to the cheapest possible supplier to make the most profit possible, ...they are not really bothered about fair trade." (FG6)

"When you think of the pork in Tesco, where the pigs are bred in Germany and kept in Germany, and then brought back here for so many weeks, then slaughtered here and called British." (FG7)

The rewards for doing this could be more loyal customers:
"I find that the Co-op's Fair Trade thing does influence me, I do try and get in there more and more." (FG3)

"I go back to Waitrose a lot because they do a good range of Fair Trade products there ... I think it is wonderful that a supermarket is stocking that number of Fair Trade products." (FG7)

"I like a supermarket that when there is a huge sort of disaster who put out huge trolleys and say could you load these up with stuff as it will get sent to where it is needed. That would make me go back to that supermarket again." (FG7)

"I like supermarkets were you see the people outside tidying up the trolleys that are educationally challenged ... people that would otherwise find it difficult to find work ... it really would (make me go back there)" (FG7)

However, from the conversation analysed, supermarkets' still have a long way to go to build up the trust of their customers before it is seen as a move towards a better society rather than just another marketing ploy:

"If there is something that I know is good - ethically good - then I will try and buy it, but I don't really believe what they tell me...they pretend to be doing one thing, but they also want the money, and at the end of the day that's why they are there - to get as much money out of you as possible." (FG2)

"I would go a long way not to shop at a supermarket if I could help it. I don't like supermarkets because I just think they are taking over." (FG6)

"I also think there has to be more control on promotions as all shops are interested in is making a profit not whether food is healthy or not." (FG7)

The seven sets of issues relating to E&SR can be further classified into three broad groups due to their interlinking nature. The principal concern is with food quality and safety. The importance of product choice factors relating to the quality, safety and taste of products which are consumed, resulting in both purchase behaviour e.g. buying free range eggs, and avoidance behaviour e.g. not buying beef during the BSE crisis, predominated here. This broad theme links a number of specific E&SR groups i.e.
animal welfare, food quality and safety, honest labelling, and advertising and promotions. In the case of mothers with families the provenance, safety and healthiness of foodstuffs given to their children were of a particular concern:

"It's my choice what I put in my mouth but it's also my choice what I put in my children's, and it's probably more important when they are younger to have the best of what they can really." (FG4)

This concern was compounded by the unequal promotions on organic/healthy products versus less healthy alternatives:

"How many promotions do you get on the fruit and veg and all of the good things? ... they never do it on the organic vegetables – if they had a buy one get one half price maybe more people would try it." (FG4)

"They never seem to do special offers on organic either ... you never see buy one get one free on organic products." (FG6)

and the illegibility and lack of clarity of labelling regarding the use of artificial additives.

The second important group of issues relates to human rights and ethical trading. Here ethical and socially responsible company behaviour linked to fair trade pricing/profit margins, working conditions for employees, and the pressure put on some producers and hence the environment:

"Farmers want to produce more and more and more so they use all of these fertilisers ... and all these animals have to be fed antibiotics if they are intensively reared ... to keep supermarkets happy." (FG7)

This second cluster included supporting the local economy and selling local, or at least British products.
The third key group of E&SR factors can be classified as environmental factors and relate to packaging and recycling issues, including the sale of biodegradable and recyclable products. These concerns link back to the ethical trading issues mentioned above, in that they include several variables relating to the additional pollution created by transporting products over long distances, and therefore support the earlier 'buy local' theme:

"I think if you could buy from England like I do then there must be less pollution from travelling, rather than it having been on an aeroplane of boat, and then driving it from Dover or Plymouth." (FG6)

6.6. The Effect of Store Image and E&SR on Shopping Behaviour

Despite the fact that respondents were screened for ethical and social sensitivity, the early parts of all the focus groups were dominated by discussion of more conventional store and product choice factors, which focused on predictable variables. In terms of store choice convenience factors were critical, particularly those relating to store location, layout and car parking. In addition the quality and range of merchandise available, as well as a consideration for price. As one respondent said:

"I am looking for a bit of everything rolled into one." (FG2)

Price was a consideration to the majority of respondents:

"I think however much money one has price is still a consideration. Its difficult for it not to be isn't it?" (FG7)

However, there were many respondents to whom it was not the top priority on where they shopped or what they bought, considering factors such as store atmosphere, and ethical trading more highly:
"Leo's in Falmouth, which is ...a little bit more expensive, but its virtually empty when it is not at peak times, and close to work, and I will go in there just because it is nice and quiet. I may pay a little bit more but I'm happy with that." (FG2)

"I am (prepared to pay more for a product that is Fair Trade)...but I am able to. I care about my ideals, and I would prefer to do that than buy organic products from Germany that have taken thousands of air miles to get here." (FG7)

Even those respondents to whom price was a more important factor did trade it off for certain items where possible, particularly in relation to important food quality issues, such as those relating to fresh organic produce:

"I just wish organic wasn't so expensive ...I try and do it as much as I can but if you are on a limited budget (its difficult)...mainly the fruit and veg." (FG5)

"We do try and buy organic stuff but it is more expensive, so you have to sort of compromise on some things, because there's myself my husband and my two children, and its quite a lot to do it all, I mean we try to lots and lots and lots of it but there are certain things that we don't. I work out that I can buy that and that and that, but I can't quite stretch to that ...(so) only vegetables really, not anything tinned." (FG4)

As one very ethically minded respondent said:

"I don't think that just money prices are the thing to consider. Its not the true price is it when you are buying the cheapest though, I mean I know some people have to, but its not the true price that you are paying ...(there's) The environment ...How far it has travelled." (FG7)

However with a number of respondents there was also a trade-off depending on what the price differential was between an E&SR product and a non-E&SR product and the available budget, even though they would like to behave differently:

"If there's just a few pence in it I'll choose the more environmentally friendly product, ...it's hard like when you are on the budgets we're on to kind of do your buying habits towards what you believe is right." (FG1)

From this statement it can be seen that being a shopper with E&SR attitudes brings with it considerable dissonance, both in terms of store and product choice – they are not
always able to behave in the way that they would like, and have to make do for the meantime:

"I find that the Co-op's Fair Trade thing does influence me, I do try and get in there more and more. And if they do get their bigger store here I am hoping that I can cut Tesco's more and more out of the loop. And I am looking forward to that." (FG3)

This resulted in several critical trade-offs being made. As one male respondent put it:

"I think it's almost all a trade off, depending, you have your convenience against what sort of foods you can get. Or you could trade off that you want to be a good person and buy organic or non-animal tested, and be prepared to pay over the odds. I think all shopping is done at maybe a subconscious level of what's best as you are never going to get everything." (FG2)

In the discussion of specific product choice factors, E&SR issues became further integrated with more conventional choice criteria than was the case for store choice. Much time was given to the topic of promotions and special offers, with respondents complaining it was the less healthy options that always seemed to carry these tags. However the difference between brand attributes (premium and own label) in these areas were easier to distinguish than those attributes such as producers' reputation for ethical behaviour and fair trade practices, as the following exchange illustrates:

"Beechams the rat killers." "Yeah, but it's hard to see which companies are run by Beechams." "Sometimes you can be reading the notes in front of you when you're cleaning your teeth one day and you realise you've got SmithKline Beecham in front of you." "Yep, upset." "And like a wave of guilt washes over you." "And then you forget about it because your teeth are clean." (FG1)

This highlighted a commonly held view that more information and better education on E&SR issues would help make shopping decisions easier. The notion of trust was of utmost importance to these consumers here, and this in the context of both the media as well as the stores themselves was mentioned here:
"The food programme on Radio Four I would trust. They usually are aware of the stories way before newspapers or television, and you get a reasoned argument."

"Actually I agree with you ...because it is all about trust, who do you trust." (FG7)

"They (supermarkets) all do these free magazines with all the latest deals and offers in — and I mean why can't they put some valid bits of information in amongst that?" (FG4)

6.7. The Effect of Store Image and E&SR on Different Types of Shopper

Interestingly this qualitative research provides early evidence that urban shoppers i.e. those from larger cities, may be more ethically and socially responsible, both in terms of their attitudes and behaviour, than those from more rural, market town locations. Overall there was a greater level of discussion of ethical issues versus conventional shopper choice factors in the three urban groups. However, greater differentiation between types of shopper can be discerned on the basis of age, gender and social group.

On the whole, older respondents were likely to be more concerned about generic ethical trading considerations, such as companies’ reputation for fairness and Fair Trade than other groups:

"I know certain things in Waitrose I can trust and I get them." (FG7)

"I go back to Waitrose a lot because they do a good range of Fair Trade products there, bananas, orange juice, coffee, tea ...they do quite a lot of chocolate as well." (FG7)

Middle-aged respondents, on the other hand, were more concerned with close-to-hand factors such as supporting local communities and buying British products:

"I like to support the local businesses, and I'm not a great one for supermarkets." (FG6)

"I prefer to buy British ...I don't buy stuff in the shop that you can't buy British" (FG5)
Younger respondents were particularly concerned about the issues relating to animal welfare:

"I like the stuff that is not tested on animals ... its just ridiculous what they do test on animals. Why do you need to do that on animals?" (FG6)

The availability of healthy foodstuffs, especially fresh organic produce, were also major issues to this group, as were price and convenience:

"I think its consumer pressure but, I think they say there's a trend towards more organic foods from consumers but I think that won't become the most important thing because if you have to pay more or go out of your way to get these things ... good foods ... its got to be just as convenient and similarly priced otherwise it just becomes unattractive." (FG1)

However the group of students stated that when their financial circumstances improved their behaviour would be likely to change:

"Would you still pay more though, because at the end of the day it does cost more to choose from organic produce?" "As a student I probably wouldn't, but maybe as a working career woman I would." (FG1)

Younger respondents as a whole were the most cynical about the motives of large retail chains:

"They (supermarkets) have morally correct ... recruiting ... and they employ people with disabilities and stuff." "That's because they fulfil a quota." "But that's being morally correct." "I don't think they do that because they want disabled people working – (it's just) so they look good." (FG1)

"Its what they can get away with exploiting on the way to maximising profits – and supermarkets are run for profits. I think an awful lot of the good stuff is good – what they do for communities and that – but I think it's because they don't want to get left behind by competitors ...Its self interest rather than others." (FG2)

However these younger groups were surprisingly conservative in their shopping choices, with strong influences coming from parents and peers on which store to use:
"The very first day that you turn up to university, and your parents bring you down, and they want to take you out shopping so that you've got a freezer full of food, they take you to where you are used to going, so you automatically get into the routine of going where they go." (FG1)

"My Mum's always shopped at Asda, so I've just carried on shopping at Asda because my Mum did it." (FG4)

The same was true of which products to buy:

"That's where my Mum shops as well, she's always kinda been into sorta food and stuff, like quality, she's always told me what to buy and what not to buy." (FG1)

In respect of gender, male and female respondents appeared to be equally concerned about E&SR, which was expected given the recruitment screening process. They showed concern for supporting British/local suppliers:

"I like to see a lot of British products – I will buy those in preference wherever possible." (FG2)

They were also bothered about honest labelling:

"I think that if there was a standard size of print on the label for all this information it would be easy to use and cross reference between different types of food instead of like having to use a microscope to read it – and its usually all over the place and not clear." (FG2)

Male respondents did not regard grocery shopping as an enjoyable activity, so tended to want a 'hassle free' environment with speed being the key issue. In order to achieve this they were at times prepared to trade-off other important store image factors such as price, and range, rather than shop around:

"I just presume that they are very similar in price ... You don't have the time to go around ticking off whether or not there is a few pence difference in price. If you are committed to going to one superstore then you are going to buy all your things under one roof." (FG2)
They were also the only group to mention other customers in the store having an effect on their shopping experience, and as such affecting their behaviour:

"Customers as well – I wouldn’t set foot in Asda or anywhere like that ...Mainly because it is a peasant’s store ...I don’t like the people you bump into. The way they talk to you, their rudeness, their abruptness, their lack of intelligence. I am a snob in that respect." (FG2)

"People who shop in the store, I don’t actually go to Lidl’s now as I found whilst I was waiting in the queue any time of any given day it seemed to be full of people who smell very heavily of drink. Looking very badly kept and buying cheap cider. It put me off going to the store even thought the staff are pleasant." (FG2)

Male respondents tended to be the most sceptical group regarding the motives of retailers, and considered E&SR had to be a trade-off:

"If there is something that I know is good – ethically good – then I will try and buy it, but I don’t really believe what they tell me." "They’re sneaky buggers! They pretend to be doing one thing, but they also want the money, and at the end of the day that’s why they are there – to get as much money out of you as possible." (FG2)

And although they could also see some good coming out of retailers’ actions, it was the motives behind them they disliked:

"If you can get people on your bus going to your supermarket then they are not going to someone else’s supermarket. So again I see it as a win win situation, as its better all round as people don’t use cars and things, and its good for the environment but again they still do it in order to get your money." (FG2)

"I think they will only do that (not exploit women and children) in order to have the cache that they don’t exploit women and children unlike our rivals. And that’s a win win situation ...because the women and children benefit and so does (the supermarket). But if they could do it then they would. It’s self interest rather than others " (FG2)

Predictably, price featured more strongly as a factor in the focus groups conducted with respondents in lower social groups, as did the area of promotions:

"It all comes down to price in the end and what you can afford." (FG4)
"When we’re living off £40 a week you’re going for the bargains." (FG1)

Although these factors were important to consumers, the dissonance associated with the low price versus ethical purchasing was particularly acute:

"There’s a fair sort of price margin between the normal priced stuff – say your basic Sainsbury’s own brand – and organic." (FG1)

This fact was highlighted in the acknowledgement that advertising and healthy produce were never combined:

"They never seem to do special offers on organic either. " ‘No, you never see buy one get one free on organic products." (FG6)

Price was considered, but was not such an obstacle, to those of higher social classes. Their concern was more with a product’s quality and heritage:

"You go to a company and you go there in trust for reasonable products at reasonable prices that have been produced in an ethical way." (FG3)

Whether or not respondents had dependent children also seemed to influence the level of concern with E&SR factors over conventional store image factors. Store image factors tended to focus on accessibility such as parent and child parking, and other children’s facilities. Those that had children were also more concerned with price, regardless of social class, and meant this had to be prioritised in relation to E&SR:

"I mean I think about it I’ve got to be honest, but my problem is I haven’t got the money so I can only do so much." (FG3)

What these consumers were most concerned about were factors of both store image and E&SR that impacted upon their children. This came down to influencing their shopping considerations:
"They have more of a choice, especially for my baby food ...they have more of the organic choice." (FG4)

"I mean it's my choice what I put in my mouth but it's also my choice what I put in my children's, and it's probably more important when they are younger to have the best of what they can really." (FG4)

This led to many respondents in this group searching for 'value':

"I tend to go to the organic farm at Totnes, I must admit I don't do it all the time but I do find I get far better value for money." (FG3)

Another behaviour more practised by this group was that of reading labels and ingredients:

"I always look at labels ...what's in the ingredients has got to be on it." (FG3)

"I don't like products that are unethical ...(or) not tested on animals ...especially household ones. I read the labels and will put it back on the shelves if not." (FG5)

"I never used to take a lot of notice of labels, but now that I'm pregnant I do." (FG4)

One aspect particularly highlighted here was the concern with promotions aimed at their children. They felt that too many unhealthy foods were being pushed at them, and not enough information was given about the contents of products sold. They felt better information could be used as guidance:

"I think supermarkets should actually have a list on the wall telling parents what the E numbers are because most of them seem to be carcinogenic, and I think that is quite unhealthy to feed your children really. Because lay people don't really know what it is, you just go and buy it anyway don't you." (FG6)

They also criticised the way that supermarkets did not encourage the use of healthy ethical products in the information they produced:
"In the Tesco's mother and baby magazine they do like a lot of organic things but in the recipe magazine that they do there’s not that much, and they don't suggest organic food in their recipes." (FG4)

6.8. Summary

Analysis of the evidence derived from the focus groups identified two visible shopping occasions (main and top-up) and two distinct shopping considerations (store and product), which can be visualised as a 2x2 matrix. These different shopping activities involve different shopping choices for the respondent, hence the aspects of need and motivation related to them vary. It is therefore proposed that investigating the issues related to each of these shopping choices per se, will enable a clearer understanding of grocery shopping behaviour as a multi rather than uni-dimensional activity.

Further investigations substantiated that the factors of store image that influence grocery shopping can be classified into a typology of eleven specific sets. Of these, those mentioned as most influential in shopping choices were convenience of location, layout of the store and ease of use, quality and assortment of merchandise, and price, similar to the findings of Lindquist (1974). Whilst it was important that the majority of these criteria were positive, a strong source of influence in shopping decisions came from avoiding those stores considered to have negative associations, especially in terms of cleanliness. The E&SR factors mentioned by respondents can be classified into a typology of seven specific sets. The seven sets of E&SR factors can be further refined into three broad groups, namely food quality and safety, human rights and ethical trading, and environmental (green) issues. Much of what was discussed related store image factors to the shopping consideration of which store to visit, and E&SR issues to which product to buy, although this was not absolute.
In terms of how these factors influence shopping behaviour it is clear that conventional store image criteria such as convenience, price and range tend to predominate decision-making, even amongst this selected population of respondents, and this relates to both store and product choice. E&SR shopping appears to revolve around a number of important issues, which vary in precedence depending on the shopping activity being undertaken. This results in certain 'attribute exchanges' being made particularly between convenience and price against the retail brand's ethical and social responsible positioning and food quality/safety.

With respect to differences in the characteristics of shoppers some interesting results emerge which suggest that in addition to age, gender and social group, the geographical location (urban/rural) of customers is a variable which affects the degree of sensitivity to specific E&SR factors. This may provide retailers with segmentation opportunities for targeting E&SR consumers through specific products or retail formats.

Initially, the preliminary typology of E&SR factors which has been derived offers a starting point from which a construct for measuring E&SR shopping behaviour can be developed, utilising quantitative data analysis together with reliability and validity techniques. Following this the extent of the influence of E&SR factors compared with other retail image variables on shopping behaviour can be assessed using multivariate methods, which can then be further developed to identify the relative importance of each of the separate dimensions of the E&SR construct. The findings also suggest that there are likely variations in the degree of influence which may exist in decisions relating to store choice compared with product choice. Furthermore, there would appear to be an important contribution to decision-making, not only in terms of individual E&SR beliefs relating to attributes of retail brands and products and the associated
attitudes of shoppers, but also the extent to which the personal influence of others may be relevant in such decisions. Finally, sufficient evidence emerges from this qualitative study to pursue more sophisticated modelling of E&SR customer types using cluster analysis, and to link these to shopping behaviour patterns.
Chapter Seven

Quantitative Research Results 1: Factors Affecting Grocery Shopping Decisions

7.1. Introduction

This section analyses the results obtained from the second data collection stage of face-to-face questionnaires. It opens by outlining the use of hierarchical information integration (Louviere & Gaeth, 1987) as a means of reducing the number of issues taken forward into the questionnaire survey. It moves on to distinguish key descriptive statistics of the population sampled, including both demographics and shopping behaviour data. Then the use of multiple regression, reliability and factor analysis to identify the considerations that influence shopping behaviour in relation to each of the four shopping situations (models) identified in Figure 6.1. are discussed. It concludes with a summary and discussion of the principal research findings of this stage.

The aim of this stage of data analysis was to answer the following research question, which identified in section 5.6:

*RQ2: How important are ethical and social responsibility factors compared to other traditional store image / product attribute aspects in grocery shopping choice decisions?*

7.2. Hierarchical Information Integration to aid Quantitative Research

Weber (1990) states that the best content analytic studies use both qualitative and quantitative operations on text. Therefore analysis of the focus group grids and coding
of the qualitative variables enabled the content of the discussion to be turned into numbers.

Issues of concern mentioned in the discussion and items rated in the grids were studied and listed to form the typologies displayed in Table 6.1 and Table 6.2. These were then considered for use in the questionnaire survey. It was felt that in order to keep the it to a reasonable length so as not to encourage respondent fatigue, the large classifications would be used, rather than the numerous subcategories, in line with the 'hierarchical information integration' system proposed by Louviere and Gaeth (1987). However where there had been a lot of interest in a particular issue, it was included as a separate measure to enable its importance to be established. This led to the emergence of thirteen store image items to assess the considerations respondents had when deciding which store to use, and 6 store image items for which product to buy. Additionally eleven E&SR items were put forward for establishing the considerations for store use, along with seventeen E&SR items for product purchase.

According to Neuman (1994) content analysis describes what is in the text, but cannot reveal the effect it may have on beliefs or behaviour. To take this into account the questionnaire was structured in a manner that would allow constructs for the Extended Theory of Planned Behaviour to be collected and analysed.

7.3. Descriptive Statistics

Descriptive statistics are used to display univariate summary statistics for several variables in a single table and to calculate standardized values. These are informative in that variables can be ordered in a variety of ways, for example by the size of their means
(in ascending or descending order), so displaying the relative importance of each factor, in this case each E&SR concern.

The number of usable questionnaires that went into the data analysis totalled 220. This is a response rate of 87.3%, well above the average rate of 81.7% for personal surveys (Malhotra & Birks, 2003).

7.3.1. Descriptive Statistics – Filter questionnaire

Initially the filter questionnaire established that respondents were ‘resident in the local area’, and the ‘main grocery shopper’ in the household. Subsequently a set of six filter questions were used, designed to select respondents with some knowledge of E&SR issues. The aim was to select only respondents who replied ‘yes’ to four or more of the statements. These statements were similar to those asked in the recruitment of the focus groups, however instead of asking about non-polluting products, a statement relating to the support of local and British suppliers was included as the focus group analysis indicated that this was a greater concern to consumers. Their responses are shown in Table 7.1..

<table>
<thead>
<tr>
<th>Statement</th>
<th>Yes Number</th>
<th>(%)</th>
<th>No Number</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you consider boycotting a company and its products on the basis that you did not agree with its policies and/or trading activities?</td>
<td>192</td>
<td>87.3</td>
<td>28</td>
<td>12.7</td>
</tr>
<tr>
<td>Do you normally try and recycle plastics, glass and other materials?</td>
<td>191</td>
<td>86.8</td>
<td>29</td>
<td>13.2</td>
</tr>
<tr>
<td>Do you try and support local and British suppliers through buying their products and/or using their stores?</td>
<td>190</td>
<td>86.4</td>
<td>30</td>
<td>13.6</td>
</tr>
<tr>
<td>Do you usually try and buy products that say ‘not tested on animals’?</td>
<td>190</td>
<td>86.4</td>
<td>30</td>
<td>13.6</td>
</tr>
<tr>
<td>Do you ever pay more for environmentally friendly products?</td>
<td>162</td>
<td>73.6</td>
<td>58</td>
<td>26.4</td>
</tr>
<tr>
<td>Do you always try and buy organically produced fruit, vegetables and other groceries?</td>
<td>81</td>
<td>36.8</td>
<td>139</td>
<td>63.2</td>
</tr>
</tbody>
</table>
From these results it can be seen that most of the behaviours have a high positive response with the top four behaviours (normally recycling, supporting local/British suppliers, boycotting companies, and not testing on animals) being in excess of 86%. Only marginally lower at 73.6% was paying more for environmentally friendly products. However the lowest scoring behaviour by far was the buying of organic groceries at 36.8%. This could be related to the fact that several participants in the focus groups stated that organic groceries attracted a premium price, and they simply could not afford to pay the extra cost.

7.3.2. Descriptive Statistics – Respondent Characteristics

Face-to-face questionnaires were carried out in six different locations within the South West region of England covering both city and market towns, so continuing the basic requisites of the focus groups.

The sample consisted of 155 female respondents (70.5%) and 65 male respondents (29.5%) all of whom were resident within the South West region of the United Kingdom, the main grocery shopper in the household, and aged 20 years or over. A more detailed breakdown of their characteristics is given in Tables 7.2 to 7.6.

<table>
<thead>
<tr>
<th>Town / City</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>32</td>
<td>14.5</td>
</tr>
<tr>
<td>Exeter</td>
<td>29</td>
<td>13.2</td>
</tr>
<tr>
<td>Plymouth</td>
<td>46</td>
<td>20.9</td>
</tr>
<tr>
<td>Totnes</td>
<td>40</td>
<td>18.2</td>
</tr>
<tr>
<td>Truro</td>
<td>42</td>
<td>19.1</td>
</tr>
<tr>
<td>Yeovil</td>
<td>31</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>220</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

TABLE 7.2. RESPONDENT LOCATION
### TABLE 7.3. RESPONDENT AGE

<table>
<thead>
<tr>
<th>Age range</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24 years</td>
<td>29</td>
<td>13.2</td>
</tr>
<tr>
<td>25-34 years</td>
<td>43</td>
<td>19.5</td>
</tr>
<tr>
<td>35-44 years</td>
<td>44</td>
<td>20.0</td>
</tr>
<tr>
<td>45-54 years</td>
<td>36</td>
<td>16.4</td>
</tr>
<tr>
<td>55-64 years</td>
<td>39</td>
<td>17.7</td>
</tr>
<tr>
<td>65+ years</td>
<td>29</td>
<td>13.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>220</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

### TABLE 7.4. NUMBER OF ADULTS IN HOUSEHOLD

<table>
<thead>
<tr>
<th>Number of adults</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>15.9</td>
</tr>
<tr>
<td>2</td>
<td>149</td>
<td>67.7</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>10.0</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>4.5</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>6+</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>220</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

### TABLE 7.5. TOTAL NUMBER OF CHILDREN IN HOUSEHOLD

<table>
<thead>
<tr>
<th>Town / City</th>
<th>total number of children in household</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No children</td>
<td>No dependent children</td>
</tr>
<tr>
<td>Bristol</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Exeter</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Plymouth</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Totnes</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Truro</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Yeovil</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>87</td>
<td>55</td>
</tr>
</tbody>
</table>
TABLE 7.6. TOTAL NUMBER OF RESPONDENTS BY ACORN CLASSIFICATION

<table>
<thead>
<tr>
<th>Town / City</th>
<th>A Thriving</th>
<th>B Expanding</th>
<th>C Rising</th>
<th>D Settling</th>
<th>E Aspiring</th>
<th>F Striving</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>16</td>
<td>8</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Exeter</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>Plymouth</td>
<td>8</td>
<td>3</td>
<td>11</td>
<td>13</td>
<td>6</td>
<td>5</td>
<td>46</td>
</tr>
<tr>
<td>Totnes</td>
<td>19</td>
<td>1</td>
<td>0</td>
<td>12</td>
<td>7</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>Truro</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>19</td>
<td>5</td>
<td>42</td>
</tr>
<tr>
<td>Yeovil</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>17</td>
<td>5</td>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>13</td>
<td>18</td>
<td>59</td>
<td>46</td>
<td>16</td>
<td>220</td>
</tr>
</tbody>
</table>

In addition to looking at demographic characteristics, the questionnaire also established several statistical measures of respondent shopping behaviour relating to matters such as frequency, mode of transport, distance travelled and whom they shopped with. Details of the statistics relating to frequency are given below for both a main shop (Table 7.7) and a top-up shop (Table 7.8).

TABLE 7.7. FREQUENCY OF A MAIN SHOP

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than once a week</td>
<td>42</td>
<td>19.1</td>
</tr>
<tr>
<td>Once a week</td>
<td>132</td>
<td>60.0</td>
</tr>
<tr>
<td>Every two weeks</td>
<td>28</td>
<td>12.7</td>
</tr>
<tr>
<td>Once a month</td>
<td>15</td>
<td>6.8</td>
</tr>
<tr>
<td>Less than once a month</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>100.0</td>
</tr>
</tbody>
</table>

TABLE 7.8. FREQUENCY OF A TOP-UP SHOP

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>24</td>
<td>10.9</td>
</tr>
<tr>
<td>Every other day</td>
<td>30</td>
<td>13.6</td>
</tr>
<tr>
<td>2-3 times a week</td>
<td>82</td>
<td>37.3</td>
</tr>
<tr>
<td>Once a week</td>
<td>71</td>
<td>32.3</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>13</td>
<td>5.9</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>100.0</td>
</tr>
</tbody>
</table>
From this analysis it can be seen that the majority of respondents participated in a main shop once a week (60%) and a top-up shop 2-3 times a week (37.2%). However a significant number of respondents also went for a top-up shop ‘once a week’ (32.3%). In general respondents tended to cluster more around once a week for their main shop - which is inline with the results of Keynote (2003b) who found 52% of their sample went for a major grocery shop once a week - whereas for a top-up shop the frequency was much more evenly spread.

**TABLE 7.9. MODE OF TRANSPORT TO A STORE**

<table>
<thead>
<tr>
<th>Mode of transport</th>
<th>For a main shop</th>
<th>For a top-up shop</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>Foot</td>
<td>24</td>
<td>10.9</td>
</tr>
<tr>
<td>Car</td>
<td>188</td>
<td>85.5</td>
</tr>
<tr>
<td>Public bus</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>220</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Although several choices were given for mode of transport to a store for both main shop and a top-up shop occasions, the only factors mentioned were foot, car and public bus. For a main shop the most frequently used mode of transport was a car (85.5%), quite likely due to the volume and weight of shopping that was being bought. In contrast a top-up shop saw most people traveling on foot (58.6%) although there was still a fairly high number who used a car (40.5%).

**TABLE 7.10. DISTANCE TRAVELLED TO A STORE**

<table>
<thead>
<tr>
<th>Distance</th>
<th>For a main shop</th>
<th>For a top-up shop</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>Less than 1 mile</td>
<td>47</td>
<td>21.4</td>
</tr>
<tr>
<td>1-2.5 miles</td>
<td>91</td>
<td>41.4</td>
</tr>
<tr>
<td>2.6-5 miles</td>
<td>39</td>
<td>17.7</td>
</tr>
<tr>
<td>Over 5 miles</td>
<td>43</td>
<td>19.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>220</td>
<td>100.0</td>
</tr>
</tbody>
</table>
A factor that can be compared to the mode of transport used is that of distance travelled to a store. For a main shop the majority of respondents travelled more than one mile (78.6%) with the largest group travelling between 1-2.5 miles (41.4%). This can be linked to the fact that the car was the main mode of transport for this type of shop. For a top-up shop the majority of respondents travelled less than one mile (50.9%); this again ties in with the main mode of transport being on foot. However, a large number do still travel 1-2.5 miles for a top up shop (37.7%), which underpins the significant use of a car for this type of shop.

<table>
<thead>
<tr>
<th>Whom</th>
<th>For a main shop</th>
<th>For a top-up shop</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent (%)</td>
</tr>
<tr>
<td>On own</td>
<td>137</td>
<td>62.3</td>
</tr>
<tr>
<td>With partner / spouse</td>
<td>66</td>
<td>30.0</td>
</tr>
<tr>
<td>With children</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>With family</td>
<td>7</td>
<td>3.2</td>
</tr>
<tr>
<td>With other adults</td>
<td>7</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In both categories of shopping respondents tended to shop on their own – main shop 62.3% and top-up shop 81.8% (Table 7.11). This can be linked back to the focus group findings that time is important and so involving others in the grocery shopping process lengthened it without increasing its pleasure.

Having established the basic shopping behaviour of the sample population, this chapter moves on to look at the factors that influence these shopping behaviours and decisions through the multivariate statistical methods of reliability analysis, factor analysis, and multiple regression analysis.
7.4. Reliability Analysis

When developing a new survey instrument Utwin (1995) states:

"... it is imperative to test it for reliability before using it to collect data from which you will draw inferences." (p.27)

Reliability is the extent to which a variable or set of variables is consistent in what it is intended to measure. Validity is the extent to which a measure or set of measures correctly represents the concept of study.

Reliability analysis assesses the degree of consistency between items in the construct – the rationale being that items measuring the same dimension of a construct should be highly inter-correlated. The measures used to test internal consistency were ‘inter-item’ correlations: correlations among items; ‘item-total correlations’: correlations of individual items to the summated score for the scale; and, Cronbach’s alpha: a reliability co-efficient that assesses the overall consistency of the scale. Any individual items with low or negative ‘inter-item’ or ‘item-total correlations’ need to be excluded from the scale to increase its reliability: this is known as ‘scale purification’.

Additionally Bartlett’s test of sphericity was used to test whether the variables are uncorrelated in the population i.e. the population matrix is an identity matrix, and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used to examine the appropriateness of factor analysis. A value between 0.5 and 1.0 indicate factor analysis is appropriate, whereas values below 0.5 imply it is not (Malhotra, 1999).

The results for each of the four models are shown in sections 7.3.1 to 7.3.4.
7.4.1. Reliability Analysis: Store, Main Shop

Table 7.12 displays the inter-item correlation matrix for the store main shop model.

<table>
<thead>
<tr>
<th>Importance of no animal testing of products sold</th>
<th>Importance of not dealing with oppressive regimes</th>
<th>Importance of no exploitation of developing countries</th>
<th>Importance of the ozone layer &amp; non-use of CFC's</th>
<th>Importance of no pollution from transportation of goods</th>
<th>Importance of no factory/intensive farming of products</th>
<th>Importance of social/employment policy of the store</th>
<th>Importance of support for the community by selling local produce</th>
<th>Importance of the availability of organic products</th>
<th>Importance of the availability of free range products</th>
<th>Importance of the availability of Fair Trade products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of no animal testing of products sold</td>
<td>-</td>
<td>-</td>
<td>.574</td>
<td>-</td>
<td>.525</td>
<td>.525</td>
<td>.402</td>
<td>.449</td>
<td>.442</td>
<td>.354</td>
</tr>
<tr>
<td>Importance of not dealing with oppressive regimes</td>
<td>.574</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.525</td>
<td>.525</td>
<td>.402</td>
<td>.449</td>
<td>.442</td>
<td>.354</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>.525</td>
<td>-</td>
<td>.574</td>
<td>.525</td>
<td>-</td>
<td>.402</td>
<td>.449</td>
<td>.525</td>
<td>.442</td>
<td>.354</td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; non-use of CFC's</td>
<td>.402</td>
<td>.550</td>
<td>.525</td>
<td>.402</td>
<td>.449</td>
<td>-</td>
<td>.402</td>
<td>.449</td>
<td>.525</td>
<td>.354</td>
</tr>
<tr>
<td>Importance of no pollution from transportation of goods</td>
<td>.449</td>
<td>.550</td>
<td>.402</td>
<td>.449</td>
<td>.449</td>
<td>.525</td>
<td>.402</td>
<td>.449</td>
<td>.525</td>
<td>.354</td>
</tr>
<tr>
<td>Importance of no factory/intensive farming of products sold</td>
<td>.442</td>
<td>.538</td>
<td>.449</td>
<td>.442</td>
<td>.525</td>
<td>.525</td>
<td>.402</td>
<td>.449</td>
<td>.525</td>
<td>.354</td>
</tr>
<tr>
<td>Importance of social/employment policy of the store</td>
<td>.354</td>
<td>.444</td>
<td>.449</td>
<td>.354</td>
<td>.449</td>
<td>.525</td>
<td>.354</td>
<td>.449</td>
<td>.525</td>
<td>.354</td>
</tr>
<tr>
<td>Importance of support for the community by selling local produce</td>
<td>.343</td>
<td>.443</td>
<td>.363</td>
<td>.343</td>
<td>.363</td>
<td>.444</td>
<td>.343</td>
<td>.443</td>
<td>.363</td>
<td>.343</td>
</tr>
<tr>
<td>Importance of the availability of organic products</td>
<td>.190</td>
<td>.201</td>
<td>.173</td>
<td>.190</td>
<td>.173</td>
<td>.327</td>
<td>.190</td>
<td>.201</td>
<td>.173</td>
<td>.190</td>
</tr>
<tr>
<td>Importance of the availability of free range products</td>
<td>.390</td>
<td>.411</td>
<td>.399</td>
<td>.390</td>
<td>.399</td>
<td>.512</td>
<td>.390</td>
<td>.411</td>
<td>.399</td>
<td>.390</td>
</tr>
<tr>
<td>Importance of the availability of Fair Trade products</td>
<td>.332</td>
<td>.526</td>
<td>.548</td>
<td>.332</td>
<td>.526</td>
<td>.468</td>
<td>.332</td>
<td>.526</td>
<td>.548</td>
<td>.332</td>
</tr>
</tbody>
</table>

207
TABLE 7.13. STATISTICS FOR SCALE: STORE, MAIN SHOP.

<table>
<thead>
<tr>
<th>Statistics for scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cases</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>220</td>
</tr>
</tbody>
</table>

TABLE 7.14. FACTOR ANALYSIS DESCRIPTIVES: STORE MAIN SHOP.

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)</th>
<th>Bartlett's Test of Sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. Chi-Square</td>
<td>df</td>
</tr>
<tr>
<td>---------------------</td>
<td>----</td>
</tr>
<tr>
<td>0.891</td>
<td>55</td>
</tr>
</tbody>
</table>

Reliability Coefficients: 11 items
Alpha: .901
Standardized item alpha: .904

From this analysis it can be seen that the score for Cronbach’s alpha is very respectable at 0.904. This shows that there is a high level of consistency in the overall scale, much higher than the ‘generally agreed lower limit of 0.70’ as stated by Hair et al (1998, p.118) and seconded by Utwin (1995). Inter-item correlations ranged from 0.190 to 0.755, and item-total correlations ranged from 0.445 to 0.715 (see Appendix VIIIa). Although the vast majority of these correlations exceed the minimum values of 0.30 (inter-item correlations) and 0.50 (item-total correlations) suggested by Robinson et al (1991), a few do fall below. However, given the extremely good alpha scores recorded, the reliability of this scale was not considered to be compromised by their inclusion, hence no purification of the scale was required.

Bartlett’s test of sphericity (Table 7.14) rejects the notion that the correlation matrix is an identity matrix – the chi-square statistic is 1299.090 with 55 degrees of freedom, which is significant at the 0.001 level. The value of the KMO statistic (0.891) is also large. Therefore factor analysis is considered an appropriate technique for analysing the correlation matrix shown in Table 7.12.
### 7.4.2. Reliability Analysis: Store, Top-up Shop

Table 7.15 displays the inter-item correlation matrix for the store top-up shop model.

<table>
<thead>
<tr>
<th>Importance of no animal testing of products sold</th>
<th>Importance of not dealing with oppressive regimes</th>
<th>Importance of no exploitation of developing countries</th>
<th>Importance of the ozone layer &amp; non-use of CFC's</th>
<th>Importance of no pollution from transportation of goods</th>
<th>Importance of no factory/intensive farming of products sold</th>
<th>Importance of social/employment policy of the store</th>
<th>Importance of support for the community by selling local produce</th>
<th>Importance of the availability of organic products</th>
<th>Importance of the availability of free range products</th>
<th>Importance of the availability of Fair Trade products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of no animal testing of products sold</td>
<td>-</td>
<td>.705</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Importance of not dealing with oppressive regimes</td>
<td>.618</td>
<td>-.838</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>.562</td>
<td>.684</td>
<td>.669</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; non-use of CFC's</td>
<td>.509</td>
<td>.647</td>
<td>.610</td>
<td>.733</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Importance of no pollution from transportation of goods</td>
<td>.544</td>
<td>.652</td>
<td>.631</td>
<td>.691</td>
<td>.713</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Importance of social/employment policy of the store</td>
<td>.424</td>
<td>.566</td>
<td>.614</td>
<td>.589</td>
<td>.610</td>
<td>.576</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Importance of support for the community by selling local produce</td>
<td>.433</td>
<td>.500</td>
<td>.520</td>
<td>.542</td>
<td>.528</td>
<td>.612</td>
<td>.596</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Importance of the availability of organic products</td>
<td>.318</td>
<td>.379</td>
<td>.406</td>
<td>.473</td>
<td>.419</td>
<td>.488</td>
<td>.557</td>
<td>.448</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Importance of the availability of free range products</td>
<td>.510</td>
<td>.581</td>
<td>.618</td>
<td>.652</td>
<td>.555</td>
<td>.698</td>
<td>.575</td>
<td>.646</td>
<td>.632</td>
<td>-</td>
</tr>
<tr>
<td>Importance of the availability of Fair Trade products</td>
<td>.469</td>
<td>.638</td>
<td>.646</td>
<td>.621</td>
<td>.524</td>
<td>.615</td>
<td>.640</td>
<td>.558</td>
<td>.617</td>
<td>.770</td>
</tr>
</tbody>
</table>
This analysis shows the score for Cronbach's alpha to be 0.939. Whilst this is respectably high, showing a high level of consistency in the overall scale, some may argue that it is too high, such that items in the scale may be measuring the same thing. In order to make sure that this was not the case the correlation matrix was examined in detail and those items with a very high correlation identified – in excess of 0.7 (Table 7.15). For this scale there were five correlations of 0.7+ shown in bold on the matrix. Dealing with oppressive regimes and animal testing (0.705) can easily be seen to be measuring different constructs. Dealing with oppressive regimes and exploitation of developing countries (0.838) are two different items in themselves, although they may be linked at a wider margin under the heading of Ethical Trading. The ozone layer and the use of CFC's with pollution from transportation (0.733), together with factory/intensive farming and pollution from transportation (0.713) are again different concepts that may be linked under the wider umbrella of the environment. Finally availability of Fair Trade products with the availability of free-range products (0.770) looks at individual types of product, but may be classed as product availability at a wider group. From this it can be seen that although there are items which may be linked via wider groups, they are all individual items in themselves and do not measure the
same thing. What is likely, given the sample recruited, is that respondents who are concerned about one area of the environment e.g. ozone layer, are likely to be concerned about other factors that will affect it e.g. pollution from transportation, and therefore may award both items a high score. However if only the wider groups had been used, the depth of data and the specific concerns of consumers would not have appeared.

Inter-item correlations ranged from 0.319 to 0.838, and item-total correlations ranged from 0.593 to 0.798 (see Appendix VIIIb). All of these correlations exceed the minimum values of 0.30 (inter-item correlations) and 0.50 (item-total correlations) suggested by Robinson et al (1991). Given these results no purification of the scale was required.

With a chi-square statistic of 1820.959 with 55 degrees of freedom, which is significant at the 0.001 level, Bartlett’s test of sphericity (Table 7.17) rejects the notion that the correlation matrix is an identity matrix. There is also a high value for the KMO statistic (0.921). Therefore factor analysis is considered an appropriate technique for analysing the correlation matrix shown in Table 7.15.

7.4.3. Reliability Analysis: Product, Main Shop

Table 7.18 displays the Correlation matrix for the Product, Main shop model.
### TABLE 7.18. INTER-ITEM CORRELATION MATRIX, PRODUCT, MAIN SHOP.

<table>
<thead>
<tr>
<th></th>
<th>PRSAFEMN</th>
<th>PRGMFRMN</th>
<th>PRRECYMN</th>
<th>PROVEPMN</th>
<th>PRATESMN</th>
<th>PRLIVEMN</th>
<th>PREXPLMN</th>
<th>PRCHILMN</th>
<th>PRFCCSMN</th>
<th>PRFOREMN</th>
<th>PRHOLBMN</th>
<th>PRADDIMN</th>
<th>PRMISRMN</th>
<th>PRMISAMN</th>
<th>PRORGAMN</th>
<th>PRFREEMN</th>
<th>PRFAIRMN</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRRECYMN</td>
<td></td>
<td></td>
<td>-</td>
<td>.441</td>
<td>.713</td>
<td>.482</td>
<td>.343</td>
<td>.401</td>
<td>.460</td>
<td>.460</td>
<td>.440</td>
<td>.394</td>
<td>.342</td>
<td>.410</td>
<td>.402</td>
<td>.596</td>
<td>.538</td>
</tr>
<tr>
<td>PROVEPMN</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.561</td>
<td>.427</td>
<td>.371</td>
<td>.401</td>
<td>.410</td>
<td>.564</td>
<td>.466</td>
<td>.324</td>
<td>.347</td>
<td>.416</td>
<td>.408</td>
<td>.454</td>
<td>.428</td>
</tr>
<tr>
<td>PRATESMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.421</td>
<td>.441</td>
<td>.341</td>
<td>.460</td>
<td>.558</td>
<td>.460</td>
<td>.323</td>
<td>.347</td>
<td>.353</td>
<td>.350</td>
<td>.435</td>
<td>.496</td>
</tr>
<tr>
<td>PRLIVEMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.713</td>
<td>.401</td>
<td>.410</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
<td>.394</td>
<td>.410</td>
<td>.408</td>
<td>.435</td>
<td>.427</td>
</tr>
<tr>
<td>PREXPLMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.401</td>
<td>.460</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
<td>.394</td>
<td>.410</td>
<td>.408</td>
<td>.435</td>
<td>.427</td>
</tr>
<tr>
<td>PRCHILMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.460</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
<td>.394</td>
<td>.410</td>
<td>.408</td>
<td>.435</td>
<td>.427</td>
</tr>
<tr>
<td>PRFCCSMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
<td>.394</td>
<td>.410</td>
<td>.408</td>
<td>.435</td>
<td>.427</td>
</tr>
<tr>
<td>PRFOREMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
<td>.394</td>
<td>.410</td>
<td>.408</td>
<td>.435</td>
</tr>
<tr>
<td>PRHOLBMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
<td>.394</td>
<td>.410</td>
<td>.408</td>
</tr>
<tr>
<td>PRADDIMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
<td>.394</td>
<td>.410</td>
</tr>
<tr>
<td>PRMISRMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
<td>.394</td>
</tr>
<tr>
<td>PRMISAMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.558</td>
<td>.466</td>
<td>.426</td>
</tr>
<tr>
<td>PRORGAMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.558</td>
<td>.466</td>
</tr>
<tr>
<td>PRFREEMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>.558</td>
</tr>
<tr>
<td>PRFAIRMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

**KEY:** (... when deciding which product to purchase during a main shop)

- **PRSAFEMN** Importance that the product is safe for consumption
- **PRGMFRMN** Importance that the product is free from genetically modified ingredients
- **PRRECYMN** Importance of recyclable or biodegradable packaging on product
- **PROVEPMN** Importance the product is not overpackaged
- **PRATESMN** Importance of no animal testing of product
- **PRLIVEMN** Importance of no transportation of live animals
- **PREXPLMN** Importance of no exploitation of developing countries
- **PRCHILMN** Importance of no use of child labour to produce goods
- **PRFCCSMN** Importance of the ozone layer & the non-use of CFC's
- **PRFOREMN** Importance of no forest destruction
- **PRHOLBMN** Importance of honest & clear labelling of product origin & ingredients
- **PRADDIMN** Importance of no artificial additives / preservatives in product
- **PRMISRMN** Importance of no misrepresentation of product on packaging
- **PRMISAMN** Importance of no misleading advertising of product
- **PRORGAMN** Importance it is an organic product
- **PRFREEMN** Importance it is a free range product
- **PRFAIRMN** Importance it is a Fair Trade product
TABLE 7.19. STATISTICS FOR SCALE: PRODUCT, MAIN SHOP

<table>
<thead>
<tr>
<th>Statistics for scale</th>
<th>Number of cases</th>
<th>Mean</th>
<th>Variance</th>
<th>Std Dev</th>
<th>Number of variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>220</td>
<td>96.523</td>
<td>259.803</td>
<td>16.118</td>
<td>17</td>
</tr>
</tbody>
</table>

TABLE 7.20. FACTOR ANALYSIS DESCRIPTIVES: PRODUCT, MAIN SHOP

<table>
<thead>
<tr>
<th>Sampling Adequacy (KMO)</th>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)</th>
<th>Bartlett's Test of Sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Approx. Chi-Square</td>
<td>df</td>
</tr>
<tr>
<td>0.905</td>
<td>2524.775</td>
<td>136</td>
</tr>
</tbody>
</table>

Reliability Coefficients: 17 items
Alpha: .934
Standardized item alpha: .934

Cronbach's alpha was calculated to be 0.934 for this model, again signifying a high level of consistency in the overall scale. Although not quite as high scoring as the 'store, top-up shop' model, the alpha score is still high enough to investigate further, just to ensure no items in the scale are seen to be measuring the same thing. When examining the correlation matrix for this model seven items were identified as having correlations in excess of 0.7, shown in bold on the matrix (Table 7.18). Transportation of live animals and animal testing (0.713) are different items, but may be linked under the theme of animal welfare; exploitation of developing countries and use of child labour (0.774) are different but have some links to ethical trading and human rights; forest destruction and the ozone layer and the use of CFC's may be linked under the wider title of the environment; product misrepresentation and honest labelling (0.700), misleading advertising and honest labelling (0.753), and misleading advertising and product misrepresentation (0.814) are all individual factors which fit under the broad heading of advertising and communications; and availability of Fair Trade products and availability of free range products (0.704) are individual product types which may be linked under product availability. As with the previous model it can be seen that although there are items which may be linked together into much wider groups, they are
all individual items in themselves and do not measure the same thing. Again the type of consumer recruited may account for some of the high scores received.

Inter-item correlations ranged from 0.127 to 0.814, and item-total correlations ranged from 0.441 to 0.770 (see Appendix VIIIc). The vast majority of these correlations exceed the minimum values of 0.30 (inter-item correlations) and 0.50 (item-total correlations) suggested by Robinson et al (1991); however a few do fall below. This was not considered to be compromise the reliability of this scale given the high alpha scores recorded with their inclusion. Therefore no purification of the scale was required.

Bartlett’s test of sphericity (Table 7.20) rejects the notion that the correlation matrix is an identity matrix – the chi-square statistic is 2524.775 with 136 degrees of freedom, which is significant at the 0.001 level. The value of the KMO statistic (0.905) is also large. Therefore factor analysis is considered an appropriate technique for analysing the correlation matrix shown in Table 7.18.

7.4.4. Reliability Analysis: Product, Top-up Shop

Table 7.21 displays the inter-item correlation matrix for the Product, Top-up shop model.
<table>
<thead>
<tr>
<th></th>
<th>PRSAFETU</th>
<th>PRGMFRTU</th>
<th>PRRECYTU</th>
<th>PROVEPTU</th>
<th>PRATESTU</th>
<th>PRHOLBTU</th>
<th>PRCHILTU</th>
<th>PRCFCSTU</th>
<th>PRFORETU</th>
<th>PRADDITU</th>
<th>PRMISRATU</th>
<th>PRORGATU</th>
<th>PRFAIRTU</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRSAFETU</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRGMFRTU</td>
<td>.384</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRRECYTU</td>
<td>.265</td>
<td>.575</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROVEPTU</td>
<td>.106</td>
<td>.191</td>
<td>.286</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRATESTU</td>
<td>.356</td>
<td>.557</td>
<td>.528</td>
<td>.197</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRLIVETU</td>
<td>.417</td>
<td>.492</td>
<td>.505</td>
<td>.202</td>
<td>.736</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREXPLTU</td>
<td>.383</td>
<td>.409</td>
<td>.559</td>
<td>.209</td>
<td>.523</td>
<td>.622</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRCHILTU</td>
<td>.478</td>
<td>.391</td>
<td>.536</td>
<td>.209</td>
<td>.515</td>
<td>.652</td>
<td>.838</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRCFCSTU</td>
<td>.307</td>
<td>.529</td>
<td>.694</td>
<td>.226</td>
<td>.488</td>
<td>.524</td>
<td>.643</td>
<td>.624</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRFORETU</td>
<td>.371</td>
<td>.564</td>
<td>.650</td>
<td>.228</td>
<td>.499</td>
<td>.594</td>
<td>.609</td>
<td>.628</td>
<td>.787</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRHOLBTU</td>
<td>.451</td>
<td>.509</td>
<td>.523</td>
<td>.193</td>
<td>.478</td>
<td>.505</td>
<td>.540</td>
<td>.552</td>
<td>.582</td>
<td>.631</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRADDITU</td>
<td>.255</td>
<td>.578</td>
<td>.530</td>
<td>.212</td>
<td>.390</td>
<td>.389</td>
<td>.427</td>
<td>.374</td>
<td>.533</td>
<td>.589</td>
<td>.563</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PRMISRATU</td>
<td>.422</td>
<td>.539</td>
<td>.495</td>
<td>.183</td>
<td>.413</td>
<td>.440</td>
<td>.441</td>
<td>.465</td>
<td>.501</td>
<td>.548</td>
<td>.734</td>
<td>.600</td>
<td>-</td>
</tr>
<tr>
<td>PRMISATU</td>
<td>.369</td>
<td>.571</td>
<td>.576</td>
<td>.201</td>
<td>.434</td>
<td>.431</td>
<td>.475</td>
<td>.464</td>
<td>.581</td>
<td>.600</td>
<td>.738</td>
<td>.570</td>
<td>.863</td>
</tr>
<tr>
<td>PRORGATU</td>
<td>.144</td>
<td>.502</td>
<td>.568</td>
<td>.243</td>
<td>.493</td>
<td>.439</td>
<td>.433</td>
<td>.393</td>
<td>.557</td>
<td>.570</td>
<td>.399</td>
<td>.582</td>
<td>.382</td>
</tr>
<tr>
<td>PRFREETU</td>
<td>.237</td>
<td>.548</td>
<td>.619</td>
<td>.246</td>
<td>.518</td>
<td>.489</td>
<td>.571</td>
<td>.539</td>
<td>.585</td>
<td>.668</td>
<td>.573</td>
<td>.599</td>
<td>.531</td>
</tr>
<tr>
<td>PRFAIRTU</td>
<td>.307</td>
<td>.495</td>
<td>.604</td>
<td>.229</td>
<td>.528</td>
<td>.469</td>
<td>.645</td>
<td>.562</td>
<td>.571</td>
<td>.552</td>
<td>.529</td>
<td>.469</td>
<td>.521</td>
</tr>
</tbody>
</table>

**KEY:** (...) when deciding which product to purchase during a top-up shop

- **PRSAFETU:** Importance that the product is safe for consumption
- **PRGMFRTU:** Importance that the product is free from genetically modified ingredients
- **PRRECYTU:** Importance of recyclable or biodegradable packaging on product
- **PROVEPTU:** Importance the product is not overpackaged
- **PRATESTU:** Importance of no animal testing of product
- **PRLIVETU:** Importance of no transportation of live animals
- **PREXPLTU:** Importance of no exploitation of developing countries
- **PRCHILTU:** Importance of no use of child labour to produce goods
- **PRCFCSTU:** Importance of the ozone layer & the non-use of CFC's
- **PRFORETU:** Importance of forest destruction
- **PRHOLBTU:** Importance of honest & clear labelling of product origin & ingredients
- **PRADDITU:** Importance of no artificial additives / preservatives in product
- **PRMISRATU:** Importance of no misrepresentation of product on packaging
- **PRMISATU:** Importance of no misleading advertising of product
- **PRORGATU:** Importance of it is an organic product
- **PRFREETU:** Importance of it is a free range product
- **PRFAIRTU:** Importance of it is a Fair Trade product
The score for Cronbach’s alpha for this model was 0.941, showing a significantly high level of consistency in the overall scale. This alpha score, although not vastly different, was the highest of all the models, and therefore the correlation matrix was restudied. When examining the inter-item correlation matrix for this model seven items were identified as having correlations in excess of 0.7, shown in bold on the matrix (Table 7.20) and these were in turn the same seven items identified in the ‘product main shop’ model. Therefore as already discussed and identified in the previous section, these items are all individual factors and do not measure the same thing. All factors bar one—misleading advertising and honest labelling (0.738) - scored more highly on the product top-up shop model than the product main shop model.

Inter-item correlations ranged from 0.106 to 0.863, and item-total correlations ranged from 0.285 to 0.775 (see Appendix VIIIId). The majority of these correlations exceed the minimum values of 0.30 (inter-item correlations) and 0.50 (item-total correlations) suggested by Robinson et al (1991), although a few do fall slightly below these values. However, given the high alpha score attained for this model, including these lower
value variables was not considered detrimental to its reliability, hence no purification of
the scale was required.

With a chi-square statistic of 2772.060 with 136 degrees of freedom, which is
significant at the 0.1 level, Bartlett’s test of sphericity (Table 7.23) rejects the notion
that the correlation matrix is an identity matrix. There is also a high value for the KMO
statistic (0.922). Therefore factor analysis is considered an appropriate technique for
analysing the correlation matrix shown in Table 7.21.

Given the fact that the reliability analysis has shown the factors to be reliable and valid
measures the next stage of factor analysis was carried.

7.5. Factor Analysis

Factor analysis is a multivariate statistical method used to analyse the structure of
interrelationships, or correlations, among a large number of variables by defining a
smaller set of common underlying dimensions, called composite variables or ‘factors’.
The main use of factor analysis is to aid summarisation and data reduction and this is
how it will be used in this study. Factor analysis may be exploratory or confirmatory.
This study will make use of exploratory factor analysis, originally developed by
Spearman (1904) in the area of human abilities. Kline (2000) states that exploratory
factor analysis is a powerful tool in elucidating important determiners and associated
variables, especially in the area of personality, and the best way of achieving this is to
put in as many variables as possible and to see what loads on to the relevant factor.

This study will use the E&SR factors of concern, generated from the focus groups and
used in the questionnaires as variables, in order to discover the main constructs or
dimensions of E&SR issues. This will enable the study to establish how these factors may be linked together under larger ‘umbrella’ themes.

7.5.1. Method

Factor analysis usually takes place in three stages: 1) a correlation matrix; 2) the extraction of factors; and 3) factor rotation. The first stage of producing a correlation matrix was carried out through the Reliability analysis process for each of the four models, which has already been discussed in sections 7.3.1-7.3.4. After the item-total correlations and alpha scores were checked for reliability, factor extraction and rotation could take place. The extraction method of analysis used was that of ‘Principal Components’ and the rotation method ‘Varimax’, applied through the use of SPSS.

‘Principal Components’ as an extraction method has certain mathematical characteristics peculiar to it, and as such makes it a technique of extreme value in the analysis of data in psychology and the social sciences. The method focuses on the total variance of the data set and seeks to reduce it to a smaller set of composite variables that are uncorrelated to each other, so maximising the variance explained for any number of factors.

Varimax (Kaiser, 1958) is an analytic rotation method which aims at simple structure whilst keeping the factor axes orthogonal, meaning that the rotated factors are uncorrelated and the communalities and the ability to reproduce the original correlation matrix are identical to the original factor analysis. According to Kline (2000) ‘Varimax is an excellent method (and) where an orthogonal simple structure rotation is desired, Varimax should be applied’ (p.68). It indicates a clear positive or negative association
between the variable and the factor so giving a clearer separation of the factors than other rotation methods such as Quartimax and Equamax (Hair et al, 1998).

Kline (2000) suggests a minimum of 100 as a sample size suitable for factor analysis, or else it could produce misleading results. Hair et al (1998) agree that the sample size should be 100 or larger. This study containing 220 responses is more than adequate.

Interpretation of the factors is aimed at understanding the underlying dimension that unified the group of variables loading on it. The greater the loading the more the variable is a pure measure of the factor. Tabachnick & Fidell (1996) suggest only interpreting loadings of 0.32 and above, and Comrey & Lee (1992) state that loadings in excess of 0.71 are considered excellent.

### 7.5.2. Factor Analysis: Store, Main Shop

Table 7.24 shows the rotated component matrix for the Store, Main shop model, showing that it loads onto two components.

<table>
<thead>
<tr>
<th>E&amp;SR Factor</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of no animal testing of products sold when deciding on a main store</td>
<td>.731</td>
<td></td>
</tr>
<tr>
<td>Importance of not dealing with oppressive regimes when deciding on a main store</td>
<td>.855</td>
<td></td>
</tr>
<tr>
<td>Importance of not exploiting developing countries when deciding on a main store</td>
<td>.803</td>
<td></td>
</tr>
<tr>
<td>Importance of ozone layer and cfc's when deciding on a main store</td>
<td>.607</td>
<td></td>
</tr>
<tr>
<td>Importance of no pollution from transportation when deciding on a main store</td>
<td>.691</td>
<td></td>
</tr>
<tr>
<td>Importance of no intensive farming when deciding on a main store</td>
<td>.604</td>
<td></td>
</tr>
<tr>
<td>Importance of store employment policy when deciding on a main store</td>
<td>.574</td>
<td></td>
</tr>
<tr>
<td>Importance of supporting local community when deciding on a main store</td>
<td>.651</td>
<td></td>
</tr>
<tr>
<td>Importance of availability of organics when deciding on a main store</td>
<td>.816</td>
<td></td>
</tr>
<tr>
<td>Importance of availability of free range when deciding on a main store</td>
<td>.800</td>
<td></td>
</tr>
<tr>
<td>Importance of availability of fair trade when deciding on a main store</td>
<td>.720</td>
<td></td>
</tr>
</tbody>
</table>
Results show that six items load onto component 1 and five items load onto component 2. Relationships can be found between each group of factors within a component. Component 1 can be related to Global E&SR concerns incorporating factors affecting the wider world. In contrast those factors in Component 2 can be seen as local E&SR concerns, which affect the local community and the consumer directly.

7.5.3. Factor Analysis: Store, Top-up Shop

Table 7.25 shows the rotated component matrix for the Store, Top-up shop model. It can be seen that these items only load onto one component.

<table>
<thead>
<tr>
<th>E&amp;SR Factor</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of no animal testing of products sold when deciding on a top-up store</td>
<td>.700</td>
</tr>
<tr>
<td>Importance of not dealing with oppressive regimes when deciding on a top-up store</td>
<td>.835</td>
</tr>
<tr>
<td>Importance of not exploiting developing countries when deciding on a top-up store</td>
<td>.833</td>
</tr>
<tr>
<td>Importance of ozone layer and cfc's when deciding on a top-up store</td>
<td>.837</td>
</tr>
<tr>
<td>Importance of no pollution from transportation when deciding on a top-up store</td>
<td>.793</td>
</tr>
<tr>
<td>Importance of no intensive farming when deciding on a top-up store</td>
<td>.837</td>
</tr>
<tr>
<td>Importance of store employment policy when deciding on a top-up store</td>
<td>.777</td>
</tr>
<tr>
<td>Importance of supporting local community when deciding on a top-up store</td>
<td>.734</td>
</tr>
<tr>
<td>Importance of availability of organics when deciding on a top-up store</td>
<td>.651</td>
</tr>
<tr>
<td>Importance of availability of free range when deciding on a top-up store</td>
<td>.836</td>
</tr>
<tr>
<td>Importance of availability of fair trade when deciding on a top-up store</td>
<td>.821</td>
</tr>
</tbody>
</table>

For this particular shopping experience there was no differentiation between these factors of E&SR. The reason for this is likely to be the nature of the choice of store for a top-up shop. If we refer back to the qualitative findings of the focus groups it can be seen that factors such as convenience, time available and location were greater considerations for a top-up shop than a main shop, and overtook considerations such as price, ethical pedigree and product range.
7.5.4. Factor Analysis: Product, Main Shop

The rotated component matrix for the Product, Main shop model is shown in Table 7.26, indicating that the model loads onto three components.

<table>
<thead>
<tr>
<th>E&amp;SR Factor</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of ozone layer and cfc's when deciding on a main product</td>
<td>0.603</td>
</tr>
<tr>
<td>Importance of no forest destruction when deciding on a main product</td>
<td>0.582</td>
</tr>
<tr>
<td>Importance of recyclable packaging when deciding on a main product</td>
<td>0.710</td>
</tr>
<tr>
<td>Importance of no overpackaging when deciding on a main product</td>
<td>0.584</td>
</tr>
<tr>
<td>Importance of being organic when deciding on a main product</td>
<td>0.829</td>
</tr>
<tr>
<td>Importance of being free range when deciding on a main product</td>
<td>0.787</td>
</tr>
<tr>
<td>Importance of being fair trade when deciding on a main product</td>
<td>0.637</td>
</tr>
<tr>
<td>Importance of no artificial additives/preservatives when deciding on a main product</td>
<td>0.556</td>
</tr>
<tr>
<td>Importance of being GM free when deciding on a main product</td>
<td>0.618</td>
</tr>
<tr>
<td>Importance of product safety when deciding on a main product</td>
<td>0.597</td>
</tr>
<tr>
<td>Importance of no animal testing when deciding on a main product</td>
<td>0.510</td>
</tr>
<tr>
<td>Importance of no transportation of live animals when deciding on a main product</td>
<td>0.692</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries when deciding on a main product</td>
<td>0.797</td>
</tr>
<tr>
<td>Importance of no child labour when deciding on a main product</td>
<td>0.846</td>
</tr>
<tr>
<td>Importance of honest labelling when deciding on a main product</td>
<td>0.777</td>
</tr>
<tr>
<td>Importance of no product misrepresentation when deciding on a main product</td>
<td>0.877</td>
</tr>
<tr>
<td>Importance of no misleading advertising when deciding on a main product</td>
<td>0.804</td>
</tr>
</tbody>
</table>

The results of this rotation shows that nine items fall onto component 1, five items fall onto component 2, and three items fall onto component 3. By studying the factors within each component the following relationships can be drawn: component 1 can be related to product heritage factors of E&SR concern – that is factors associated with how the product has been produced and is presented; component 2 shows a relationship based upon animal and human rights; and component 3 can be seen as E&SR concerns about advertising and communications.
7.5.5. Factor Analysis: Product, Top-up Shop

Illustrated below in Table 7.27 is the rotated component matrix for the Product, Top-up shop model. This shows that the model also loads onto three components, like the product main shop model.

<table>
<thead>
<tr>
<th>E&amp;SR Factor</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of ozone layer and cfc's when deciding on a top-up product</td>
<td>.559</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of no forest destruction when deciding on a top-up product</td>
<td>.532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of recyclable packaging when deciding on a top-up product</td>
<td>.639</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of no overpackaging when deciding on a top-up product</td>
<td>.428</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of being organic when deciding on a top-up product</td>
<td>.806</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of being free range when deciding on a top-up product</td>
<td>.705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of being fair trade when deciding on a top-up product</td>
<td>.600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of no artificial additives/preservatives when deciding on a top-up product</td>
<td>→</td>
<td>.607</td>
<td></td>
</tr>
<tr>
<td>Importance of being GM free when deciding on a top-up product</td>
<td>→ .541</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of honest labelling when deciding on a top-up product</td>
<td>.739</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of no product misrepresentation when deciding on a top-up product</td>
<td>.873</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of no misleading advertising when deciding on a top-up product</td>
<td>.839</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of product safety when deciding on a top-up product</td>
<td></td>
<td>.625</td>
<td></td>
</tr>
<tr>
<td>Importance of no animal testing when deciding on a top-up product</td>
<td></td>
<td>.611</td>
<td></td>
</tr>
<tr>
<td>Importance of no transportation of live animals when deciding on a top-up product</td>
<td></td>
<td>.756</td>
<td></td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries when deciding on a top-up product</td>
<td></td>
<td>.757</td>
<td></td>
</tr>
<tr>
<td>Importance of no child labour when deciding on a top-up product</td>
<td></td>
<td>.822</td>
<td></td>
</tr>
</tbody>
</table>

Table 7.27 shows that seven items fall onto component 1, five fall onto component 2 and five fall onto component 3. The factors loaded onto component 1 can be related to product heritage factors of E&SR concern. Component 2 shows a relationship based upon advertising and communications — that is factors of how the product is advertised, who to, and whether what is said is transparent and honest. Finally component 3 can be seen as E&SR concerns about animal and human rights.
Only two factors have moved between the Product, Main shop model and the Product, Top-up shop model. These are ‘importance of being GM free’ and ‘importance of no artificial additives and preservatives’ when choosing a product during a top-up shop, which have moved from being product heritage based to being advertising and communications based. This again can be explained by looking back at the focus group discussions which found that as top-up shopping was more convenience-based, certain areas of E&SR were not so well researched, and therefore consumers relied more heavily on communications and labelling to make decisions. This could explain why certain aspects of what is in a product become linked to what is being communicated to consumers, which in turn affects their behaviour during a top-up shop.

Having looked at the importance of E&SR factors on their own in order to establish their role in shopping behaviour it has to be recognised, as stated previously, that these factors cannot be considered in isolation. In order to examine fully the influences on grocery shopping decisions, E&SR factors need to be studied alongside store image factors. The methodology used to implement this was multiple regression analysis.

7.6. Multiple Regression Analysis

Multiple regression analysis is a dependence technique used to analyse the relationship between one dependent variable (DV) and two or more independent variables (IVs). Multiple regression analysis not only enables the prediction of the DV, but also provides an assessment of the relative impact of each of the IVs, as well as the combined ability of the IVs in explaining the variation in the DV.

The objective of multiple regression analysis is to predict the changes in the DV in response to changes in the IVs. In order to achieve this objective and ensure the best
prediction from the set of IVs each IV is weighted during analysis using the ‘least squares’ mathematical procedure. (Hair et al, 1998).

The formula describing any regression line is:

\[ Y = \beta_0 + \beta_1X \]

Multiple regression extends this to:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \ldots + \beta_nX_n + \varepsilon \]

which is the generalised equation used to express multiple regression analysis (Malhotra, 1999; Hair et al, 1998; Freund & Wilson, 1998; Aiken & West, 1991). \( Y \) is the predicted value of the DV, and the \( X \)s represent the various IVs, of which there are \( n \). \( \beta_0 \) is the \( Y \) intercept and is constant, being the value of \( Y \) when all \( X \) values are zero. The \( \beta \)s represent the regression coefficients associated with each \( X \) (or IV). Thus they represent the slope of the regression surface or response surface for each IV. \( \varepsilon \) is the random error usually assumed to be normally distributed with mean zero and variance \( \sigma^2 \).

As a parametric statistical technique multiple regression analysis requires that both the DV and IVs are metric i.e. measured at interval or ratio level. IVs comprising of nominal or ordinal data can be incorporated provided that they are transformed using ‘dummy’ variables (Babbie et al, 2000; Diamantopoulos & Schlegelmilch, 1997), however no data was collected in this form so making a need for this transformation redundant. In this particular study the dependent variable is the measure of intention to either use an E&SR store or purchase an E&SR product during a main or top-up shop,
and the independent variables are provided in the form of the E&SR factors and the
store image factors, all of which were measured at interval level.

The size of a sample when testing for multiple regressions (i.e. the number of cases
available for each IV) is an issue which may affect both statistical power and
generalisability, so needs to be within an acceptable limit. Firstly, with regard to
statistical power, the sample of 220 with 9 to 15 IVs, is able to detect relationships with
$R^2$ values of between approximately 9-11% at a power of 0.80 with the significance
level set at 0.01. From this it can be considered that regression analysis is sufficient to
identify statistically significant relationships. Additionally it also closely approaches
the proposed guideline for the ratio of observations to IVs of 15-20 to 1 deemed
desirable in order for the results to be generalisable in a representative sample, with a
ratio of between 15:1 to 24:1. This figure exceeds the ‘desired’ level at times, but is not
considered to be in danger of being ‘overfitted’ (Hair et al, 1998). Secondly, in respect
of generalisability, the number of observations included in each model was very much
in excess of the 15 to 20 deemed desirable in order for the results to be generalisable in
a representative sample (Hair et al, 1998).

7.6.1. Method

A linear regression analysis was used to analyse how consumers make grocery shopping
decisions, and the significance of E&SR and store image factors in them. E&SR
composite variables (developed by the factor analysis) and store image factors were
used as the Independent Variables (IVs) and intention (of where to shop/what to buy)
was used as the Dependent variable (DV). These measures were taken from the
questionnaire, and related specifically to each shopping model.
Having made sure the sample was suitable for multiple regression analysis it was then possible to calculate correlation coefficients between the DV and all possible IVs. The process was executed using the computer package SPSS. A series of models were produced, with 'enter' being the chosen method of selecting IVs to enter into each model.

Prior to the multiple regression analysis the data was screened to identify whether or not any significant violations of the assumptions underlying the technique existed – linearity, homoscedasticity, independence of the residuals, and normality. Scatterplots were examined for linearity, any marked skewness, and homoscedasticity (Tabachnick & Fidell, 1996).

The correlation matrices produced, along with collinearity diagnostics generated from the multiple regression models, were examined in order to identify any problems with multicollinearity amongst the IVs. A correlation of 0.9 or above is considered to indicate substantial multicollinearity, which was not found in these models (Hair et al, 1998; Tabachnick & Fidell, 1996). In addition scores for the variance inflation factor (VIF) and tolerance were studied. Large scores for VIF (VIF>10) and low values for tolerance (TOL<0.10) indicate high degrees of multicollinearity (Hair et al, 1998; Freund & Wilson, 1998; Neter et al, 1996). Again the scores for this study were within these acceptable limits.

Additionally standardised residuals (X=ZRESID) and standardised predicted values (Y=ZPRED) were used to create scatterplots for each shopping occasion. Visual inspection established the non-existence of outliers, or cases of disproportionate influence (Hair et al, 1998; Tabachnick & Fidell, 1996).
Of critical importance to understanding the predictive power of regression models are multiple R and $R^2$. Multiple R is the correlation coefficient that indicates the strength of association between any two metric variables, in this case the DV and the IVs. As its designation implies, $R^2$ is this correlation coefficient squared. Its value indicates the proportion of the variance in the DV that can be explained by the model (Hair et al., 1998). Although $R^2$ is an accurate measure for the sample drawn, it is considered an optimistic estimate for the population value. A modified measure that is considered a better population estimate is the adjusted coefficient of determination (Adjusted $R^2$), and is particularly useful for comparison between models with different numbers of IVs, as is the case with this study, as it makes allowances for the specific number of IVs upon which each model is based (Hair et al., 1998; Neter et al., 1996).

F ratios are also reported here. These illustrate the extent to which the amount of variance explained by each of the models is more than that which could be explained by the average i.e. the extent to which $R^2$ is greater than zero (Hair et al., 1998).

7.6.2. Regression Analysis: Store, Main Shop

The matrix in Table 7.28 sets out the correlation coefficients between the intention to use an E&SR store for a main shop (DV) and the composite variables of E&SR developed from the factor analysis, together with the store image factors generated from the questionnaire (IVs). For ease of interpretation a key of the variables is included.
<table>
<thead>
<tr>
<th></th>
<th>INTESTMN</th>
<th>STGLOBMN</th>
<th>STLOCLMN</th>
<th>STRPICMN</th>
<th>STQUALMN</th>
<th>STRANGMN</th>
<th>STLOCMN</th>
<th>STCARPMN</th>
<th>STOPENMN</th>
<th>STCASHMN</th>
<th>STPETRMN</th>
<th>STCUSFMN</th>
<th>STSTAFMN</th>
<th>STPROMMN</th>
<th>STDESIMN</th>
<th>STRETUMN</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTESTMN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STGLOBMN .464***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STLOCLMN .477***</td>
<td>.665***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRPICMN .181**</td>
<td>.183**</td>
<td>.076</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STQUALMN .214***</td>
<td>.289***</td>
<td>.359***</td>
<td>.356***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRANGMN .150*</td>
<td>.269***</td>
<td>.337***</td>
<td>.286***</td>
<td>.606***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STLOCMN .056</td>
<td>.098</td>
<td>.158*</td>
<td>.195**</td>
<td>.182**</td>
<td>.381***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STCARPMN .154*</td>
<td>.043</td>
<td>.165**</td>
<td>.208***</td>
<td>.251***</td>
<td>.173**</td>
<td>.135*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STOPENMN .171**</td>
<td>.112*</td>
<td>.278***</td>
<td>.155*</td>
<td>.142*</td>
<td>.146*</td>
<td>.244***</td>
<td>.370***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STCASHMN .150*</td>
<td>.082</td>
<td>.014</td>
<td>.152*</td>
<td>.026</td>
<td>.054</td>
<td>.116*</td>
<td>.222***</td>
<td>.347***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STPETRMN .187**</td>
<td>.000</td>
<td>.017</td>
<td>.134*</td>
<td>.079</td>
<td>.179**</td>
<td>.096</td>
<td>.486***</td>
<td>.303***</td>
<td>.559***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STCUSFMN .379***</td>
<td>.148*</td>
<td>.238***</td>
<td>.227***</td>
<td>.192**</td>
<td>.222***</td>
<td>.196**</td>
<td>.366***</td>
<td>.476***</td>
<td>.424***</td>
<td>.532***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STSTAFMN .185**</td>
<td>.294***</td>
<td>.322***</td>
<td>.252***</td>
<td>.482***</td>
<td>.495***</td>
<td>.320***</td>
<td>.132*</td>
<td>.173**</td>
<td>.031</td>
<td>.102</td>
<td>.413***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STPROMMN .240***</td>
<td>.207***</td>
<td>.216***</td>
<td>.375***</td>
<td>.180*</td>
<td>.284***</td>
<td>.322***</td>
<td>.169**</td>
<td>.246***</td>
<td>.340***</td>
<td>.285***</td>
<td>.410***</td>
<td>.449***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STDESIMN .141*</td>
<td>.074</td>
<td>.227***</td>
<td>.198**</td>
<td>.339***</td>
<td>.405***</td>
<td>.352***</td>
<td>.320***</td>
<td>.306***</td>
<td>.223***</td>
<td>.311***</td>
<td>.430***</td>
<td>.483***</td>
<td>.408***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRETUMN .220***</td>
<td>.150*</td>
<td>.233***</td>
<td>.149*</td>
<td>.232***</td>
<td>.233***</td>
<td>.314***</td>
<td>.277***</td>
<td>.279***</td>
<td>.241***</td>
<td>.305***</td>
<td>.460***</td>
<td>.309***</td>
<td>.458***</td>
<td>.529***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 220; **** = p<0.001; ** = p<0.01; * = p<0.05

**KEY:**
- INTESTMN Intend to use an E&S R store next time you go for a main shop
- STGLOBMN Importance of Global E&S R concerns when deciding on a main store
- STLOCLMN Importance of Local E&S R concerns when deciding on a main store
- STRPICMN Importance of price when deciding on a main store
- STQUALMN Importance of merchandise quality when deciding on a main store
- STRANGMN Importance of range of merchandise when deciding on a main store
- STLOCMN Importance of location when deciding on a main store
- STCARPMN Importance of free car park when deciding on a main store
- STOPENMN Importance of opening hours when deciding on a main store
- STCASHMN Importance of cash point when deciding on a main store
- STPETRMN Importance of petrol station when deciding on a main store
- STCUSFMN Importance of customer facilities when deciding on a main store
- STSTAFMN Importance of polite & friendly staff when deciding on a main store
- STPROMMN Importance of promotions when deciding on a main store
- STDESIMN Importance of design & layout when deciding on a main store
- STRETUMN Importance of returns, exchanges & credit facilities when deciding on a main store
The correlation matrix shown in Table 7.28 establishes that there are no values above 0.9, so multicollinearity between the IVs is not an issue. However there are several relatively high correlations (above 0.3) between the DV (intention) and three of the IVs, and one relatively low correlation, which are highlighted in bold. Both the global and local E&SR issues of concern correlate highly with the intention to use an E&SR store the next time a main shop was undertaken (0.464 and 0.477 respectively). This is not unexpected given the nature of the sample studied: i.e. consumers filtered for awareness of E&SR issues. Customer facilities is the other factor that correlates strongly with intention (0.379), albeit at a lower value than both of the E&SR factors. This is likely to be due to the fact that consumers look for the convenience of having other services/facilities at a store (toilets, cafe, other sub-stores, etc) so enabling a 'one-stop-shop', as mentioned in the focus group discussions. Additionally past literature points to the provision of additional services as being a main factor in supermarket choice criteria (Hutcheson & Moutinho, 1998). Location correlates with intention at a relatively low value (0.56). This could be due to the fact that each study was carried out in an area containing retail competition, so for consumers in these areas location was a given factor, and it is the importance of other attributes which influences their store choice (Richardson et al, 1994).

The results for the regression coefficients for the store, main shop model are shown in Table 7.29.
From this table it can be seen that the factor of greatest significance influencing the intention to use an E&SR store the next time a respondent goes for a main grocery shop is the availability of customer facilities, which incorporates facilities such as toilets, café, children’s facilities and other sub-stores. The two other significant factors are found to be the Global (component 1) and Local (component 2) E&SR issues. Although there are some negative beta values present in the table, they are negligible and not statistically significant, so are not a concern to this study.

The $R^2$ value indicates that this model explains 32.7% of the variance in intention, and the F ratio is significant at the 0.001 level, meaning these results are unlikely to have occurred by chance.
7.6.3. Regression Analysis: Store, Top-up Shop

Correlation coefficients between the intention to use an E&SR store for a top-up shop (DV) and the composite variable of E&SR developed from the factor analysis along with the store image factors generated from the questionnaire (IVs) are displayed in Table 7.30. A key of the variables is included.
TABLE 7.30. CORRELATION MATRIX OF MULTIPLE REGRESSION ANALYSIS: STORE, TOP-UP SHOP

<table>
<thead>
<tr>
<th></th>
<th>INTESITU</th>
<th>STE&amp;SRTU</th>
<th>STPRICTU</th>
<th>STQUALTU</th>
<th>STRANGTU</th>
<th>STLOCATU</th>
<th>STCARPTU</th>
<th>STOPENTU</th>
<th>STCASHTU</th>
<th>STPETRTU</th>
<th>STCUSFTU</th>
<th>STSTAFTU</th>
<th>STPROMTU</th>
<th>STDESITU</th>
<th>STRETUTU</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTESITU</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STE&amp;SRTU</td>
<td>.420***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STPRICTU</td>
<td>.086</td>
<td>.368***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STQUALTU</td>
<td>.308***</td>
<td>.524***</td>
<td>.493***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRANGTU</td>
<td>.130*</td>
<td>.195**</td>
<td>.262***</td>
<td>.370***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STLOCATU</td>
<td>.071</td>
<td>-.101</td>
<td>.047</td>
<td>.136*</td>
<td>.114*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STCARPTU</td>
<td>.137*</td>
<td>.211***</td>
<td>.203</td>
<td>.264***</td>
<td>.288***</td>
<td>.138*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STOPENTU</td>
<td>.194***</td>
<td>.125*</td>
<td>.196***</td>
<td>.222***</td>
<td>.088</td>
<td>.378***</td>
<td>.237***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STCASHTU</td>
<td>.025</td>
<td>.098</td>
<td>.268**</td>
<td>.118*</td>
<td>.090</td>
<td>.042</td>
<td>.234***</td>
<td>.281***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STPETRTU</td>
<td>.058</td>
<td>.068</td>
<td>.153***</td>
<td>.147*</td>
<td>.150*</td>
<td>.015</td>
<td>.410***</td>
<td>.150*</td>
<td>.495***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STCUSFTU</td>
<td>.250***</td>
<td>.193**</td>
<td>.282***</td>
<td>.263***</td>
<td>.150*</td>
<td>.020</td>
<td>.376***</td>
<td>.204***</td>
<td>.327***</td>
<td>.557***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STSTAFTU</td>
<td>.234***</td>
<td>.400***</td>
<td>.336***</td>
<td>.574***</td>
<td>.241***</td>
<td>.148*</td>
<td>.202***</td>
<td>.272***</td>
<td>.007</td>
<td>.153*</td>
<td>.369***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STPROMTU</td>
<td>.277***</td>
<td>.275***</td>
<td>.465***</td>
<td>.323***</td>
<td>.208***</td>
<td>.132*</td>
<td>.244***</td>
<td>.282***</td>
<td>.245***</td>
<td>.282***</td>
<td>.350***</td>
<td>.421***</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STDESITU</td>
<td>.055</td>
<td>.260***</td>
<td>.456***</td>
<td>.343***</td>
<td>.206***</td>
<td>.080</td>
<td>.311***</td>
<td>.231***</td>
<td>.214***</td>
<td>.259***</td>
<td>.464***</td>
<td>.452***</td>
<td>.538***</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>STRETUTU</td>
<td>.126*</td>
<td>.320***</td>
<td>.354***</td>
<td>.283***</td>
<td>.181*</td>
<td>.026</td>
<td>.323***</td>
<td>.148*</td>
<td>.233***</td>
<td>.438***</td>
<td>.473***</td>
<td>.321***</td>
<td>.553***</td>
<td>.623***</td>
<td>-</td>
</tr>
</tbody>
</table>

N = 220; *** = p<0.001; ** = p<0.01; * = p<0.05

KEY: INTESITU Intend to use an E&SR store next time you go for a top-up shop
      STE&SRTU Importance of E&SR concerns when deciding on a top-up store
      STPRICTU Importance of price when deciding on a top-up store
      STQUALTU Importance of merchandise quality price when deciding on a top-up store
      STRANGTU Importance of range of merchandise when deciding on a top-up store
      STLOCATU Importance of location when deciding on a top-up store
      STCARPTU Importance of free car park when deciding on a top-up store
      STOPENTU Importance of opening hours when deciding on a top-up store
      STCASHTU Importance of cash point when deciding on a top-up store
      STPETRTU Importance of petrol station when deciding on a top-up store
      STCUSFTU Importance of customer facilities when deciding on a top-up store
      STSTAFTU Importance of polite & friendly staff when deciding on a top-up store
      STPROMTU Importance of promotions when deciding on a top-up store
      STDESITU Importance of design & layout when deciding on a top-up store
      STRETUTU Importance of returns, exchanges & credit facilities when deciding on a top-up store
Table 7.30 displays the correlation matrix for intention to patronise an E&SR store for a top-up grocery shop, and establishes that multicollinearity is not present as no correlation value is above 0.9. However, the DV (intention) correlates relatively highly (>0.30) with two IV’s and relatively lowly (<0.06) with three of the IV’s, which are highlighted in **bold**. E&SR issues correlate most highly with intention (0.420), and can be accredited to the nature of the sample as discussed previously. The other strong correlation is between merchandise quality and intention (0.308), and reference to the focus groups and past literature illustrate that this is one of the main issues to consumers when grocery shopping (Wasik, 1992; Hutcheson & Moutinho, 1998).

The importance of other facilities such as a petrol station and a cash point when undertaking a top-up shop are low in importance, as illustrated in their correlations with intention (0.058 and 0.025 respectively). Additionally the design of the store correlates at a low value with intention (0.055). The relatively low importance placed on these issues is likely to be due to the nature of a top-up shop.

The results for the regression coefficients for the store, top-up shop model are shown in Table 7.31.
It can be seen that the factors of significance in Table 7.31 are the E&SR factors, price, promotions, design & layout, as well as, again, the availability of customer facilities. However, the factors of E&SR, customer facilities and promotions all have positive beta values, whereas price and design/layout have negative beta values. Those factors with positive beta values (E&SR, customer facilities, promotions) indicate an important influence on patronage, whilst those with negative beta values (price, design/layout) indicate an unimportant influence. This therefore suggests that E&SR issues are important influences as with a main shop. The importance of promotions can be explained by referring back to the focus group studies where respondents mentioned visiting certain stores for a particular promotion, in the nature of a top-up shop. The
area of design/layout is less important in the nature of a top-up shop, as is price, with other factors taking precedence.

The $R^2$ value indicates that this model explains 28.9% of the variance in intention, and the F ratio is significant at the 0.001 level, meaning these results are unlikely to have occurred by chance. This model does not explain as much of the variance in intention as the main shop model, however the significance of the F ratio (0.000) shows that it is still a strong predictor of this type of shopping activity.

7.6.4. Regression Analysis: Product Main Shop

The matrix in Table 7.32 sets out the correlation coefficients between the intention to purchase an E&SR product when doing a main shop (DV) and the composite variables of E&SR developed from the factor analysis, together with the store image factors generated from the questionnaire (IVs). For ease of interpretation a key of the variables is included.
The results of the correlation matrix shown in Table 7.32 show no signs of multicollinearity, as no IV correlation exceeds a value of 0.9. There are two relatively high correlations (>0.40) and two relatively low correlations (<0.06) between the DV (intention) and other IVs, which are highlighted in **bold**. The E&SR issues of product heritage (0.479), followed by animal and human rights (0.439) correlate most highly with intention. These can be explained by reference to the focus group discussions and the amount of times trust, production techniques, animal testing and fair trade policies where mentioned, to establish these are areas of importance. The low correlations between intention and price (0.051) can be explained through studying the focus group discussions, as many respondents stated they were happy to pay more for E&SR.
products, so making price less of a concern. Product design and intention also
correlated at 0.051, showing this is of lower concern to consumers than E&SR issues
and quality.

The results for the regression coefficients for the product, main shop model are shown
in Table 7.33.

**TABLE 7.33. REGRESSION COEFFICIENTS & MODEL SUMMARY: PRODUCT, MAIN
SHOP**

<table>
<thead>
<tr>
<th>PRMN model</th>
<th>Standardized Coefficients</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
<th>R square</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEPRMN</td>
<td></td>
<td>1.768</td>
<td>.079</td>
<td>0.300</td>
<td>0.270</td>
<td>9.997</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>PRPRHEMN</td>
<td>.460</td>
<td>4.924</td>
<td>.000</td>
<td></td>
<td>.043</td>
<td>.469</td>
<td>2.130</td>
<td></td>
</tr>
<tr>
<td>PRA&amp;HRMN</td>
<td>.185</td>
<td>2.185</td>
<td>.030</td>
<td></td>
<td>.464</td>
<td>2.155</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRAD&amp;CMN</td>
<td>-.172</td>
<td>-2.038</td>
<td>.043</td>
<td></td>
<td>.731</td>
<td>1.369</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRPRICMN</td>
<td>-.081</td>
<td>-1.193</td>
<td>.234</td>
<td></td>
<td>.634</td>
<td>1.577</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRQUALMN</td>
<td>.160</td>
<td>2.204</td>
<td>.029</td>
<td></td>
<td>.558</td>
<td>1.793</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRRANGMN</td>
<td>-.097</td>
<td>-1.253</td>
<td>.212</td>
<td></td>
<td>.536</td>
<td>1.865</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRPKSZMN</td>
<td>-.083</td>
<td>-1.050</td>
<td>.295</td>
<td></td>
<td>.618</td>
<td>1.619</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRDESIMN</td>
<td>-.010</td>
<td>-1.137</td>
<td>.891</td>
<td></td>
<td>.577</td>
<td>1.732</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRPROMMN</td>
<td>.167</td>
<td>2.194</td>
<td>.029</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It can be seen that the factors of significance positively influencing the intention to
purchase an E&SR product the next time a respondent went for a main grocery shop are
the E&SR factors of product heritage (component 1), animal and human rights
(component 2), product quality, and promotions. However having a negative effect on
intention is the E&SR area of advertising and communications (component 3). Given
the nature of the sample this finding appears a little surprising, however the focus group
discussions indicate that other areas of E&SR concern may be more important (animal
testing, Fair Trade, recycling/environment), followed by a focus on quality, so
explaining in part this result. Additionally with the amount of considerations to take
into account in a shopping decision, priorities have to take place. This dilemma is
summed up by one focus group respondent:

"... I can only do so much ... if you worried about every political situation, every
country of origin, or the ethics of it you'd never end up getting anything ... you are
aware of the bigger picture, but you just wouldn't end up taking anything home if you
worried about it all." (FG3)

The $R^2$ value indicates that this model explains 27% of the variance in intention, and the
F ratio is significant at the 0.001 level, meaning these results are unlikely to have
occurred by chance. This model does not explain as much of the variance in intention
as either of the store models, however the significance of the F ratio (0.000) shows that
it is still a strong predictor of intention to purchase an E&SR product.

7.6.5. Regression Analysis: Product, Top-up Shop

Correlation coefficients between the intention to purchase an E&SR product when
doing a top-up shop (DV) and the composite variable of E&SR developed from the
factor analysis, along with the store image factors generated from the questionnaire
(IVs) are displayed in Table 7.34. A key of the variables is included below for ease of
interpretation.
TABLE 7.34. CORRELATION MATRIX OF MULTIPLE REGRESSION ANALYSIS, PRODUCT TOP-UP SHOP

<table>
<thead>
<tr>
<th></th>
<th>INTEPRTU</th>
<th>PRPRHETU</th>
<th>PRAD&amp;CTU</th>
<th>PRA&amp;HRTU</th>
<th>PRPRICTU</th>
<th>PRQUALTU</th>
<th>PRRANGTU</th>
<th>PRPKSZTU</th>
<th>PRDESITU</th>
<th>PRPROMTU</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEPRTU</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRPRHETU</td>
<td>.453***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRAD&amp;CTU</td>
<td>.316***</td>
<td>.688***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRA&amp;HRTU</td>
<td>.387***</td>
<td>.658***</td>
<td>.650***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRPRICTU</td>
<td>.135*</td>
<td>.220***</td>
<td>.205***</td>
<td>.262***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRQUALTU</td>
<td>.281***</td>
<td>.367***</td>
<td>.461***</td>
<td>.382***</td>
<td>.532***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRRANGTU</td>
<td>.194**</td>
<td>.361***</td>
<td>.468***</td>
<td>.333***</td>
<td>.413***</td>
<td>.485***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRPKSZTU</td>
<td>.161***</td>
<td>.307***</td>
<td>.340***</td>
<td>.290***</td>
<td>.389***</td>
<td>.381***</td>
<td>.651***</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRDESITU</td>
<td>.089</td>
<td>.116*</td>
<td>.142*</td>
<td>.136*</td>
<td>.231***</td>
<td>.206***</td>
<td>.375***</td>
<td>.507***</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PRRPROMTU</td>
<td>.203***</td>
<td>.113*</td>
<td>.214***</td>
<td>.240***</td>
<td>.483***</td>
<td>.309***</td>
<td>.430***</td>
<td>.420***</td>
<td>.543***</td>
<td>-</td>
</tr>
</tbody>
</table>

N = 220; *** = p<0.001; ** = p<0.01; * = p<0.05

KEY:
INTEPRTU  Intend to purchase a E&SR product next time you go for a top-up shop
PRPRHETU  Importance of E&SR Product Heritage factors when deciding on a top-up product
PRAD&CTU  Importance of E&SR Advertising and Communication factors when deciding on a top-up product
PRA&HRTU  Importance of E&SR Animal and Human rights factors when deciding on a top-up product
PRPRICTU  Importance of price when deciding on a top-up product
PRQUALTU  Importance of product quality when deciding on a top-up product
PRRANGTU  Importance of product range when deciding on a top-up product
PRPKSZTU  Importance of pack size when deciding on a top-up product
PRDESITU  Importance of product design and packaging when deciding on a top-up product
PRPROMTU  Importance of promotions when deciding on a top-up product

The results of the correlation matrix shown in Table 7.34 shows no IV correlation exceeds a value of 0.9, so multicolinearity is not present. The E&SR issues of product heritage (0.453), followed by animal and human rights (0.387) correlate most highly with intention, as in the product main shop model, and the correlation between intention and product design (0.089) is again the lowest. These correlations are highlighted in bold.

The results for the regression coefficients for the product, top-up shop model are shown in Table 7.35.
It can be seen that the factors of significance influencing the intention to purchase an E&SR product the next time a respondent goes for a top-up grocery shop are the E&SR factor of product heritage (component 1), promotions and product quality. These are in keeping with those found for the product main shop model; although in this instance the E&SR area of animal and human rights is not significant. There are no significant negative correlations in this model as there are with the Product Main shop and Store Top-up shop models.

The $R^2$ value indicates that this model explains 22.9% of the variance in intention, and the F ratio is significant at the 0.001 level, meaning these results are unlikely to have occurred by chance. This model does not explain as much of the variance in intention as the product main shop model, or either of the store models, however the significance of the F ratio (0.000) shows that it is still a strong predictor of intention to purchase an E&SR product during a top-up shop.
7.6.6. Regression Analysis: Validation of the Results

Having run these regression models it is prudent to ensure that each one is representative of the general population (generalisable) and appropriate to the situations in which it will be used (transferable). A favoured way of doing this is to see to what extent this model matches an existing theoretical model on the same topic. However in this instance there is no such model with which to compare the results so a split sample was carried out. The sample was split in two taking alternate respondents from the data set, that is 1,3,5, ...219 formed sample 1, and 2,4,6, ...220 formed sample 2. The same regression analysis was then run on the samples.

In order to compare the regression models the most common standard used according to Hair et al (1998) is that of overall predictive fit. In order to do this the adjusted R$^2$ was used. The adjusted R$^2$ was used rather than the R$^2$ as it takes into account both models with different numbers of independent variables, and different sample sizes. The resulting comparisons for each model can be seen in Tables 7.36 to 7.39.

<table>
<thead>
<tr>
<th>Model Fit</th>
<th>Overall (n=220)</th>
<th>Sample 1 (n=110)</th>
<th>Sample 2 (n=110)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R$^2$</td>
<td>0.373</td>
<td>0.535</td>
<td>0.343</td>
</tr>
<tr>
<td>Adjusted R$^2$</td>
<td>0.327</td>
<td>0.461</td>
<td>0.238</td>
</tr>
<tr>
<td>Standard error of the estimate</td>
<td>1.265</td>
<td>1.135</td>
<td>1.347</td>
</tr>
</tbody>
</table>

Comparison of the overall model fit for the main shop model show a reasonable level of similarity of the results in terms of R$^2$, adjusted R$^2$ and the standard error of the estimate. This indicates that the regression equation containing the store main shop E&SR and store image factors is a reasonable predictor of the intention to use an E&SR store the next time a main shop is undertaken.
The store top-up shop model comparison of the overall model fit shows a relative degree of likeness to the overall results in terms of $R^2$, adjusted $R^2$ and the standard error of the estimate. However, as in the previous model Sample 2 is more representative of the initial population than Sample 1. Therefore the regression equation containing the store top-up shop E&SR and store image factors is believed to be a reasonable predictor of the intention to use an E&SR store the next time a top-up shop is undertaken.

Comparison of the overall model fit show a very high level of similarity of the results in terms of $R^2$, adjusted $R^2$ and the standard error of the estimate for the product main shop model. This indicates that the regression equation containing the store main shop E&SR and store image factors is a very good predictor of the intention to purchase an E&SR product the next time a main shop is undertaken.

---

**TABLE 7.37. SPLIT SAMPLE VALIDATION: STORE, TOP-UP SHOP.**

<table>
<thead>
<tr>
<th>Model Fit</th>
<th>Overall $(n=220)$</th>
<th>Sample $(n=110)$</th>
<th>Sample 2 $(n=110)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2$</td>
<td>0.335</td>
<td>0.560</td>
<td>0.363</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.289</td>
<td>0.495</td>
<td>0.269</td>
</tr>
<tr>
<td>Standard error of the estimate</td>
<td>1.342</td>
<td>1.088</td>
<td>1.417</td>
</tr>
</tbody>
</table>

**TABLE 7.38. SPLIT SAMPLE VALIDATION: PRODUCT, MAIN SHOP.**

<table>
<thead>
<tr>
<th>Model Fit</th>
<th>Overall $(n=220)$</th>
<th>Sample $(n=110)$</th>
<th>Sample 2 $(n=110)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2$</td>
<td>0.300</td>
<td>0.352</td>
<td>0.307</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.270</td>
<td>0.294</td>
<td>0.245</td>
</tr>
<tr>
<td>Standard error of the estimate</td>
<td>1.160</td>
<td>1.162</td>
<td>1.162</td>
</tr>
</tbody>
</table>
Although not as high as the product main shop, comparison of the overall model fit for this product top-up model indicates a fair level of similarity of results in terms of $R^2$, adjusted $R^2$ and the standard error of the estimate. This indicates that the regression equation for product top-up shop is a reasonable predictor of the dependent variable i.e. the intention to use an E&SR store when next going for a top-up shop.

### 7.7. Summary

The findings in this chapter relate to a sample population of 155 female and 65 male shoppers. Analysis of descriptive statistics identified that the majority of respondents shopped once a week for a main shop (60%), and 2-3 times a week for a top-up shop (37.3%). Most respondents used a car to get to their main shop (85.5%), and travelled 1-2.5 miles (41.4%). A top-up shop saw most respondents travelling by foot (58.6%), for stores less than 1-mile distance (50.9%). However a large percentage also used a car for top-up shopping (40.5%).

Reliability analysis was used to assesses the constructs, and found that the no ‘scale purification’ was needed; Bartlett’s test of sphericity established that the population matrices were not identity matrices; Kaiser-Meyer-Olkin’s (KMO) measure of sampling adequacy found that the use of factor analysis was appropriate for this investigation.

This chapter identifies that there are many considerations for consumers concerned with E&SR factors, which relate to four different shopping situations (store main shop, store
top-up shop, product main shop, product top-up shop) as established in Chapter 6. It moves on to explore relationships between these factors and, through the use of factor analysis, recognises that E&SR concerns can be split into different groups for store shopping decisions – global, and local concerns, and product shopping decisions – product heritage, animal and human rights, and advertising and communications.

Utilising multiple regression analysis, the chapter then investigated the effect of both E&SR concerns and store image factors on the four shopping situations. It found that the importance of these factors differs depending on whether the consumer is deciding which store to frequent, or which product to purchase, as well as whether the decision was taking place for a main shop or a top-up shop. The factors of greatest significance in the store main shop model were the availability of customer facilities, global E&SR issues, and local E&SR issues. For the store top-up shop model the factors of E&SR, customer facilities and promotions all had a positive influence on intention, whereas price and design/layout had a negative effect. The E&SR factors of product heritage, animal and human rights, product quality, and promotions had a positive influence on intention to purchase an E&SR product during a main shop, whilst the E&SR area of advertising and communications had a negative effect. Finally the product top-up shop model showed that the E&SR factor of product heritage, along with promotions and product quality were of greatest significance.

The strength of these models was found to be good with between 22.9% and 32.7% of the variance in intention being explained. The store models predictability was found to be slightly higher than that of the product models. These models were found to be both generalisable and transferable through the use of split sampling.
Chapter Eight

Quantitative Research Results 2:
Attitudes and E&SR Grocery Shopping Behaviour

8.1. Introduction

This research study is primarily concerned with understanding the shopping behaviour of consumers, and in particular behavioural choice in relation to E&SR issues. It is also interested in the utility of the Extended Theory of Planned Behaviour (Extended TPB) for identifying the factors that influence E&SR shopping behaviour. The following chapter outlines the results of the data collected from the extended TPB structured part of the face-to-face questionnaire. Initially it briefly overviews the Extended TPB, before illustrating the relationships between the extended TPB factors through correlation matrices. It then continues with an illustration of how the Extended TPB model applies to each of the four shopping occasion models, and discusses the differences that occur between each. It concludes with a summary and discussion of the principal research findings of this stage.

The aim of this section of data analysis from the second stage of data collection was to answer the third research question proposed in section 5.6:

*RQ3: How do attitudes to ethics and social responsibility issues influence grocery shopping behaviour?*
8.2. Overview of the Extended Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) provides a framework for systematically investigating the determinants of behaviour and has been applied to many different situations as discussed earlier in Chapter 3. It assumes that people behave rationally, considering the implications of their actions and is therefore consistent with rational choice approaches to shopping. According to the theory, human behaviour is guided by three kinds of consideration: beliefs about the likely outcome of the behaviour and evaluations of these outcomes (behavioural beliefs); beliefs about the normative expectations of others and motivation to comply with these expectations (normative beliefs); and beliefs about factors that may facilitate or impede the ability to perform this behaviour, and the perceived power of these factors (perceived behavioural control). These combined factors lead to the formation of a behavioural intention. The theory assumes that the more favourable these three factors are, the stronger the intention the individual will have to perform the behaviour, and given a sufficient degree of actual control, the individual is expected to carry out the behaviour when the opportunity arises. Although it recognises that factors external to the model such as personality, social circumstances and demographics, may also influence behavioural intentions, it is argued that these factors will only affect intention indirectly and that the model provides a sufficient explanation of intentions. However the TPB does allow for the inclusion of additional variables provided they contribute significantly to the explanation of intentions. Due to this the factors of ethical obligation and self-identity were included; these have been shown to better explain the prediction of behavioural intention in the E&SR consumer (see Chapter 3).

The whole TPB provides an explanation of behaviour by identifying factors that underlie action. However the relative importance of the constructs (Attitude, Subjective
Norm, Perceived Behavioural Control) may vary from application to application, due to which East (1997) states that it is not always clear which global variable a factor belongs to when an investigation is being conducted and hence whether or not constructs are conceptually different. Because a factor may work through more than one global variable there is a danger it may be ‘double-counted’, however Fishbein & Ajzen (1975) highlight that it is possible for a piece of information to lead to two separate effects. Furthermore Fishbein & Ajzen (1981) claim that there is generally a degree of separation between the paths of the model so suggesting this is not a problem. Their claim is supported by Trafimow & Fishbein (1995) who found that people do distinguish between outcome and normative beliefs, and East (1997) who states;

"Double-counting is not a problem when the correlation between specific factors and intention is reported." (p.145)

The starting point to ensure that the constructs used in the Extended TPB (or any summated scale) are conceptually different according to Hair et al (1998) is their conceptual definition. This specifies the theoretical basis for the scale by defining the concept being represented in terms applicable to the research context: in academic research theoretical definitions are based on prior research that defines the character and nature of a concept. This area is suitably covered given the TPB literature overviewed previously in Chapter 3, which discusses not only the constructs used (Sparks & Shepherd, 1992; Kurland, 1995; Shepherd & Sparks, 1995) but additionally their application in relation to E&SR shopping behaviour (Shaw & Clarke, 1999; Shaw et al, 2000).

Content validity (or face validity) may then be used to assess the correspondence of the variables to be included in the scale with its conceptual definition. An additional test for unidimensionality (Hair et al (1998) may be carried out through either exploratory
or confirmatory factor analysis to establish that all items of a construct load onto a single component. This was not deemed necessary in this instance as there was no suggestion of multidimensionality from the content validity.

The correlation matrices produced from the multiple regression models may also be examined to identify any problems with multicollinearity among the IV constructs which would suggest that they were measuring the same thing, and so are not conceptually different.

8.2.1. Implementation of the Extended Theory of Planned Behaviour

Measures used to obtain the relevant statistical information in a TPB questionnaire may be collected as either direct or indirect measures, with both methods find support from different authors. Direct measures have been used to investigate waste behaviour in the construction industry (Teo & Loosemore, 2001), pollution reduction preferences of managers (Cordano & Frieze, 2000), and garbage reduction (Taylor & Todd, 1995), whilst indirect measures have been used to study green marketing (Kalafatis et al, 1999). Randall & Gibson (1991) used a mixture of both direct and indirect measures to study ethical decisions in the medical profession, as did Shaw & Clarke (1999) when exploring belief formation in ethical consumer groups.

Ajzen (2002, p.4.) states that the use of direct measures may

"yield findings of interest, (but) it can produce measures with relatively low reliabilities and lead to an underestimate of the relations among the theory’s constructs and of its predictive validity”.

Therefore indirect measures were used for most of the constructs in the questionnaire due to their greater depth, and the use of multiple questions for a measure was thought
to give greater predictions for this complex subject. However, Notani (1998) initially thought that 'a belief (indirect) based PBC measure can be expected to be more accurate because it is based on more information'. After investigating the predictiveness of PBC in the TPB, Notani found PBC to be a stronger predictor of behaviour when operationalised as a global (direct) measure. He states this may be due to direct measures being more evaluative in nature, whereas belief based measures are more cognitive. Similarly Kurland (1995), in her study on ethical intentions of insurance agents, found that her indirect measure of PBC was below the level of other constructs in the model – a fact which she states could be due to respondents not differentiating between the different scales used to predict the PBC construct. Additionally, the pilot questionnaire generated in the current study found that a direct measure for PBC was more clearly understood by respondents. Thus these findings imply that whilst a belief-based measure of PBC could be utilised for understanding particular control beliefs that make up PBC, a simple direct measure of PBC will be sufficient to predict behaviour.

The use of indirect measures entails several calculations in order to arrive at the end constructs. The formats of the measures, both direct and indirect are detailed below:

**Intention (I)** – determined by the individuals intention to act in a particular way. Collected as a direct measure so no calculation needed. One question was asked to assess intention using a 7-point Likert scale from ‘extremely likely’ to ‘extremely unlikely’.

**Attitude (A)** – determined by the individual’s beliefs about the outcomes of performing the behaviour. Calculated by multiplying the likelihood of each outcome (behavioural belief strength $b$) by the individual’s evaluation of the outcome (outcome evaluation $e$), and summing the resultant products across the number of beliefs. Five items assessed
attitude for store, with eight items for product, all measured on a 7-point Likert scale from ‘extremely likely’ to ‘extremely unlikely’.

*Subjective Norm (SN)* – determined by the beliefs of others likely to influence the individual’s behaviour and the motivation the individual has to comply with their views. Calculated by multiplying the belief of each ‘other’ (normative belief strength $n$) by the individual’s motivation to comply (motivation to comply $m$), and summing the resultant products across the number of beliefs. Four items assessed subjective norm for both store and product, using a 7-point Likert scale from ‘extremely likely’ to ‘extremely unlikely’ for normative belief strength, and from ‘not at all’ to ‘all of the time’ for motivation to comply.

*Perceived Behavioural Control (PBC)* – determined by individual’s beliefs about factors which may facilitate or inhibit performance of the behaviour and the individual’s assessment of the factor. Although a direct measure was used Ajzen (2002) states that items should capture a respondents *self-efficacy* ($s$) - difficulty of performing the behaviour, or the likelihood that the respondent could do it; and *controllability* ($o$) - respondents belief that they have control over the behaviour, that its performance is or is not up to them. Therefore two questions were asked for this measure, one relating to self-efficacy and one relating to controllability, with a measure being calculated by summing the resultant products across the number of beliefs. Two items assessed PBC for both store and product, all measured on a 7-point Likert scale using ‘extremely difficult’ to ‘extremely easy’ for self-efficacy, and ‘no control’ to ‘complete control’ for controllability.

*Ethical Obligation (EO)* – determined by measuring an individual’s internalised ethical rules to determine their beliefs about right and wrong. Collected as a direct measure so
no calculation needed. One question was asked to assess ethical obligation using a 7-point Likert scale from ‘strongly agree’ to ‘strongly disagree’.

*Self Identity (SId)* – determined by measuring issues of importance to individual’s self-identity, to determine their behavioural intention. Calculated by dividing the sum of the important issues (SId) by the number of important issues. To assess self-identity eleven items were used for store, and seventeen were used for product, ranked on a 7-point Likert scale from ‘extremely important’ to ‘extremely unimportant’.

Each of these calculations were set up for the four models to be tested relating to both store patronage and product purchase, as well as the shopping occasions of main shop and top-up shop. The results of these calculations can be seen in Tables 8.1-8.4.

In addition to looking at the calculation of variables, the tables look at the descriptive statistics of the measures (mean, standard deviation), and specifies Cronbach’s alpha coefficient in order to assess the consistency of the entire scale, and hence its reliability.

The area of reliability analysis has been referred to in detail previously in section 7.3. As with the earlier work in this study, the measures used to test internal consistency were Cronbach’s alpha (shown in tables 8.1-8.4) and ‘item-total correlations’ (shown in Appendix IXa-IXd).
### Table 8.1: Model Variables and Descriptive Statistics: Store, Main Shop

<table>
<thead>
<tr>
<th>Model Variables</th>
<th>Formula</th>
<th>Measure</th>
<th>Scale</th>
<th>Measurement Items</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Std. Item Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>n/a</td>
<td>n/a</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>The next time you go food and grocery shopping how likely are you to use a store like this for a main shop?</td>
<td>4.668</td>
<td>1.542</td>
<td>n/a</td>
</tr>
<tr>
<td>Behavioural beliefs (b)</td>
<td>$\sum b_{ij}$</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>How likely do you believe your use of a store like this will:</td>
<td>1 - encourage retailers to behave in an E&amp;SR way?</td>
<td>1) 26.296</td>
<td>1) 11.077</td>
<td>0.883</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 - encourage retailers to stock E&amp;SR products?</td>
<td>2) 26.906</td>
<td>2) 11.780</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 - withdraw support from non-E&amp;SR companies?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 - result in you using a store whose location is not convenient?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 - give you peace of mind?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>$\frac{\sum b_{ij} e_{i}}{5}$</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>How important do you believe the following issues are:</td>
<td>1 - encouraging retailers to behave in an E&amp;SR way</td>
<td>3) 23.423</td>
<td>3) 11.714</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 - encouraging retailers to stock E&amp;SR products</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 - withdrawing support from non-ethical companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 - using a store which is not convenient in location but behaves in an E&amp;SR way</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 - your peace of mind</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>$\sum n_{mi}$</td>
<td>'not at all' to 'all of the time'</td>
<td>Generally speaking how much do you want to do what ... think you should do?</td>
<td>1 - your family</td>
<td>3) 23.405</td>
<td>3) 11.874</td>
<td>0.698</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 - your friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 - ethical organisations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 - multinational companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation to comply (m)</td>
<td>$n_{mi}$</td>
<td>'not at all' to 'all of the time'</td>
<td></td>
<td>1 - your family</td>
<td>4) 8.614</td>
<td>4) 8.237</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 - your friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 - ethical organisations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 - multinational companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBC</td>
<td>$\frac{s + \alpha}{2}$</td>
<td>'extremely easy' to 'extremely difficult'</td>
<td>How easy is it for you to use an E&amp;SR store when doing your main grocery shop?</td>
<td></td>
<td>3.936</td>
<td>1.724</td>
<td>0.757</td>
</tr>
<tr>
<td></td>
<td></td>
<td>'no control' to 'extremely difficult'</td>
<td>How much control do you believe you have over using a store like this when doing a main</td>
<td></td>
<td>3.946</td>
<td>1.764</td>
<td></td>
</tr>
</tbody>
</table>
The Cronbach’s alpha scores in this analysis ranged from 0.698 for subjective norm, to 0.904 for self-identity. These are all respectably high, being above the acceptable level of 0.7 (Hair et al, 1998: Frankfort-Nachmias & Nachmias, 1996), with the exception of SN. However, Hair et al (1998) do go on to say that the alpha value may decrease to 0.6 in exploratory research, as is the nature of this study. Given these results and that the item-total correlations (Appendix IXa) are predominantly above the minimum item-total value of 0.5 suggested by Robinson et al (1991), no purification of the scale was required.
### TABLE 8.2. MODEL VARIABLES AND DESCRIPTIVE STATISTICS: STORE, TOP-UP SHOP

<table>
<thead>
<tr>
<th>Model Variables</th>
<th>Formula</th>
<th>Measure</th>
<th>Scale</th>
<th>Measurement items</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Std. Item Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>n/a</td>
<td>n/a</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>The next time you go food and grocery shopping how likely are you to use a store like this for a top-up shop?</td>
<td>4.409</td>
<td>1.592</td>
<td>n/a</td>
</tr>
<tr>
<td>Attitude</td>
<td>$\sum_{i=1}^{5} \beta_i$</td>
<td>5</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>How likely do you believe your use of a store like this will: 1) encourage retailers to behave in an E&amp;SR way? 2) encourage retailers to stock E&amp;SR products? 3) withdraw support from non-E&amp;SR companies? 4) result in you using a store whose location is not convenient? 5) give you peace of mind?</td>
<td>1) 26.296</td>
<td>1) 11.077</td>
<td></td>
</tr>
<tr>
<td>Outcome</td>
<td>$\sum_{i=1}^{5} \alpha_i$</td>
<td>5</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>How important do you believe the following issues are: 1) encouraging retailers to behave in an E&amp;SR way 2) encouraging retailers to stock E&amp;SR products 3) withdrawing support from non-ethical companies 4) using a store which is not convenient in location but behaves in an E&amp;SR way 5) your peace of mind</td>
<td>3) 23.423</td>
<td>3) 11.714</td>
<td>0.883</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>$\sum_{i=1}^{4} \beta_i$</td>
<td>4</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>How likely is it that ... think you should take into account E&amp;SR issues when using a store? 1) your family 2) your friends 3) ethical organisations 4) multinational companies</td>
<td>1) 17.823</td>
<td>1) 10.736</td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>$\sum_{i=1}^{4} \alpha_i$</td>
<td>4</td>
<td>'not at all' to 'all of the time'</td>
<td>Generally speaking how much do you want to do what ... think you should do? 1) your family 2) your friends 3) ethical organisations 4) multinational companies</td>
<td>3) 23.405</td>
<td>3) 11.874</td>
<td></td>
</tr>
<tr>
<td>PBC</td>
<td>$\frac{s + o}{2}$</td>
<td>2</td>
<td>'extremely easy' to 'extremely difficult'</td>
<td>How easy is it for you to use an E&amp;SR store when doing your top-up grocery shop?</td>
<td>3.791</td>
<td>1.747</td>
<td></td>
</tr>
<tr>
<td>Controlability</td>
<td>$\frac{s + o}{2}$</td>
<td>2</td>
<td>'no control' to 'complete control'</td>
<td>How much control do you believe you have over using a store like this when doing a top-up grocery shop?</td>
<td>3.682</td>
<td>1.788</td>
<td></td>
</tr>
</tbody>
</table>

254
| Ethical Obligation | n/a | 'strongly agree' to 'strongly disagree' | Do you feel you have an ethical obligation to consider E&SR issues? | \( \frac{\sum S\ell d}{11} \) | \( \text{Self-identity} \) | \text{In general how important are the following factors to you when you decide which store to use for a top-up grocery shop?} | \begin{tabular}{l} - no animal testing of products sold  \\
- no dealing with oppressive regimes  \\
- no exploitation of developing countries  \\
- the ozone layer and use of CFC's  \\
- pollution from the transportation of goods  \\
- no factory/-intensive farming of products sold  \\
- social/employment policy of the store  \\
- support the local community by selling local produce  \\
- availability of organic products  \\
- availability of free range products  \\
- availability of Fair Trade products 
\end{tabular} | | \begin{tabular}{l} 5.536 \\
- 1.124 \\
- n/a 
\end{tabular} | | 0.939 | 255 |

The Cronbach's alpha scores in this analysis ranged from 0.698 for subjective norm, to 0.939 for self-identity. Again, with the exception of the subjective norm measure, these are all above the acceptable level of 0.7 (Hair et al, 1998: Frankfort-Nachmias & Nachmias, 1996). The subjective norm is still an acceptable item in the scale however, as it is above the lower limit of 0.6 deemed permissible for exploratory research (Hair et al, 1998). Given these results, and that all but two of the item-total correlations Appendix IXb) are above the minimum value of 0.5 recommended by Robinson et al (1991), no purification of the scale was required.
<table>
<thead>
<tr>
<th>Model Variables</th>
<th>Formula</th>
<th>Measure</th>
<th>Scale</th>
<th>Measurement items</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Std. Item Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>n/a</td>
<td>n/a</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>The next time you go food and grocery shopping how likely are you to purchase a product like this during a main shop?</td>
<td>4.955</td>
<td>1.357</td>
<td>n/a</td>
</tr>
</tbody>
</table>
| Attitude        | \(\sum \beta_i\) \(/\bar{x}\) \(8\) | Behavioural beliefs (b) | 'extremely likely' to 'extremely unlikely' | How likely do you believe your purchase of a product like this will:  
1 - result in a fair price for E&SR producers?  
2 - prevent the exploitation of E&SR producers?  
3 - encourage retailers to stock E&SR products?  
4 - withdraw support from non-E&SR companies?  
5 - result in you purchasing a product that is not readily available?  
6 - result in you purchasing a product that is more expensive?  
7 - involve purchasing a quality product?  
8 - give you peace of mind? | 1) 25.327 | 1) 11.033 | 2) 25.518 | 2) 11.074 | 3) 27.591 | 3) 11.778 | 4) 23.041 | 4) 11.724 | 0.921 |
| Subjective Norm | \(\sum \mu_i\) \(/\bar{x}\) \(4\) | Normative belief strength (n) | 'extremely likely' to 'extremely unlikely' | How important do you believe the following issues are:  
1 - gaining a fair price for E&SR producers  
2 - preventing the exploitation of E&SR producers  
3 - encouraging retailers to stock these types of product  
4 - withdrawing support from non-ethical companies  
5 - purchasing a product which is not readily available but is produced in an E&SR way  
6 - purchasing a product which is more expensive but is produced in an E&SR way  
7 - purchasing a quality product  
| Subjective Norm | \(\sum \nu_i\) \(/\bar{x}\) \(4\) | Motivation to comply (m) | 'not at all' to 'all of the time' | Generally speaking how much do you want to do what the following groups think you should do?  
1 - your family  
2 - your friends  
3 - ethical organisations  
4 - multinational companies | 1) 18.127 | 1) 10.936 | 2) 16.514 | 2) 10.289 | 3) 23.400 | 3) 12.013 | 4) 8.700 | 4) 8.475 | 0.659 |
The Cronbach’s alpha scores in this analysis ranged from 0.659 for subjective norm, to 0.934 for self-identity. The subjective norm is again the lowest score, but still above the acceptable level of 0.6 for exploratory research (Hair et al., 1998). Given these results, and that the majority of item-total correlations (Appendix IXc) are above 0.5 (Robinson et al., 1991), no purification of the scale was required.
<table>
<thead>
<tr>
<th>Model Variables</th>
<th>Formula</th>
<th>Measure</th>
<th>Scale</th>
<th>Measurement Items</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Std. Item Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>n/a</td>
<td>n/a</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>The next time you go food and grocery shopping how likely are you to purchase a product like this during a top-up shop?</td>
<td>4.586</td>
<td>1.510</td>
<td>n/a</td>
</tr>
<tr>
<td>Behavioural beliefs (b)</td>
<td>Σbe,i</td>
<td>8</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>How likely do you believe your purchase of a product like this will: 1 - result in a fair price for E&amp;SR producers? 2 - prevent the exploitation of E&amp;SR producers? 3 - encourage retailers to stock E&amp;SR products? 4 - withdraw support from non-E&amp;SR companies? 5 - result in you purchasing a product that is not readily available? 6 - result in you purchasing a product that is more expensive? 7 - involve purchasing a quality product? 8 - give you peace of mind?</td>
<td>1) 25.327</td>
<td>1) 11.033</td>
<td></td>
</tr>
<tr>
<td>Outcome evaluation (e)</td>
<td>Σhe,i</td>
<td>8</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>How important do you believe the following issues are: 1 - gaining a fair price for E&amp;SR producers 2 - preventing the exploitation of E&amp;SR producers 3 - encouraging retailers to stock these types of product 4 - withdrawing support from non-ethical companies 5 - purchasing a product which is not readily available but is produced in an E&amp;SR way 6 - purchasing a product which is more expensive but is produced in an E&amp;SR way 7 - purchasing a quality product 8 - your peace of mind</td>
<td>5) 21.318</td>
<td>5) 11.277</td>
<td>0.921</td>
</tr>
<tr>
<td>Normative belief strength (n)</td>
<td>Σnp,i</td>
<td>4</td>
<td>'extremely likely' to 'extremely unlikely'</td>
<td>How likely is it that … think you should take into account E&amp;SR issues when buying a product? 1 - your family 2 - your friends 3 - ethical organisations 4 - multinational companies</td>
<td>1) 18.127</td>
<td>1) 10.936</td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td></td>
<td></td>
<td>'not at all' to 'all of the time'</td>
<td>Generally speaking how much do you want to do what the following groups think you should do? 1 - your family 2 - your friends 3 - ethical organisations 4 - multinational companies</td>
<td>3) 23.400</td>
<td>3) 12.013</td>
<td>0.659</td>
</tr>
</tbody>
</table>

258
<table>
<thead>
<tr>
<th>PBC</th>
<th>$s + o$</th>
<th>Self-efficacy (s)</th>
<th>'extremely easy' to 'extremely difficult'</th>
<th>How easy is it for you to purchase an E&amp;SR product when doing your top-up grocery shop?</th>
<th>3.755</th>
<th>1.678</th>
<th>0.839</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Controllability (o)</td>
<td>'no control' to 'complete control'</td>
<td>How much control do you believe you have over purchasing a product like this when doing a top-up grocery shop?</td>
<td>3.923</td>
<td>1.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Obligation</td>
<td>n/a</td>
<td>'strongly agree' to 'strongly disagree'</td>
<td>Do you feel you have an ethical obligation to consider E&amp;SR issues?</td>
<td>5.536</td>
<td>1.124</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Self-identity</td>
<td>$\Sigma Std$</td>
<td>'extremely important' to 'extremely unimportant'</td>
<td>In general how important are the following factors to you when you decide which product to purchase during a top-up grocery shop?</td>
<td>6.550</td>
<td>1.099</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>- product safe for consumption</td>
<td>5.577</td>
<td>1.624</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- free from genetically modified (GM) ingredients</td>
<td>5.182</td>
<td>1.566</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- recyclable or biodegradable packaging on product</td>
<td>5.468</td>
<td>5.075</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- product not overpackaged</td>
<td>5.473</td>
<td>1.609</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- no animal testing of products sold</td>
<td>5.264</td>
<td>1.614</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- no transportation of live animals</td>
<td>5.400</td>
<td>1.472</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- no exploitation of developing countries</td>
<td>5.655</td>
<td>1.511</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- no use of child labour to produce goods</td>
<td>5.341</td>
<td>1.578</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- the ozone layer and use of CFC’s</td>
<td>5.455</td>
<td>1.533</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- forest destruction</td>
<td>5.936</td>
<td>1.370</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- honest and clear labelling of product origin &amp; ingredients</td>
<td>5.146</td>
<td>1.569</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- no artificial additives/preservatives in product</td>
<td>5.768</td>
<td>1.457</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- no misrepresentation of product on packaging</td>
<td>5.723</td>
<td>1.459</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- no misleading advertising of product</td>
<td>4.318</td>
<td>1.685</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- being an organic product</td>
<td>5.086</td>
<td>1.590</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- being a free range product</td>
<td>4.955</td>
<td>1.578</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- being a Fair Trade product</td>
<td>0.941</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Cronbach’s alpha scores in this analysis ranged from 0.659 for subjective norm, to 0.941 for self-identity. All factors are above the acceptable level of 0.6 for exploratory research (Hair et al, 1998). Given these results, and that the item-total correlations (Appendix IXd) are above the minimum suggested (0.5 by Robinson et al, 1991), no purification of the scale was required.
8.3. Overview of Correlation Analysis

A correlation matrix shows the simple correlations between all possible pairs of variables included in the analysis. The coefficients are expressed between the values of −1 to +1, so indicating not only the strength of the association, but also the direction of the relationship.

Correlation matrices were compiled for all four grocery shopping situations - store, main shop; store, top-up shop; product, main shop; product, top-up shop. These were used to compare the correlations between the different measures used in the Extended TPB, to corroborate its basic structure and establish that its constructs are conceptually different by checking for multicolinearity.

8.3.1. Correlation Matrix – Store, Main Shop

Table 8.5 shows the correlation coefficients between the intention to patronise an E&SR store when doing a main grocery shop (DV) and the other Extended Theory of Planned Behaviour measures (IVs).

<table>
<thead>
<tr>
<th>Intention Store Main Shop</th>
<th>Attitude Store Main Shop</th>
<th>Subjective Norm Store Main Shop</th>
<th>Perceived Behavioural Control Store Main Shop</th>
<th>Ethical Obligation Store Main Shop</th>
<th>Self Identity Store Main Shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention Store Main Shop</td>
<td>-</td>
<td>.629***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Store Main Shop</td>
<td>.629***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm Store Main Shop</td>
<td>.281***</td>
<td>.436***</td>
<td>.313***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Behavioural Control Store Main Shop</td>
<td>.676***</td>
<td>.577***</td>
<td>.313***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Obligation Store Main Shop</td>
<td>.369***</td>
<td>.409***</td>
<td>.133*</td>
<td>.271***</td>
<td></td>
</tr>
<tr>
<td>Self Identity Store Main Shop</td>
<td>.515***</td>
<td>.643***</td>
<td>.362***</td>
<td>.436***</td>
<td>.554***</td>
</tr>
</tbody>
</table>

N = 220; *** = p<0.001; ** = p<0.01; * = p<0.05

260
All items correlate significantly with Intention, and with each other at the 0.001 level, with the exception of the correlation between ethical obligation and the subjective norm which is only significant at the 0.05 level. The strongest correlation is between PBC and intention to use an E&SR store the next time a main grocery shop is undertaken ($r = 0.676, p<0.001$), closely followed by the correlation between having a favourable attitude towards E&SR issues when doing a main grocery shop and self-identity ($r = 0.643, p<0.001$), and the correlation between attitude and intention ($r = 0.629, p<0.001$). Self-identity was also closely correlated with both the ethical obligation to consider E&SR issues ($r = 0.554, p<0.001$) and the intention to use an E&SR store the next time a main shop was undertaken ($r = 0.515, p<0.001$).

No correlation exceeds 0.9 (Hair et al., 1998; Tabachnick & Fidell, 1996) therefore multicollinearity is not considered to be a problem in this model, so suggesting that the constructs are conceptually different.

8.3.2. Correlation Matrix – Store, Top-up Shop

The relationship between the intention to patronise an E&SR store when doing a top-up grocery shop (DV), and the other Extended Theory of Planned Behaviour measures (IVs), is displayed in Table 8.6.
TABLE 8.6. CORRELATION MATRIX - EXTENDED TPB: STORE, TOP-UP SHOP

<table>
<thead>
<tr>
<th>Intention Store Top-up Shop</th>
<th>Attitude Store Top-up Shop</th>
<th>Subjective Norm Store Top-up Shop</th>
<th>Perceived Behavioural Control Store Top-up Shop</th>
<th>Ethical Obligation Store Top-up Shop</th>
<th>Self Identity Store Top-up Shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Store Top-up Shop</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Subjective Norm Store Top-up Shop</td>
<td>.573***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Perceived Behavioural Control Store Top-up Shop</td>
<td>.242***</td>
<td>.436***</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ethical Obligation Store Top-up Shop</td>
<td>.634***</td>
<td>.525***</td>
<td>.264***</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Self Identity Store Top-up Shop</td>
<td>.354***</td>
<td>.409***</td>
<td>.133*</td>
<td>.274***</td>
<td>-</td>
</tr>
</tbody>
</table>
| N = 220; *** = p<0.001; ** = p<0.01; * = p<0.05

As with the store main shop model all items correlate significantly with intention, and with each other at the 0.001 level, except for the correlation between ethical obligation and the subjective norm which is only significant at the 0.05 level. The highest correlations found for this shopping activity are the same as for the store main shop model: PBC and intention to use an E&SR store the next time a main grocery shop is undertaken ($r = 0.634$, $p<0.001$); however the second and third highest are the same constructs, but their relative importance is reversed, such that: attitude and intention ($r = 0.573$, $p<0.001$), followed by attitude towards E&SR issues when doing a main grocery shop and self-identity ($r = 0.557$, $p<0.001$).

Multicollinearity is not considered to be a problem in this model as no correlation exceeds 0.9 (Hair et al, 1998; Tabachnick & Fidell, 1996). The constructs are therefore considered to be conceptually different.
8.3.3. Comparison of the Store models

When comparing the two previous correlation matrices it can be seen that all of the values for a main shop are greater or equal to those for a top-up shop, with one marginal exception (PBC and ethical obligation – main shop = 0.271, top-up shop = 0.274). This is likely to be due to the nature of the shopping behaviour in the relationship to the decision-making process i.e. in most cases more thought and effort goes into a main shop than a top-up shop. The significance shown is identical across the models in terms of both variables and strength. PBC and intention to use an E&SR store the next time a main grocery shop is undertaken is the strongest correlation in both models. The subjective norm displays the same value for the correlation between itself and PBC, attitude, and ethical obligation across both models. This indicates that influential others play a similar role in affecting individual’s behaviour regardless of the shopping occasion.

8.3.4. Correlation Matrix – Product, Main Shop

Table 8.7 shows correlations between the DV intention to purchase an E&SR product the next time a main shop is undertaken with the other Extended TPB constructs (IVs).
TABLE 8.7. CORRELATION MATRIX - EXTENDED TPB: PRODUCT, MAIN SHOP

<table>
<thead>
<tr>
<th></th>
<th>Intention Product Main Shop</th>
<th>Attitude Product Main Shop</th>
<th>Subjective Norm Product Main Shop</th>
<th>Perceived Behavioural Control Product Main Shop</th>
<th>Ethical Obligation Product Main Shop</th>
<th>Self Identity Product Main Shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention Product Main Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Product Main Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Norm Main Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Behavioural Main Shop</td>
<td>.629***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Main Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obligation Main Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Main Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Identity Main Shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 220; *** = p<0.001; ** = p<0.01; * = p<0.05

All of the items in this model correlate significantly at the 0.001 level with just one exception: SN and ethical obligation only correlate significantly at the 0.05 level. The strongest correlation is between having a favourable attitude towards E&SR issues when purchasing a product during a main grocery shop and intention to purchase an E&SR product the next time a main shop was undertaken (r = 0.629, p<0.001). The correlation between having a favourable attitude towards E&SR issues when doing a main grocery shop, and self-identity (r = 0.606, p<0.001) is also of a high value. These findings show that the higher the importance of E&SR concerns to an individual, the more favourable an attitude towards purchasing an E&SR product, and the greater the intention to purchase one during the next main shop.

No correlation exceeds 0.9 (Hair et al, 1998; Tabachnick & Fidell, 1996), therefore multicollinearity is not considered to be a problem in this model, so suggesting that the constructs are conceptually different.
8.3.5. Correlation Matrix – Product, Top-up Shop

The correlations between all possible pairs of variables for the purchase of an E&SR product when doing a top-up grocery shop are displayed in Table 8.8.

<table>
<thead>
<tr>
<th>Intention Product Top-up Shop</th>
<th>Attitude Product Top-up Shop</th>
<th>Subjective Norm Product Top-up Shop</th>
<th>Perceived Behavioural Control Product Top-up Shop</th>
<th>Ethical Obligation Product Top-up Shop</th>
<th>Self Identity Product Top-up Shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Product Top-up Shop</td>
<td>.552***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top-up Shop Subjective Norm</td>
<td>.220***</td>
<td>.416***</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Top-up Shop Perceived</td>
<td>.404***</td>
<td>.424***</td>
<td>.266***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural Control Product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top-up Shop Ethical Obligation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Top-up Shop Self-Identity</td>
<td>.408***</td>
<td>.409***</td>
<td>.129*</td>
<td>.238***</td>
<td></td>
</tr>
<tr>
<td>Product Top-up Shop Shop</td>
<td>.449***</td>
<td>.556***</td>
<td>.266***</td>
<td>.355***</td>
<td>.425***</td>
</tr>
</tbody>
</table>

N = 220; *** = p<0.001; ** = p<0.01; * = p<0.05

As with the product main shop model all of the items in this matrix correlate significantly at the 0.001 level, apart from SN and ethical obligation, which only correlates significantly at the 0.05 level. The strongest correlation is between having a favourable attitude towards E&SR issues when purchasing a product during a main grocery shop and the factors of importance associated with the concept of self-identity (r = 0.556, p<0.001), very closely followed by the correlation between having a favourable attitude towards E&SR issues when purchasing a product during a main grocery shop and the intention to purchase an E&SR product the next time a main shop is undertaken (r = 0.552, p<0.001). This is the opposite way around from the product main shop model in terms of strength, indicating that during a top-up shop the
importance of E&SR concerns are still high, leading to a favourable attitude, but it does not lead to quite so strong an intention to purchase an E&SR product as with a main shop.

Multicollinearity is not considered to be a problem in this model as no correlation exceeds 0.9 (Hair et al., 1998; Tabachnick & Fidell, 1996). The constructs are therefore considered to be conceptually different.

8.3.6. Comparison of the Product Models

If the two product matrices are compared it can be seen that the significance shown is identical across both models in terms of both variables that correlate and the strength of significance of those correlations. Although most of the values for a main shop are greater or equal to those of a top-up shop, there is one exception. The correlation between PBC and ethical obligation is of marginally greater value for a top-up shop (0.238) than a main shop (0.226). The subjective norm correlates at the same value with attitude (0.416) and ethical obligation (0.129) for both a main shop and a top-up shop. This upholds and strengthens the findings in the store models, that influential others play a similar role in affecting individual's behaviour regardless of the shopping occasion. Additionally the correlation between attitude and ethical obligation is of the same value (0.409) for purchasing an E&SR product during both a main shop and a top-up shop. This suggests that E&SR consumers feel that they have an obligation to consider E&SR issues when purchasing a product, whether it is during a main shop or a top-up shop and this is reflected in a favourable attitude towards such issues.
8.3.7. Comparison of the Main Shop Models – Store vs. Product

When comparing the models for the intention to patronise an E&SR store for a main shop and the intention to purchase an E&SR product during a main shop it can be seen that the significance shown in the correlations is identical across both models in terms of both variables that correlate and the strength of significance of those correlations. All correlations are significant at the 0.001 level, except SN and ethical obligation in each model, which are significant at the 0.05 level. All of the values are of greater value in the store main shop model than the product main shop model, with three exceptions: intention and attitude correlate at the same value in each model (0.629), as does attitude and ethical obligation (0.409); and intention and ethical obligation correlate at a higher value in the product main shop model (0.444) than the store main shop model (0.369).

The highest correlation in each model differs, with PBC and intention (0.676) correlating most highly in the store main shop model, whereas in the product main shop model it is between attitude and intention (0.629). However the second highest correlations are between the same constructs in both models, being between attitude and self-identity (store = 0.643, product = 0.606).

A noticeable difference between these two models is the part played by PBC in affecting intention. In the store model it correlates at a much higher value (0.676) than in the product model (0.444), whereas for other constructs the values are much closer. This suggests consumers feel that they have much more control over being able to carry out E&SR behaviour when patronizing a store rather than when purchasing a product. This is contradictory to the findings of the focus groups where respondents stated they usually had to use stores that were convenient in location whether they felt they were
ethically sound or not, but would then choose items which reflected their E&SR concerns where possible. However, some explanation may be found in the fact that over 62% of respondents said that they shopped on their own, so therefore could control the decision on which store to visit, but the purchase of an E&SR product may be influenced by other factors such as relevant information, price, time, location of a store stocking E&SR products, children's tastes; factors supported by the qualitative analysis.

8.3.8. Comparison of the Top-up Shop Models – Store vs. Product

As with the main shop models, the significance shown in the correlations is identical across both models in terms of variables that correlate together and the strength of significance of those correlations. All correlations are significant at the 0.001 level, except SN and ethical obligation which is significant at the 0.05 level. The highest two correlations in each model are between the same constructs, but the level of importance is reversed. In the store top-up model the highest correlation is between attitude and self-identity (0.556) followed by the correlation between attitude and intention (0.552), whereas for the product top-up model attitude and intention is the higher correlation value (0.573) followed by attitude and self-identity (0.557).

All of the values are of greater value in the store top-up shop model than the product top-up shop model, with four exceptions: attitude and ethical obligation correlate at the same value in each model (0.409); intention and ethical obligation correlate at a higher value in the product top-up shop model (0.408) than the store main shop model (0.354), as does intention and self-identity (product = 0.449, store = 0.420), and PBC and SN (product = 0.266, store = 0.264).
Again the main difference between these two models is the significance of PBC in predicting behavioural intention. PBC correlates at a value of 0.634 in the store top-up model, but only at 0.404 on the product model. Again the aforementioned reasoning given in section 8.3.7 can be used to explain this finding, especially given the increase in the number of people who go top-up shopping on their own (81.8%).

8.4. Model Measure Comparison – TRA, TPB or the Extended TPB?

From the correlation analyses it can be seen that the measures contained within both the store and product models correlate significantly with their component parts. However, in order to check that the Extended TPB, which is used in this study, increases the predictability of the previous models in question (Theory of Reasoned Action; Theory of Planned Behaviour) multiple regression analysis was run on all four models and results compared. The coefficient of determination ($R^2$) which measures the proportion of the variance of the dependent variable (DV) about its mean which is explained by the independent variables (IV’s) may be used to assess the increased predictability of the model. Fundamentally speaking the higher the value of $R^2$ the greater the explanatory power of the regression equation (model) and hence the better the prediction of the DV (intention). However a modified measure of the coefficient of determination is often used when comparing equations with different numbers of IV’s (Hair et al, 1998) known as the adjusted coefficient of determination, or adjusted $R^2$, as it takes into account the number of IV’s included in the regression equation and the sample size. Whereas the addition of IV’s will always cause $R^2$ to rise, the adjusted $R^2$ may fall if the added IV’s have little explanatory power. Therefore although this measure gives a more conservative view of a model’s predictability it is considered appropriate when comparing the extenions to the TPB so as to not ‘over-fit’ the data (Hair et al, 1998).
This procedure finds support in past studies where it has been utilized to explore the inclusion of the additional measures, such as ethical obligation and self-identity, as a means of improving the predictability of the original TRA model (Kurland, 1995; Shaw et al., 2000). The results of the multiple regression analysis comparisons for the current study can be seen in Tables 8.9 to 8.12.

8.4.1. Model Measure Comparison: Store, Main Shop

Table 8.9 outlines the regression analysis for the TRA, the TPB, and the Extended TPB for store choice whilst undertaking a main shop.

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables</th>
<th>Beta</th>
<th>Sig of Beta</th>
<th>R^2</th>
<th>Adjusted R^2</th>
<th>F</th>
<th>F of change in R^2</th>
<th>Sig of F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRA</td>
<td>A</td>
<td>0.626</td>
<td>0.000</td>
<td>0.396</td>
<td>0.391</td>
<td>71.188</td>
<td>71.118 0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN</td>
<td>0.008</td>
<td>0.887</td>
<td>0.544</td>
<td>0.537</td>
<td>85.814</td>
<td>69.877 0.000</td>
<td></td>
</tr>
<tr>
<td>TPB</td>
<td>A</td>
<td>0.369</td>
<td>0.000</td>
<td>0.544</td>
<td>0.537</td>
<td>85.814</td>
<td>69.877 0.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN</td>
<td>-0.028</td>
<td>0.590</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC</td>
<td>0.472</td>
<td>0.000</td>
<td>0.544</td>
<td>0.537</td>
<td>85.814</td>
<td>69.877 0.000</td>
<td></td>
</tr>
<tr>
<td>Ext</td>
<td>A</td>
<td>0.282</td>
<td>0.000</td>
<td>0.559</td>
<td>0.549</td>
<td>54.348</td>
<td>3.805 0.024</td>
<td></td>
</tr>
<tr>
<td>TPB</td>
<td>SN</td>
<td>-0.033</td>
<td>0.524</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC</td>
<td>0.485</td>
<td>0.000</td>
<td>0.559</td>
<td>0.549</td>
<td>54.348</td>
<td>3.805 0.024</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EO</td>
<td>0.077</td>
<td>0.163</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sld</td>
<td>0.103</td>
<td>0.120</td>
<td>0.559</td>
<td>0.549</td>
<td>54.348</td>
<td>3.805 0.024</td>
<td></td>
</tr>
</tbody>
</table>

Both the R^2 and the adjusted R^2 have increased in value showing that the added factors in both the TPB and the Extended TPB better explain the variation on intention than when just using the TRA. The most noticeable rise comes from the addition of PBC, although the addition of EO and Sld moderately increase its predictability further. A and PBC are significant at the 0.001 level across models, whereas SN shows a low negative value, and is not significant, so having little effect on the explanation of variance. Neither EO or Sld are significant, however they do display positive beta
values, unlike $SN$, and given that these results show they do increase the explanation of the variation on intention further, their inclusion in the model is justified.

### 8.4.2. Model Measure Comparison: Store Top-up Shop

The regression analysis for the TRA, the TPB, and the Extended TPB for store choice when doing a top-up shop is displayed in Table 8.10.

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables</th>
<th>Beta</th>
<th>Sig of Beta</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>$F$</th>
<th>F of change in $R^2$</th>
<th>Sig of F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRA</td>
<td>$A$</td>
<td>0.577</td>
<td>0.000</td>
<td>0.876</td>
<td>0.328</td>
<td>52.957</td>
<td>52.957</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>$SN$</td>
<td>-0.010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TPB</td>
<td>$A$</td>
<td>0.343</td>
<td>0.000</td>
<td>0.591</td>
<td>0.482</td>
<td>67.013</td>
<td>64.253</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>$SN$</td>
<td>-0.029</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$PBC$</td>
<td>0.462</td>
<td></td>
<td></td>
<td>0.475</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ext</td>
<td>$A$</td>
<td>0.293</td>
<td>0.000</td>
<td>0.646</td>
<td>0.492</td>
<td>41.525</td>
<td>2.187</td>
<td>0.115</td>
</tr>
<tr>
<td>TPB</td>
<td>$SN$</td>
<td>-0.025</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$PBC$</td>
<td>0.449</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$EO$</td>
<td>0.105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$Std$</td>
<td>0.021</td>
<td></td>
<td>0.742</td>
<td>0.492</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As with the Store Main shop model, both the value of $R^2$ and the adjusted $R^2$ increase between the TRA and the Extended TPB, showing that the additional constructs aid the explanation of variance in intention. As with the store main shop model the main contribution to this increase comes from the construct of $PBC$, with $EO$ and $Std$ being moderate contributors. $EO$ is close to being significant in this model, suggesting that it does play an important role in behavioural intention. $SN$ has an increasingly limited effect on intention when $PBC$ is added in the TPB, and again displays a small, negative, insignificant value in all models. It can be seen that in the Extended TPB $SN$ marginally decreases and $PBC$ marginally increases, although the addition of $EO$ and $Std$ appear to
help increase the explanation of variance. \( A \) and \( PBC \) remain significant at the 0.001 level across the models.

8.4.3. Model Measure Comparison: Product Main Shop

Table 8.11 outlines the regression analysis for the TRA, the TPB, and the Extended TPB in respect of choosing a product during a main shop.

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables</th>
<th>Beta</th>
<th>Sig of Beta</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>( F )</th>
<th>( F ) of change in ( R^2 )</th>
<th>Sig of F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRA</td>
<td>( A )</td>
<td>0.651</td>
<td>0.000</td>
<td>0.398</td>
<td>0.392</td>
<td>71.652</td>
<td>71.652</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>( SN )</td>
<td>-0.052</td>
<td>0.371</td>
<td>0.398</td>
<td>0.392</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TPB</td>
<td>( A )</td>
<td>0.577</td>
<td>0.000</td>
<td>0.417</td>
<td>0.409</td>
<td>51.583</td>
<td>7.289</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>( SN )</td>
<td>-0.065</td>
<td>0.257</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( PBC )</td>
<td>0.161</td>
<td>0.007</td>
<td>0.417</td>
<td>0.409</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ext</td>
<td>( A )</td>
<td>0.442</td>
<td>0.000</td>
<td>0.462</td>
<td>0.449</td>
<td>36.702</td>
<td>8.796</td>
<td>0.000</td>
</tr>
<tr>
<td>TPB</td>
<td>( SN )</td>
<td>-0.060</td>
<td>0.284</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( PBC )</td>
<td>0.155</td>
<td>0.008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( EO )</td>
<td>0.190</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( Sld )</td>
<td>0.097</td>
<td>0.148</td>
<td>0.462</td>
<td>0.449</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( R^2 \) has increased in value, along with the adjusted \( R^2 \) showing that the added factors in both the TPB and the Extended TPB better explain the variation on intention than those in the TRA alone. \( A \) remains significant at the 0.001 level across the models, as does \( PBC \). \( SN \) is still showing a low negative value, and as such is an insignificant factor in its ability to affect intention. The addition of \( EO \) and \( Sld \) in the Extended TPB appear to help increase the explanation of variance with \( EO \) being significant at the 0.001 level. The amount of variance in intention is explain more by the construct of \( EO \) than \( PBC \) in this model, unlike in the store models, suggesting that respondents tended to feel a greater obligation to consider E&SR issues when purchasing a product than when patronising a store.
8.4.4. Model Measure Comparison: Product Top-up Shop

Table 8.12 outlines the regression analysis for the indirect measures of the TRA and the TPB in respect of choosing a product during a top-up shop.

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables</th>
<th>Beta</th>
<th>Sig of Beta</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>F of change in R²</th>
<th>Sig of F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRA</td>
<td>A</td>
<td>0.557</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN</td>
<td>-0.012</td>
<td>0.849</td>
<td>0.305</td>
<td>0.299</td>
<td>47.595</td>
<td>47.595</td>
<td>0.000</td>
</tr>
<tr>
<td>TPB</td>
<td>A</td>
<td>0.477</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN</td>
<td>-0.035</td>
<td>0.570</td>
<td>0.341</td>
<td>0.332</td>
<td>37.261</td>
<td>11.838</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>PBC</td>
<td>0.211</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ext</td>
<td>A</td>
<td>0.347</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TPB</td>
<td>SN</td>
<td>-0.028</td>
<td>0.643</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PBC</td>
<td>0.178</td>
<td>0.003</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EO</td>
<td>0.174</td>
<td>0.005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sld</td>
<td>0.126</td>
<td>0.064</td>
<td>0.385</td>
<td>0.371</td>
<td>26.787</td>
<td>7.639</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The values of $R^2$ and the adjusted $R^2$ have again increased in value from the TRA to the Extended TPB. $A$ is again significant at the 0.001 level across all models, as is $PBC$ in the TPB and Extended TPB. The measure of $SN$ is not significant in any of the models, and displays a low negative beta value. In the Extended TPB the addition of $EO$ and $Sld$ appear to help increase the explanation of variance with $EO$ being significant at the 0.01 level, and $Sld$ although not significant, being close enough to suggest an impact on this shopping activity. In this product main shop model $PBC$ and $EO$ play a very similar role in explaining the variance in intention, whereas in the product main shop model it was $EO$ that was of greater importance. This suggests that whilst feeling obliged to consider E&SR issues when purchasing a product, they are more likely to influence intention when doing a main shop than a top-up shop.
The four shopping models in the current study explain between 37% and 55% of the variance in intention when looking at the figures for the adjusted coefficient of determination (Adjusted $R^2$) (store main = 55%, store top-up = 48%, product main = 45%, product top-up = 37%). This shows a substantial improvement in predictability when compared to the findings of past research: Shaw et al (2000), in a similar study of fairly traded products, which included the additional elements of ethical obligation and self-identity added to the TPB, found their model only explained 24% of variance in intention (Adjusted $R^2 = 0.24$). Although in theory the predictability of the four Extended TPB models proposed in this study shows greater improvement when looking at the coefficient of determination ($R^2$) figures (store main = 56%, store top-up = 49%, product main = 46%, product top-up = 39%) it was considered prudent to work with the adjusted $R^2$ figures which account for the different number of IV's included in the comparison (TRA = 2, TPB = 3, Extended TPB = 5).

8.4.5. Ethical Shopping Behaviour and the Extended Theory of Planned Behaviour – Predicting Intention

In order to explore the Extended TPB further as a predictor of ethical shopping behaviour, it was necessary to determine which of the five constructs had the greatest effect on intention to perform the behaviour. This was done by looking at the beta values in the Extended TPB sections of the multiple regression analysis displayed in Tables 8.9-8.12.

These results show that the predictors of intention vary in strength depending on the shopping activity being undertaken. In the store models the strongest influence comes from PBC, followed closely by attitude, with only a slight difference in strength between main shop and top-up shop occasions. Ethical obligation is slightly stronger
than self-identity in the top-up model, however the reverse is true in the main shop model. $SN$ does not significantly influence intention in either model.

In the product models the greatest influence on intention comes from attitude, then ethical obligation for a main shop. With a top up shop attitude is still the strongest construct, however then $PBC$ is very marginally above $EO$. This supports earlier research that found measures of $EO$ improve the predictions of the TPB when applied to ethical behaviour (Randall & Gibson, 1991; Kurland, 1995; Granberg & Holmberg, 1990; Sparks & Shepherd, 1992; Sparks & Guthrie, 1998; Shaw et al, 2000). Self-identity can be seen as being influential, although it is not significant, however $SN$ still has no major influence on intention, being negative and insignificant.

The results in all of these models show that the addition of $PBC$, $EO$ and $Sld$ greatly reduce the unique contribution of attitude. Furthermore, although the results of these regression models do not show significance for $SN$, it is correlated with both intention and other Extended TPB variables across all of the models (see Tables 8.5-8.8). This said, the findings of this study with regard to $SN$ are not unheard of, as results from past research has shown $SN$ to be insignificant (Randall & Gibson, 1991; Kurland, 1995; Shaw et al, 2000) and in some instances of a low negative value (Beck & Ajzen, 1991). A suggestion for the lack of impact of $SN$ comes from Vallerland et al (1992) who state it may be due to its being concerned with a more remote concept i.e. what important others think, a notion which may be particularly relevant to this behavioural context, as Shaw & Clarke (1999) found that individuals often feel isolated in their ethical concerns.
8.5. Reliability of the Findings

A major concern of any study of behaviour is the reliability of the findings. As E&SR behaviour is a 'moral' behaviour and as such seen as 'the right thing to do' it may be the subject of dishonest reporting, as respondents want to appear more ethical than they really are. The inclusion of a social desirability scale would have allowed an estimation of the respondents' tendencies either to deny or to exaggerate socially desirable/undesirable attitudes and behaviour. However given the length of the questionnaire already it was decided not to include such a scale - a decision upheld by Tonglet (2001) in her study on shoplifting.

In order to establish some reliability for the study and its findings the results from this study are compared with other TPB studies of both ethical and 'non-ethical' behaviours, illustrated in Table 8.13.

| TABLE 8.13. COMPARISON OF THIS STUDY WITH PREVIOUS TPB STUDIES - CORRELATIONS BETWEEN INTENTIONS AND OTHER MODEL VARIABLES. |
|---|---|---|---|---|---|---|---|
| Behaviour | Sparks & Shepherd (1992) | Shaw et al (2000) | Tonglet (2001) | This study | This study | This study | This study |
| Attitude | 0.26 | 0.17 | 0.68 | 0.63 | 0.57 | 0.63 | 0.55 |
| Subjective Norm | 0.30 | 0.29 | 0.45 | 0.28 | 0.24 | 0.22 | 0.22 |
| PBC | 0.27 | 0.42 | 0.44 | 0.68 | 0.63 | 0.43 | 0.40 |
| Moral norm | - | - | 0.48 | - | - | - | - |
| Past experience | - | - | 0.39 | - | - | - | - |
| EO | - | 0.26 | - | 0.37 | 0.35 | 0.44 | 0.41 |
| Std | 0.37 | 0.26 | - | 0.52 | 0.42 | 0.48 | 0.45 |
| Regression coefficient | - | 0.24 | 0.51 | 0.55 | 0.48 | 0.45 | 0.37 |

(values are shown to 2 d.p in order to give a consistent comparison with past results)
This study shows that there is a degree of consistency between ethical behaviours and the current study, especially when looking at some elements of the product models (SN, PBC, Std), alongside the product related past studies on organic vegetables (Sparks & Shepherd, 1992) and Fair Trade products (Shaw et al, 2000). However attitude measures for the current study were more consistent with those of the non-ethical study on shoplifting (Tonglet, 2001). Given that planned behaviour theory hypothesises that attitudes are determined by the individual’s beliefs about the likely outcomes of the behaviour and their evaluation of whether those outcomes are good or bad, the fact that attitude values are stronger for the current study than the other two ‘ethical’ studies may be due to the nature of the investigation. Only looking at attitudes towards one aspect of ethical consumption (consume organic vegetables; purchase Fair Trade products) may limit the recorded strength of attitude if the consumer is not concerned about that particular aspect of ethical behaviour, whereas the current study has enquired about many aspects so allowing the general ethical beliefs to be measured.

In addition Ajzen (1991) reviewed 16 applications of the TPB and reports that the multiple correlations (R) ranged from a low of 0.43 to a high of 0.94, with an average correlation of 0.71. The findings from this study fall favourably within this range (store main shop = 0.75, store top-up shop = 0.70, product main shop = 0.70, product top-up shop = 0.62). The consistency of these findings, along with the alpha coefficients reported in Tables 8.1-8.4, provides much support for the questionnaires having been completed truthfully and consistently. Additionally it provides support for the utility of the Extended TPB in investigating E&SR behaviour.
8.6. Summary

This area of the study develops and applies an Extended TPB model to the context of E&SR grocery shopping which is defined in terms of a typology of ethical shopping choice decisions. In so doing further insights are provided into the role of attitudes, perceived behavioural control and ethical obligation in particular when making E&SR decisions in relation to store and product choice. Attitude, which captures a range of consumers' beliefs, and perceived behavioural control which reflects consumers' understanding of their control over ethical consumption decisions, both positively affect shopping intentions with respect to store and product. In addition ethical obligation, which represents consumers' belief in the need to act in a moral way when shopping for groceries, also positively affects product choice; neither subjective norm nor self-identity make significant explanatory contributions to shopping intentions in this research. Findings suggest that E&SR behaviour cannot be attributed to one factor in isolation, but rather to a number of factors acting in combination.

Consistent with past studies (Shaw et al, 2000), findings from this investigation indicate that the addition of self-identity and ethical obligation add to the predictive value of the TPB. When applying the Extended TPB to the four shopping models in this study they explained between 37% and 55% of the variance in intention, compared to the 24% explained by Shaw et al (2000) in a similar study of fairly traded products (when comparing Adjusted $R^2$ figures). Given the constructs of EO and Sld are more pertinent to the prediction of behavioural intention in the Extended TPB than the traditional measure of subjective norm, a deficiency in the original TPB model, which is underpinned by purely self-interested motives is highlighted.
The efficacy of the use of the Extended TPB is in this instance is evidenced by the results, but little is added through the distinction of main and top-up choice decisions, although previous research and the earlier qualitative focus group results indicated this. However, the differentiation between store and product choice factors is clear, with ethical obligation being significant in the case of product choice, but not store choice. This cannot be explained through differences in perceived behavioural control which could arguably be considered a possible factor. This suggests therefore that it may be actual behavioural control (over situational variables including accessibility and expense), which in practice leads to the manifestation of such differences; this may be the result of using the direct measure in the modelling undertaken here.

The major value of the approach taken in this study is that it enables the identification of the beliefs that underlie the decision to engage in E&SR shopping behaviour. By integrating consumer behaviour and E&SR, this area of data analysis has provided an additional element to E&SR research, in that it attempts to understand how the beliefs, attitudes and perceptions of individual consumers interact with both store and product attributes. Firstly, investigating the relationship between the contributory variables has provided a means for understanding the basis of E&SR shopping attitudes, a major predictor of E&SR shopping intentions for all respondents; and secondly, exploring the role played by ethical obligation and self identity has shown the impact of important issues on both attitudes and intentions. Sufficient evidence has emerged from the results of the study so far to pursue more sophisticated modelling of the E&SR customer types using cluster analysis, and to link these to shopping behaviour patterns.
Chapter Nine

Quantitative Research Results 3:
Identification of E&SR Grocery Shopper Types

9.1. Introduction

'(A) need to group customers ... on the basis of the benefits they seek from buying a particular product or brand ... is clearly crucial for market segmentation.' (Kent, 1999, p.181). The primary objective of the research presented in this chapter is therefore to determine E&SR shopping behaviour and store/product use in terms of consumer characteristics. Comprehensive lists of E&SR and store image factors were generated (see Chapter 6) by a variety of consumer types, so some data reduction was desirable in order to clarify these complex issues (Babbie et al, 2000). However the use of factor analysis is not advisable here because behaviours rather than attitudes are measured (Kline, 2000). Therefore 'types of E&SR consumers' were derived through the application of cluster analysis. In particular this chapter investigates the factors of greatest importance to different consumer types, whether this varies across shopping occasions, and key characteristics of consumers which may assist in building segmentation strategies. It concludes with a summary and discussion of the principal research findings of this stage.

This stage of data analysis carried out on the questionnaire data aimed to answer the fourth research question identified in section 5.6:
RQ4: Are there different buyer types within the sector of E&SR consumers which may be differentiated and segmented by their concerns?

9.2. Overview of Cluster Analysis

Cluster analysis is widely used in the social sciences to group similar objects or individuals (Hair et al., 1998; Everitt, 1980), and differs from factor analysis in that it is concerned with reducing the number of objects for which measurements have been obtained rather than variables (Diamantopoulos & Schlegelmilch, 1997). As clusters can be defined in different ways according to the 'discipline and purpose of the researcher' (Chisnall, 2005), past research has suggested that clusters display two properties: 1) external isolation – objects in a cluster should be separated from those in other clusters by well defined space, and 2) internal cohesion – objects within a cluster should be similar (Cormack, 1971). Therefore by looking at the similarities and differences in the measurement scores, objects or individuals are grouped into mutually exclusive 'clusters', the individuals in each having more in common with those in their cluster than with those in others. These clusters can then be targeted with appropriate market segmentation strategies, and as such cluster analysis has proved a frequently adopted and efficient method. It is an especially good method for exploratory research as in the case of this study as the groups are not predefined as in some other methods such as discriminant analysis, instead the technique is used to identify groups (Hair et al., 1998).

A combination of both hierarchical and non-hierarchical cluster analysis methods was used in order to gain the benefits of each method. First a hierarchical analysis was used to establish the number of clusters, profile the cluster centres, and identify any obvious outliers. After this a non-hierarchical method was used to cluster respondents using the
cluster centres from the initial hierarchical cluster results as seed points. By using these two methods together 'the advantages of the hierarchical method are complemented by the ability of the non-hierarchical methods to 'fine-tune' the results by allowing the switching of cluster membership' (Hair et al, 1998, p.498).

Cluster analysis requires a representative sample, and a reasonable sample size. These requirements were met in that 220 respondents were generated from a representative sample of E&SR consumers.

9.3. Methodology

The reduced set of factor variables, generated in Chapter 7, was used as the input variables in a cluster algorithm, along with the store image factors. Two stages of cluster analysis were then undertaken. The first was a hierarchical analysis used to group similar respondents on the basis of similar concerns. A preliminary screening for outliers in these dendograms was also carried out – a stage Hair et al (1998) see as "always necessary ... (as) outliers distort the true structure and make the derived clusters unrepresentative of the true population structure" (p.483). Outliers identified in this initial hierarchical cluster analysis were removed in order to more easily enable the identification of the number of distinct clusters from the dendogram.

Having established the number of clusters through this approach, the mean values of the variables in the original solution were input as the centroids or 'seed points' for a second non-hierarchical cluster. For this analysis all respondents were entered including the outliers identified in the hierarchical stage. This was done as a non-hierarchical algorithm reallocates all cases using a method which results in a more even
distribution between clusters and therefore provides a stronger platform from which outlying cases can be meaningfully classified into groups.

The cluster method used was ‘between groups linkage’, and as interval measures were used, the squared Euclidean distance measured the distance between variables. The number of clusters selected for analysis was decoded from a visual inspection of the dendograms generated from this analysis.

An agglomerative hierarchical procedure was used to form clusters, whereby each variable starts as its own cluster and, in a series of steps, joins with other variables (Hair et al., 1998; Everitt, 1980). The variance method of Ward’s method (Ward, 1963) was used to minimise the with-in cluster variance.

The stopping rule (Hair et al., 1998) was used to determine the final number of clusters to be formed, and is illustrated by the use of dendograms, which display the cluster structures visually (See Appendix Xa to Xd). The objective of this procedure was to establish the simplest variable structures possible. A vertical line has been drawn at the point on each dendogram which provides the ‘best’ or ‘simplest solution for clustering the variables. The number of clusters is revealed as the number of horizontal lines crossed by the vertical line, and cluster membership can be established by tracing back through the branches to the respondent number, and hence characteristics (George & Mallery, 1999).

As the number of clusters decrease, the less homogenous they become. Hence each cluster solution must be viewed for its description of structure balanced against the homogeneity of the clusters. Large increases in the overall similarity between the
clusters indicates that combining these would result in the formation of a single cluster, markedly less homogenous than the originals from which they were formed. Therefore a simple rule of cluster solution is to select the cluster point prior to such large increases in squared Euclidean distance (Malhotra, 1999; Hair et al, 1998). This rule was considered when deciding when to stop each of the following cluster procedures.

However, given the difficulties associated with the interpretation of cluster analysis (Everitt, 1980), a priori criteria, as well as those based on marketing theory, were used in conjunction with the ‘stopping rule’ to address the “perplexing issue” of how many clusters should be formed. This heuristic approach is one generally advocated in the literature (George & Mallery, 1999), though it is recommended that the outcomes are treated with caution (Chisnall, 2005). If there is any doubt raised about a clusters content then it should not be carried forward to further analysis.

This methodology was repeated for each of the four proposed models using the data sets relevant to each.

9.4. Classification into ‘Types’ of E&SR Consumer / Concern

For this study the E&SR composite variables derived from the factor analysis, and store image factors identified from the questionnaire, were used as the means of differentiating consumers in the data set. The number of clusters and initial cluster centres were established using Ward’s (1963) hierarchical approach, and this formed the basis of a K-means non-hierarchical analysis to provide the final clusters. The number of clusters was initially established on the basis of interpretation of the dendogram and the agglomeration schedules of the hierarchical cluster process.
In order to understand further, and achieve a richer appreciation of the cluster types, additional analysis was undertaken on consumer characteristics. Following an inspection of the initial descriptive statistics, tests for identifying significant differences were employed. The tests adopted were: a one-way ANOVA for differences in the metric measures (price of merchandise, quality of merchandise, range of merchandise, etc); the Kruskal-Wallis non-parametric ANOVA for the ordinal characteristics (gender, age, number of adults in household, etc); and Chi-square tests for nominal features (number of children in household, occupation, acorn classification, etc). Cross-tabulations were also run.

9.4.1. Cluster Analysis: Store, Main Shop

In respect of the store main shop data, visual inspection of the dendogram revealed eleven outliers, which were removed to leave six clear clusters (see Appendix Xa). The non-hierarchical cluster analysis was then run on all 220 respondents. The robustness of the solution was tested by looking at the results of a discriminant analysis, which showed that 96.8% of the original grouped cases were correctly classified.

9.4.1.1. The Identified Consumer Types of Store Main Shop

The cluster centres, cluster labels and number of consumers comprising each cluster are presented in Table 9.1. The centres represent the mean values for each of the store image and E&SR variables for each of the consumer types.
The clusters show two large groups of equal size, three medium sized groups, and one small group.

In order to investigate these consumer types further, profiling through other types of statistics was undertaken as discussed in section 9.4. Results of the ANOVA tests revealed that all of the store image and E&SR factors were significant. Further investigation used Scheffé’s multiple comparison post hoc test. This test has the advantages of applicability to groups of unequal size, and being relatively insensitive to divergence from normality and homogeneity of variances. The tests revealed that
significant differences between the groups at the 0.05 level were identifiable, illustrated in Table 9.2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>ANOVA Sig. (F Value)</th>
<th>Significant Differences Observed between Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of price when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 and 5</td>
</tr>
<tr>
<td>Importance of merchandise quality when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 5 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of range of merchandise when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 4 &amp; 6</td>
</tr>
<tr>
<td>Importance of location when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 4, 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1, 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of free car park when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 3, 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1, 3 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 6 &gt; Cluster 1, 3 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 1 &gt; Cluster 3 &amp; 5</td>
</tr>
<tr>
<td>Importance of opening hours when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 6 &gt; Cluster 1, 4 &amp; 5</td>
</tr>
<tr>
<td>Importance of cash point when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 6 &gt; Cluster 1, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 1 &gt; Cluster 4</td>
</tr>
<tr>
<td>Importance of petrol station when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 3, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 6 &gt; Cluster 1, 3, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 1 &gt; Cluster 3 &amp; 5</td>
</tr>
<tr>
<td>Importance of customer facilities when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 6 &gt; Cluster 1, 4 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1 &amp; 5</td>
</tr>
<tr>
<td>Importance of polite &amp; friendly staff when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; 1 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 5 &gt; Cluster 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 6 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of promotions when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 4, 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of design &amp; layout when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 4, 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 6 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance returns, exchanges &amp; credit facilities when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1, 4, 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1 &amp; 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 6 &gt; Cluster 1</td>
</tr>
<tr>
<td>Factor analysis, composite variable, store main shop, component 1 Global</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1</td>
</tr>
<tr>
<td>Factor analysis, composite variable, store main shop, component 2 Local</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 4 &gt; Cluster 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 5 &gt; Cluster 1</td>
</tr>
<tr>
<td>Use an E&amp;SR store when deciding on a main store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1</td>
</tr>
</tbody>
</table>

TABLE 9.2. MULTIPLE COMPARISON (SCHEFFE) TEST FOR IDENTIFIED CONSUMER TYPES: STORE, MAIN SHOP
The use of Chi-squared cross tabulations helped identify further characteristics of the customer types.

The resulting clusters from the previous analysis have been labelled to describe the nature of the behaviour and concerns of these types of consumers. Each consumer type will now be discussed in detail.

**Cluster 1 – Ethical, conservative, globally concerned shoppers**

This cluster contains consumers who show above average concern for both global and local E&SR factors, with only product quality scoring higher overall. Global E&SR concerns were scored very slightly higher than local ones. This type of consumer was least concerned about customer facilities and availability of a petrol station at the store. They seem to be more concerned with the E&SR issues and quality surrounding the store they use for a main shop, than the fundamental store image factors.

Consumers in this type tended to be in the higher end of the A - Thriving ACORN classification, with one-third being in the Acorn Group 1 – Wealthy Achievers, Suburban areas. There is a fairly equal split by gender with 55% being female and 45% male. Ages are fairly similarly represented across the board from 20-65+, however a slight peak is seen in the 35-44 years age bracket, and again in the 55-64 years age bracket. The majority of consumer households in this cluster have 2 adults, and although dependent children were found, the majority have either ‘no children (40%), or ‘no dependent children (31.7%). Respondents in this type are most likely to have 2 children (11.7%) closely followed by 1 child (10%). No respondent in this group has more than three dependent children. Most children in this cluster are aged below 11 years (16.6%), with the remaining 11.7% being aged between 12 and 19 years. The majority (61.7%) of the respondents are the chief income earner in the household and in
full-time work (65%). The tenure of their property is weighted towards ownership through mortgage (53.3%), although being owned outright (23.3%) and private rental (18.3%) also accounts for a fair portion. Car ownership is high in this cluster with 51.7% having one car in the household, and 41.7% having two. Only 5% do not own a car and 1.6% own 3+ vehicles.

**Cluster 2 – Traditional extremist, locally concerned shoppers - Drivers**

Consumers in this cluster show above average concern for all aspects of store image, especially in respect of product quality, polite and friendly staff, and free car parking. In addition they have an above average concern for E&SR issues, with local concerns ranking very slightly above global ones. The lowest scoring factor is the availability of a cash machine at the main shop store, but even this factor scores above average, with a final cluster centre of 4.700. This type of consumer is evidenced as being concerned with all aspects of store image and E&SR factors, although the store image factors of product quality, product range, store location, free car parking, polite and friendly staff, in store promotions and returns and exchanges are ranked above the E&SR factors.

Consumers of this type tend to run across the age ranges, but with a noticeable peak in the 35-44 years age bracket. The majority tend to be female (76.6%) rather than male (23.4%), but this tends to mirror more closely the population split of the sample than Cluster 1 (sample = 70.5% female, 29.5% male). More of this type of consumer fell into the D – Settling (30%) ACORN classification, although there was still a substantial finding in the A – Thriving (26.7%) and the C – Rising (18.3%) classifications. The majority of households in this cluster contain 2 adults (70%), and a fair number of single adult households (20%) – double that of Cluster 1. Although not as high as Cluster 1, this cluster still displays a high percentage of consumers with either no
children (33.3%) or no dependent children (25%). It contains more one child (20%) than two child (15%) households, the opposite to Cluster 1. Children in this cluster tend to be younger with 23.4% being aged 0-11 yrs, whereas only 18.3% were found in the 12-19 years age bracket. A higher proportion of respondents stated that their partner or spouse was the chief income earner in the household (56.7%) than those who stated this to be themselves (41.7%). This is recognised in the fact that only 15% of respondents work full time whilst 26.7% work part time. Although 46.6% of respondents have a mortgage on their house, (which is lower than that of Cluster 1), a higher number own their home outright (31.7%). Similar characteristics can be found to Cluster 1 in terms of cars per household, with 48.3% of respondents having one car and 35% having two cars. However there are a higher number of households having 3+ cars (10%) which could be accounted for by the increased number of older children in households within this consumer type.

Cluster 3 - Traditional extremist, globally concerned shoppers - Non-drivers

This type of consumer elicits very similar concerns to that of those in Cluster 2. The main difference with these consumers is their lack of concern for both free car parking and the availability of a petrol station at the store. These consumers either have no car, or else use a different method of transport when undertaking a main shop. The highest scoring factors for this cluster were polite and friendly staff, store location and product quality. In respect of the E&SR factors they show marginally more concern for global rather than local issues, different in priority to Cluster 2.

The majority of consumers of this type tend to fall between the ages of 20 and 44 years (66.7%) and be predominantly female (83.3%) rather than male (16.6%). However several 65+ consumers (25%) fall into this category as well. No more than three adults
were found in this type of households, with the majority having two adults (50%), closely followed by one adult (33.3%). A large percentage of this cluster was found to have either no children (41.7%) or no dependent children (33.3%). However it was the only cluster to contain a respondent who had five children – the largest family in the sample. Of the eleven dependent children in the sample nine were aged 0-11 years, and two aged 12-15 years. The largest percentage of this type of consumer is found in the C - Rising ACORN classification (33.3%) although only slightly smaller numbers were found in the E - Aspiring (25%) and F - Striving (25%) classifications. The majority of respondents were found to be the chief income earner in the household (66.7%), and in full time work (41.6%), although a significant number are retired (33.3%). In respect of tenure, large and equal numbers of respondents were found to either own their home outright (41.7%) or to be privately renting (41.7%). A higher number of local authority rentals (8.3%) were displayed in this consumer type than in Cluster 1, 2 or 4. Half of the consumers in this category do not have a car in the household, whilst 33.3% have one car and 16.7% have two.

Cluster 4 - Ethical, advocate, locally concerned shoppers - Drivers

Consumers in this type have several very prominent concerns, but also a couple of very low ranking issues. They are highly concerned with product quality, free car parking and polite and friendly sales staff, and very concerned with both global and local E&SR issues. Here local issues are slightly higher than global ones. On the other hand they display very little concern with the store having a petrol station or cash machine. The rest of the store image factors fall very closely around the median mark of 4.000.

The majority consumers in this type were found in equal measures of 29.7% in both the A - Thriving ACORN classification (with 13.5% being in ACORN Group 1 – Wealthy
Achievers, Suburban areas) and the D – Settling classification (with 24.3% being found in ACORN Group 9 – Comfortable middle-agers, Mature Home owning areas). Gender is split on a 78.4% female and 21.6% male basis, and a higher proportion of respondent ages tend to fall in the 55-64 year age bracket (27%). However this was the pinnacle of a curve that noticeably started increasing at 35-44 years and only dipped slightly after in the 65+ age bracket. By far the highest percentage of households in this type contain 2 adults (70.2%). 43.2% of consumers have dependent children in this group, with 21.6% having one child, 13.5% two children, 5.4% three children and 2.7% having four children. Children in this cluster tended to be older, with 27% aged between 12-19 years of age, and 21.6% being between 16-19 years old. There were also a fair number of respondents with no children in this group (37.8%). Respondents in this type are fairly equally split between being the chief income earner themselves (48.6%) and it being their partner or spouse (45.9%). 64.9% of the chief income earners are in full-time work, but the second highest category is of those retired at 21.6%. The largest number of consumers by tenure of property falls relatively equally between being owned outright (40.5%) and ownership through mortgage (37.8%). One-car ownership was high in this cluster with 62.2% of respondents falling into this category, whilst 27% have two. Only 5.4% do not own a car and 5.4% own 3+ vehicles.

Cluster 5 – Ethical, advocate, globally concerned shoppers – Non-drivers

The pattern of consumer concerns in this type is similar to that of Cluster 4, but with more extreme scoring. These consumers are very highly concerned with product quality and polite and friendly sales staff, and very concerned with both global and local E&SR issues. In difference to Cluster 4 they rank global issues above local issues. They demonstrate a lack of concern over the issues of free car parking, customer facilities, and availability of a petrol station, and a cash machine at the store.
Consumers grouped into this type were spread fairly evenly across the age ranges, but with slight peaks in the 20-24 years (22.7%) and the 45-54 years (27.2%) age bracket. The gender split was very similar to that of Cluster 2 with 78.4% females and 21.6% males. The largest group of consumers by ACORN classification fell into the A – Thriving (36.4%) category, with 27.3% being within Group 1 – Wealthy Achievers, Suburban areas. However a substantial portion was also found in the E – Aspiring category (27.3%). Over half (59.1%) of consumers in this type live in a household containing two adults, although there were similar numbers living in one and three adult households (18.2% and 13.6% respectively). This type also has the highest number of consumers living in households with five (4.5%) or six plus (4.5%) adults out of all the clusters. Half of the consumers in this cluster have no children, and a further 31.8% have no dependent children. Consumers that have children in this group tend to either have young children under the age of 11 years (11.4%) or older aged 16-19 years (4.5%). This could be related to the peak ages in this type. Respondents tend to be the chief income earner (54.5%), with 77.3% of the chief income earners being in full-time employment. The main type of tenure for this group is through a mortgage (50%), although equal numbers own their homes outright (18.1%) or rent privately (18.1%). 9.1% rent through the local authority. In respect of number of cars per household, there are similar figures between one-car homes (40.9%) and households with no cars (31.8%). Two car households make up 22.7% of this customer type and 3+ 4.5%.

*Cluster 6 – Traditional, indifferent, globally concerned shoppers*

This group of consumers are very narrow in the scoring of their concerns with all factors, displaying final cluster centres between 4.310 and 5.931. The highest scoring concern is that of product quality and the lowest store location. Concerns with E&SR factors are above average and global concerns are prioritised over local issues.

293
The majority of consumers in this type tend to fall between the ages of 25 and 44 years (62.1%). Their gender profile is very similar to that of Cluster 5 with 72.4% being female and 27.6% male. The majority of households in this type contain two adults (70%), although similar figures were found between the one, three and four adult households (13.8%, 6.9% and 10.3% respectively). There are a greater number of children in the household in this cluster than in others with only 41.4% of households having no children and 13.8% having no dependent children. The number of dependent children in the household is closely run, with one, two and three child households coming in at 13.8%, 17.2% and 10.3 respectively. Children’s’ ages range right across the board from 0-19 years, although a higher proportion were found in the 0-11 year age range (24.1%) than the 12-19 year age range (20.7%). The largest percentage of this type of consumer was found in the E – Aspiring (37.9%) ACORN classification although only smaller but still significant numbers were found in the A – Thriving (24.1%) and D – Settling (24.1%) classifications. The majority of respondents were found to be the chief income earner in the household (55.2%), although for a fair number it is their spouse or partner (37.9%). 79.3% of the chief income earners are in full time work, although 13.8% are retired. In respect of tenure just over half (51.7%) of consumers in this type have a mortgage on their home, whereas 24.1% own it outright. 13.8% rent their home privately, and 10.3% from the local authority – the highest number out of all the clusters. The majority of households have one car (58.6%), followed by two cars (34.5%). Households with either no cars or three plus cars are similarly matched at 3.4% each.

9.4.2. Cluster Analysis: Store, Top-up Shop

In respect of the store top-up shop data, visual inspection of the dendogram revealed twelve outliers, which were removed to leave three clear clusters (see Appendix Xb).
The non-hierarchical cluster analysis was then run on all 220 respondents. The robustness of the solution was tested by looking at the results of a discriminant analysis, which showed that 96.8% of the original grouped cases were correctly classified.

9.4.2.1. The Identified Consumer Types of Store Top-up Shop

The cluster centres, cluster labels and number of consumers comprising each cluster are presented in Table 9.3. The centres represent the mean values for each of the store image and E&SR variables, for each of the consumer types.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cluster 1 (N = 60)</th>
<th>Cluster 2 (N = 74)</th>
<th>Cluster 3 (N = 86)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of price when deciding on a top-up store</td>
<td>3.117</td>
<td>5.297</td>
<td>4.640</td>
</tr>
<tr>
<td>Importance of merchandise quality when deciding on a top-up store</td>
<td>4.400</td>
<td>6.405</td>
<td>5.337</td>
</tr>
<tr>
<td>Importance of range of merchandise when deciding on a top-up store</td>
<td>3.967</td>
<td>5.378</td>
<td>4.802</td>
</tr>
<tr>
<td>Importance of location when deciding on a top-up store</td>
<td>5.783</td>
<td>6.135</td>
<td>4.884</td>
</tr>
<tr>
<td>Importance of free car park when deciding on a top-up store</td>
<td>3.533</td>
<td>5.865</td>
<td>3.128</td>
</tr>
<tr>
<td>Importance of opening hours when deciding on a top-up store</td>
<td>4.700</td>
<td>6.162</td>
<td>3.884</td>
</tr>
<tr>
<td>Importance of cash point when deciding on a top-up store</td>
<td>1.967</td>
<td>3.905</td>
<td>2.907</td>
</tr>
<tr>
<td>Importance of petrol station when deciding on a top-up store</td>
<td>1.500</td>
<td>3.568</td>
<td>2.198</td>
</tr>
<tr>
<td>Importance of customer facilities when deciding on a top-up store</td>
<td>1.817</td>
<td>4.622</td>
<td>2.581</td>
</tr>
<tr>
<td>Importance of polite &amp; friendly staff when deciding on a top-up store</td>
<td>4.117</td>
<td>6.473</td>
<td>5.070</td>
</tr>
<tr>
<td>Importance of promotions when deciding on a top-up store</td>
<td>2.250</td>
<td>5.527</td>
<td>4.419</td>
</tr>
<tr>
<td>Importance of design &amp; layout when deciding on a top-up store</td>
<td>2.467</td>
<td>5.176</td>
<td>3.988</td>
</tr>
<tr>
<td>Importance returns, exchanges &amp; credit facilities when deciding on a top-up store</td>
<td>1.750</td>
<td>5.189</td>
<td>3.826</td>
</tr>
<tr>
<td>Reliability analysis, composite variable, store top-up shop</td>
<td>4.185</td>
<td>5.639</td>
<td>5.164</td>
</tr>
</tbody>
</table>

The clusters show three large groups of roughly similar size, which will be investigated further by profiling through other types of statistics.
Results of the ANOVA tests revealed that all of the store image and E&SR factors were significant. Scheffé’s multiple comparison post hoc test was used to further investigate these factors. Multiple comparison tests revealed significant differences between the groups at the 0.05 level. These are outlined in Table 9.4.

### Table 9.4. Multiple Comparison (Scheffé) Test for Identified Consumer Types: Store, Top-Up Shop

<table>
<thead>
<tr>
<th>Variable</th>
<th>ANOVA Sig. (F Value)</th>
<th>Significant Differences Observed between Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of price when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of merchandise quality when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of range of merchandise when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of location when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 1 &gt; Cluster 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 2 &gt; Cluster 3</td>
</tr>
<tr>
<td>Importance of free car park when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td>Importance of opening hours when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 1 &gt; Cluster 3</td>
</tr>
<tr>
<td>Importance of cash point when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of petrol station when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of customer facilities when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of polite &amp; friendly staff when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of promotions when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance of design &amp; layout when deciding on a top-up store</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cluster 3 &gt; Cluster 1</td>
</tr>
<tr>
<td>Importance returns, exchanges &amp; credit facilities when deciding on a top-up shop</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td>Reliability analysis, composite variable, store top-up shop</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
<tr>
<td>Intention to use an E&amp;SR store the next time for a top-up shop</td>
<td>0.002</td>
<td>Cluster 2 &gt; Cluster 1 &amp; 3</td>
</tr>
</tbody>
</table>

The use of Chi-squared cross tabulations helped identify further characteristics of the customer types.

The resulting clusters from the previous analysis have been labelled to describe the nature of the behaviour and concerns of these types of consumers. Each consumer type will now be discussed in detail.
Cluster 1 – Ethical, conservative, shoppers

This cluster contains consumers whose main concern when using a store for a top-up shop is the location of that store. These are followed by opening hours of the store and merchandise quality. E&SR concerns for this consumer type are seen to be above average and rank next in line after the aforementioned factors. Apart from these factors, and concern for polite and friendly sales staff, all of their other concerns are below average, with the least concern being shown for the availability of a petrol station at the store. The factors of returns and exchanges, customer facilities, and availability of a cash point, are also lowly ranked.

The largest group of consumers in this type (41.7%) are found in the A - Thriving ACORN classification with 51.6% in the A, B and C categories. Of these 23.3% are classed as being in the highest Acorn group, Group 1 – Wealthy Achievers, Suburban areas. However there are also reasonable numbers found in both the D – Settling (26.7%) and E – Aspiring (18.3%) ACORN classifications. In respect of gender this cluster consists of 65% females and 35% males. The largest numbers of consumers are in the 55-64 year age bracket in this group (28.3%). However a wider peak was found in the younger age ranges of 25-34 years (23.3%) and 35-44 years (20%). The majority of consumer households in this cluster have 2 adults (76.7%). 43.3% of households have no children, 25% have no dependent children; and of the 31.7% that do have children 11.6% have one child, 13.4% have two children, and 6.7% have three children. The ages of children in the household is spread over the 0-19 year age range, with 19.2% being aged below 11 years, and 12.5% aged 12-19 years. The chief income earner in the household is fairly evenly split between the respondent (51.7%) and their partner or spouse (48.3%). 68.3% of chief income earners are in full-time employment, whereas, of those respondents who are not the chief income earners 30% are in full-time
employment, 33.3% in part-time work and 23.3% retired. The tenure of this group’s property displayed similar figures for both outright ownership (38.3%) and mortgaged (40%). Car ownership is high in this cluster with 56.7% having one car in the household, and 38.4% having two. Only 3.3% do not own a car and 1.6% own 3+ vehicles.

Cluster 2 – Traditional, extremist shoppers
Consumers in this type show above average concern for a number of aspects of store image, with the highest concern being for polite and friendly sales staff, very closely followed by merchandise quality. Their other very high-ranking concerns are for store location and opening hours. They show much concern for E&SR factors, and rank them the highest out of the three clusters. However price is also a high concern for this group. Their lowest concerns are for the availability of a petrol station at the store, and a cash point. Apart from these, this type of consumer ranks all other concerns as much higher than average.

Consumers of this type tend to run in an arc across the age ranges, peaking in the 35-44 years age bracket. There is a much higher proportion of females in this group (78.4%) than males (21.6%), considerably different to the sample population (sample – female = 70.5%, male = 29.5%). This consumer type is spread across all ACORN classifications, but with notably higher numbers found in the D – Settling category (25.7%) followed by equal amounts (of 21.6%) found in the A – Thriving category and the C – Rising category. Most households in this cluster contain 2 adults (68.9%), although 17.4% are single adult households. Although this cluster again displays a large percentage of consumers with either no children (37.8%) or no dependent children (17.6%) this is the lowest of all the clusters. The majority of households with dependent children have
either one child (18.9%) or two children (17.6%), although 8.1% have three children. Children within this cluster range across the board from 0-19 years, but with a higher proportion falling into the 0-11 years age bracket (25%) than the 12-19 year age range (19.6%). More respondents stated that their partner or spouse was the chief income earner in the household (54.1%) than those who stated it was themselves (43.2%). Of these chief income earners, 73% are in full-time employment and only 5.4% in part-time work, whilst of the respondents who are not the chief income earner, 27% are in part-time work, and only 9.5% are in full time work. 14.9% of chief income earners are retired, whilst 4.8% of respondents who were not the chief income earner are retired. The number of respondents who have a mortgage on their house (45.9%) is higher than that of Cluster 1. However a lower number own their home outright (27%). Cars per household statistics found 55.4% of respondents having one car and 29.7% having two cars, similarly to Cluster 1. However in contrast to Cluster 1 there is a higher number of households owning 3+ cars (8.1%) and a higher number of households who do not own a car at all (6.8%).

Cluster 3 – Ethical, advocate, shoppers

This type of consumer elicits greatest concern for merchandise quality, closely followed by E&SR factors, when deciding where to go for a top-up shop. Yet again, like the other clusters, their lowest concern is for the availability of a petrol station at the store. Many of the store image factors are within the two point range of 2.9-4.9, showing that these consumers do not differentiate their concerns highly, outside of the previously mentioned factors.

Consumers in this type are fairly evenly spread, with figures ranging between 19.8% (20-24 years) and 14% (55-64 years). They reflect most closely the population sample
of the three clusters, being split 67.4% female and 32.6% male. 60.5% of households contain two adults; however comparatively speaking it has higher numbers of 3, 4 and 5 adult households (14%, 7% and 1.2% respectively) than the other two clusters. A large percentage of this cluster has either no children (38.4%) or no dependent children (31.4%). One child is the most common size of family (11.6%), however households with between 2-5 children were also found in this cluster. For the 30.2% of households that do have children, 14.5% are aged 0-11 years and 15.7% 16-19 years. The largest percentage of this type of consumer was found in the A – Thriving ACORN classification (30.2%) although only slightly smaller numbers were found in the E – Aspiring (26.7%) classification. A higher proportion of respondents are chief income earners in this cluster (61.6%) than in the other two. Only 30.2% stated their partner or spouse is the chief income earner. 63% of these chief income earners are in full-time work, and 17.4% retired. In respect of tenure a much larger proportion of respondents were found to have a mortgage (50%) than own their home outright (24.4%) or are privately renting (17.4%). This cluster has the largest number of the consumers who do not have a car in the household (18.6%), although 44.2% have one car, 32.6% two, and 4.6% have three or more.

9.4.3. Cluster Analysis: Product, Main Shop

In respect of the product main shop data, visual inspection of the dendogram revealed fifteen outliers, which were removed to leave five clear clusters (see Appendix Xc). The non-hierarchical cluster analysis was then run on all 220 respondents. The robustness of the solution was tested by looking at the results of a discriminant analysis, which showed that 97.3% of the original grouped cases were correctly classified.
9.4.3.1. *The Identified Consumer Types of Product Main Shop*

The cluster centres, cluster labels and number of consumers comprising each cluster are presented in Table 9.5. The centres represent the mean values for each of the store image and E&SR variables for each of the consumer types.

**TABLE 9.5. FINAL CLUSTER CENTRES FOR PRODUCT MAIN SHOP**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1 (N = 45)</th>
<th>2 (N = 75)</th>
<th>3 (N = 68)</th>
<th>4 (N = 23)</th>
<th>5 (N = 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of price when deciding on a main product</td>
<td>5.933</td>
<td>6.067</td>
<td>5.059</td>
<td>4.304</td>
<td>3.778</td>
</tr>
<tr>
<td>Importance of product quality when deciding on a main product</td>
<td>6.156</td>
<td>6.800</td>
<td>6.368</td>
<td>5.043</td>
<td>4.889</td>
</tr>
<tr>
<td>Importance of product range when deciding on a main product</td>
<td>4.200</td>
<td>6.027</td>
<td>5.250</td>
<td>4.739</td>
<td>2.222</td>
</tr>
<tr>
<td>Importance of pack size when deciding on a main product</td>
<td>3.600</td>
<td>5.827</td>
<td>4.412</td>
<td>4.522</td>
<td>2.111</td>
</tr>
<tr>
<td>Importance of product design and packaging when deciding on a main product</td>
<td>2.378</td>
<td>5.253</td>
<td>2.471</td>
<td>4.478</td>
<td>3.111</td>
</tr>
<tr>
<td>Importance of promotions when deciding on a main product</td>
<td>5.111</td>
<td>5.880</td>
<td>2.838</td>
<td>5.478</td>
<td>1.222</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product main shop, component 1 product heritage</td>
<td>5.235</td>
<td>5.947</td>
<td>5.616</td>
<td>4.184</td>
<td>3.716</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product main shop, component 2 animal and human rights</td>
<td>6.049</td>
<td>6.307</td>
<td>5.900</td>
<td>4.704</td>
<td>4.244</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product main shop, component 3 Advertising and communications</td>
<td>6.037</td>
<td>6.680</td>
<td>6.201</td>
<td>5.087</td>
<td>3.667</td>
</tr>
</tbody>
</table>

The clusters show two large groups of similar size, then two medium sized groups, and one small group.

In order to investigate these consumer types further, profiling through other types of statistics was undertaken. Results of the ANOVA tests revealed that all of the store image and E&SR factors were significant. Further investigation used Scheffé's multiple comparison post hoc test. Looking at the Multiple Comparisons table from the Post-Hoc tests revealed that significant differences between the groups at the 0.05 level were identifiable.
The use of Chi-squared cross tabulations helped identify further characteristics of the customer types.

The resulting clusters from the previous analysis have been labelled to describe the nature of the behaviour and concerns of these types of consumers. The concerns of each group will now be discussed, and the type of consumer profiled in detail.

*Cluster 1 – Ethical, advocate, A & H concerned shoppers*

This type contains consumers who show very high scores for the ‘animal and human rights’ and ‘advertising and communications’ aspects of E&SR, with only product
quality scoring higher. However the ‘product heritage’ aspect of E&SR was not scored so highly, albeit it was fifth in importance after price. This type of consumer is least concerned over ‘product design and packaging’ and ‘pack size’. These consumers seem to be more concerned with the E&SR issues and the quality surrounding the product they purchase during a main shop, than the fundamentals of what the product looks like, although price and promotions on the product were rated relatively highly.

Consumers in this type were found in slightly higher numbers in the E – Aspiring ACORN classification (28.9%), although high numbers were also found in the A – Thriving ACORN classification (22.2%), with half being in the Acorn Group 1 – Wealthy Achievers, Suburban areas, and the D – Settling ACORN classification (20%).

Looking at the cluster by gender, there is a split of 77.8% female 22.2% male. Ages are well represented across the board from 20-65+ years; however a slight peak was seen in the 25-44 (46.7%) years age bracket, and again in the 55-64 years age bracket. The majority of consumer households in this cluster have 2 adults (77.8%), although the next highest band is one adult households at 13.3%. Households without children are high, and split between ‘no children (42.2%), and ‘no dependent children (17.8%). Respondents in this type are nearly twice as likely to have 2 children (20%) as one child (11.1%). A slight majority of children in this cluster are aged below 11 years (18.9%), with the remaining 21.1% aged between 12 and 19 years. 60% of the respondents said they are the chief income earners, whereas 35.6% said it was their partner or spouse. 71.1% of chief income earners in this cluster are in full-time work (65%), where as more are retired (11.1%) than in part-time work (6.7%). The tenure of their property is weighted towards ownership through mortgage (46.7%), although own outright (24.4%) and private rental (17.8%) also account for a fair portion. Car ownership is high in this
cluster with 57.8% having one car in the household, and 28.9% having two. Only 11.1% do not own a car and 2.2% own 3+ vehicles.

**Cluster 2 – Traditional, extremist, A & C concerned shoppers**

Consumers in this type show above average concern for all aspects of store image, especially product quality, price, and product range. In addition they have an above average concern for E&SR issues, with ‘advertising and communications’ concerns ranking slightly above ‘animal and human rights’. Only price scored higher than these two issues. However ‘product heritage’ factors (although receiving a high score) are behind all of the aforementioned issues. The lowest scoring factor is the ‘product design and packaging’ of a product bought during a main shop, but again even this factor scores above average with a final cluster centre of 5.253. This type of consumer is evidenced as being concerned with all aspects of store image and E&SR factors.

Consumers in this type tend to run across the age ranges, with a very small peak in the 25-34 years age bracket. The gender profile is similar to that of cluster 1, with 78.7% of respondents being female and 21.3% male. More of this type of consumer falls into the D – Settling (28%) ACORN classification, although there is still a substantial group of C – Rising (24%), A – Thriving (18.7%), and E – Aspiring (18.7%) classifications. The majority of households in this cluster contain 2 adults (72%), and a fair number of single adult households (18.7%). This cluster displays a lower percentage of consumers with no children (38.7%) than Cluster 1, and had more with no dependent children (22.7%). It contains more one child (17.3%) than two child (14.7%) households, the opposite to Cluster 1. Children in this cluster tend to be younger, with 22% being aged 0-11yrs, whereas only 16.6% were found in the 12-19 years age bracket. A higher proportion of respondents stated that their partner or spouse was the chief income earner.
in the household (52%) than those who stated it was themselves (44%). This is recognised in the fact that only 14.7% of respondents work full time, whilst 22.7% work part time. However, 18.7% of chief income earners in this cluster are retired. Similar figures were shown in this cluster for respondents who have a mortgage on their home (38.7%) as own it outright (37.3%). 20% rent privately and 4% from the local authority. In terms of cars per household, 48% of respondents have one car and 32% two cars. 12% of respondents do not have a car in the household - similar in number to Cluster 1. However there was a higher number of households having 3+ cars (8%).

Cluster 3 – Ethical, advocate, A & C concerned shoppers

The main concern of this type of consumer is product quality, followed by all three aspects of E&SR. Advertising and communications is their top E&SR concern, then animal and human rights, then product heritage issues. They are least concerned about product design and packaging, and promotions, which are scored well below average, (the only two factors to do this). These consumers can be classified as most concerned about product quality and E&SR issues. However price and product range are still important considerations. They are similar to consumers in Cluster 1, but have less concern for product promotions.

The majority of consumers in this type tend to be older, with 78% over the age of 35 years, and 41.2% over the age of 55 years. They were found to be predominantly female (61.8%) rather than male (38.2%), in difference to the population sample (female = 70.5%, male = 29.5%). The majority of households are found to have two adults (60.3%), and then one and three adult households are very evenly matched (14.7% and 16.2% respectively). This cluster is the only one to display households containing six adults (4.4%). A large percentage of this cluster is found to have either
no children (35.3%) or no dependent children (36.8%). However it is the only cluster to contain a respondent who had five children – the largest family in the sample. Of the thirty-nine dependent children in the sample, nineteen are aged 0-11 years, and twenty aged 12-15 years. The largest percentage of this type of consumer was found in the A – Thriving ACORN classification (42.6%) with 25% being in the Acorn Group 1 – Wealthy Achievers, Suburban areas. Smaller numbers of equal size are also found in the D – Settling (17.6%) and E – Aspiring (17.6%) classifications. The majority of respondents are found to be the chief income earner in the household (52.9%), although a number stated it was their partner or spouse (42.6%). Of the chief income earners 63.2% are in full-time work, although a significant number are retired (19.1%). In respect of tenure most respondents were found to either have a mortgage (51.5%), own their home outright (29.4%) or to be privately renting (16.2%). Nearly equal number of respondent either have one car (44.1%) or two (42.6%) in the household, although 10.3% do not have a car in the household, whilst 2.9% have three or more.

Cluster 4 – Ethical, indifferent, A & C concerned shoppers

Consumers of this type do not seem to have any extreme concerns, with all final cluster centres being within a 1.3 range of 4.184 to 5.478. However they are most concerned about promotions when deciding on a product during a main shop. This is followed by the ‘advertising and communications’ E&SR factors. Product quality and product range then fit in before the next E&SR concern of ‘animal and human rights’. The least concern is shown for the E&SR issue of ‘product heritage’. Despite this group’s concern with promotions, price of products during a main shop scored second from bottom in level of importance.
The majority of consumers in this type were found to be in the A - Thriving ACORN classification (39.1%) with 34.8% being in ACORN Group 1 – Wealthy Achievers, Suburban areas. Significant numbers were also found in the E – Aspiring ACORN classification (30.4%), with 21.7% being on ACORN Group 12 – white collar workers, better-off multi ethnic areas, and the D – Settling ACORN classification (17.4%).

Gender is split fairly evenly on a 52.2% female and 47.8% male basis. The age of respondents is skewed towards the younger age ranges with the majority of respondents being under 44 years (69.6%). By far the highest percentage of households in this type contain 2 adults (52.2%), although four adult households (21.7%) are more prevalent than single or three adult households (13% each). 39.1% of consumers have dependent children in this group, with 21.7% having one child, 13% two children, and 4.3% four children. Children in this cluster tend to be younger with 23.9% aged between 0-11 years of age, and only 17.3% in the 12-19 years age range (of which 15.2% were between 16-19 years old). There is also a much higher number of respondents with no children in this group (47.8%) than with ‘no dependent children’ (13%). This could be a reflection of the age range of respondents in this group. Far more respondents in this type are the chief income earner in the household (73.9%) rather than it being their partner or spouse (21.7%). This is reflected in the fact that 69.6% of the chief income earners are in full time employment, and only 4.3% of respondents who are not the chief income earner are in full time employment. The largest number of consumers by tenure of property fall into the category ‘ownership through mortgage’ (39.1%). Private rentals (26.1%) accounted for more tenures than those ‘owned outright’ (17.4%), and 17.4% of respondents live in local authority housing. One-car ownership is high in this cluster with 56.5% of respondents falling into this category, whilst 26.1% have two. 8.7% of respondents do not own a car in the household, the same amount that own 3+ vehicles in the household (8.7%).
Cluster 5 – Ethical, conservative, A & H concerned shoppers

This type of consumer displays low scores for all aspects of importance. Of greatest concern is product quality, followed by the E&SR concern of ‘animal and human rights’. These are the only two final cluster centres to be scored above the average of 4.000. Price is then a consideration, closely followed by ‘product heritage’ and then ‘advertising and communications. This cluster along with Cluster 1, is the only ones to score animal and human rights as their top E&SR concern; and this cluster was the only one not to have ‘product heritage’ as the least important of the three E&SR concerns. Least concern in this consumer type is shown for promotions, although product range and pack size also score lowly.

Consumers are grouped into the lower age ranges, with all respondents being under the age of 55 years. Slightly more respondents fall into the 45-55 year (44.5%) and 25-34 year (33.3%) age range than the 20-24 year, or 35-44 year age brackets (11.1% each). The gender split is identical to that of Cluster 1, very similar to that of Cluster 2 with 77.8% females and 22.2% males. The largest group of consumers by ACORN classification fall into the A – Thriving (55.6%) category, with 44.4% being within Group I – Wealthy Achievers, Suburban areas. The only other representation in this cluster is seen in much smaller numbers in the D – Settling classification (33.3%) and the E – Aspiring classification (11.1%). Consumers in this type are only represented in the one adult (22.2%) and two adult (77.8%) household categories. Nearly half of the consumers in this cluster have no children (44.4%), and a further 22.2% have no dependent children. Dependent children in this group tend to be young, with all those evidenced being under the age of 11 years. This could be related to the peak ages in this type. 66.7% of respondents said their partner or spouse is the chief income earner in the household, with the other 33.3% stating it was themselves. All of the chief income
earners were in full-time employment with 22.2% being self employed. The main type of tenure for this group is through a mortgage (77.8%). The only other types of tenure recorded were 'own outright' and 'rent from the local authority' which both accounted for 11.1%. In respect of number of cars per household for this cluster one-car homes account for 88.9% and two car households 11.1%. No other categories were used.

9.4.4. Cluster Analysis: Product, Top-up Shop

With regard to the product top-up shop data, visual inspection of the dendogram revealed five outliers, which were removed to leave three clear clusters (see Appendix Xd). The non-hierarchical cluster analysis was then run on all 220 respondents. The robustness of the solution was again tested by looking at the results of a discriminant analysis, which showed that 92.3% of the original grouped cases were correctly classified.

9.4.4.1. The Identified Consumer Types of Product Top-up Shop

The cluster centres, cluster labels and number of consumers comprising each cluster are presented in Table 9.7. The centres represent the mean values for each of the store image and E&SR variables for each of the consumer types.
The clusters show two large groups of roughly similar size, and a third medium sized, but much smaller group.

In order to investigate these consumer types further, profiling through other types of statistics was undertaken. Results of the ANOVA tests revealed that all of the store image and E&SR factors were significant. Further investigation used Scheffé’s multiple comparison post hoc test. This test has the advantages of applicability to groups of unequal size, and being relatively insensitive to divergence from normality and homogeneity of variances. Looking at the multiple comparisons in Table 9.8 revealed that significant differences between the groups at the 0.05 level were identifiable.

### Table 9.7. Final Cluster Centres for Product Top-up Shop

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cluster 1 (N = 98)</th>
<th>Cluster 2 (N = 90)</th>
<th>Cluster 3 (N = 32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of price when deciding on a top-up product</td>
<td>5.633</td>
<td>4.411</td>
<td>3.750</td>
</tr>
<tr>
<td>Importance of product quality when deciding on a top-up product</td>
<td>6.429</td>
<td>5.800</td>
<td>3.969</td>
</tr>
<tr>
<td>Importance of product range when deciding on a top-up product</td>
<td>5.255</td>
<td>4.089</td>
<td>2.625</td>
</tr>
<tr>
<td>Importance of pack size when deciding on a top-up product</td>
<td>5.051</td>
<td>3.367</td>
<td>2.500</td>
</tr>
<tr>
<td>Importance of product design and packaging when deciding on a top-up product</td>
<td>4.592</td>
<td>2.267</td>
<td>2.750</td>
</tr>
<tr>
<td>Importance of promotions when deciding on a top-up product</td>
<td>5.337</td>
<td>3.000</td>
<td>2.969</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product top-up shop, component 1 product heritage</td>
<td>5.560</td>
<td>5.370</td>
<td>3.036</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product top-up shop, component 2 Advertising and communications</td>
<td>6.192</td>
<td>5.753</td>
<td>3.563</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product top-up shop, component 3 Animal and human rights</td>
<td>6.080</td>
<td>5.789</td>
<td>4.069</td>
</tr>
</tbody>
</table>
The use of Chi-square cross tabulations helped identify further characteristics of the customer types.

The resulting clusters from the previous analysis have been labelled to describe the nature of the behaviour and concerns of these types of consumers. The concerns of each group will now be discussed, and the type of consumer profiled in detail.

**Cluster 1 – Traditional, extremist, A & C concerned shoppers.**

This type contains consumers whose main concern when purchasing a product during a top-up shop is product quality. This is followed in order of importance by the E&SR factors of ‘animal and human rights’ and ‘advertising and communications’. Price is then considered, before the third E&SR factor of ‘product heritage’ comes into account. E&SR concerns for this consumer type are seen to be high in importance. However all of the traditional product factors score highly as well. ‘Product design and packaging’

<table>
<thead>
<tr>
<th>Variable</th>
<th>ANOVA Sig (F Value)</th>
<th>Significant Differences Observed between Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of price when deciding on a top-up product</td>
<td>0.000</td>
<td>Cluster 1 &gt; Clusters 2 &amp; 3</td>
</tr>
<tr>
<td>Importance of product quality when deciding on a top-up product</td>
<td>0.000</td>
<td>Cluster 1 &gt; Cluster 2 &amp; 3</td>
</tr>
<tr>
<td>Importance of product range when deciding on a top-up product</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 3</td>
</tr>
<tr>
<td>Importance of pack size when deciding on a top-up product</td>
<td>0.000</td>
<td>Cluster 1 &gt; Cluster 2 &amp; 3</td>
</tr>
<tr>
<td>Importance of product design and packaging when deciding on a top-up product</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 3</td>
</tr>
<tr>
<td>Importance of promotions when deciding on a top-up product</td>
<td>0.000</td>
<td>Cluster 1 &gt; Cluster 2 &amp; 3</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product top-up shop, component 1 product heritage</td>
<td>0.000</td>
<td>Cluster 1 &gt; Cluster 3</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product top-up shop, component 2 Advertising and communications</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 3</td>
</tr>
<tr>
<td>Factor analysis, composite variable, product top-up shop, component 3 Animal and human rights</td>
<td>0.000</td>
<td>Cluster 1 &gt; Cluster 3</td>
</tr>
<tr>
<td>Intention to purchase an E&amp;SR product the next time you go for a main shop</td>
<td>0.000</td>
<td>Cluster 2 &gt; Cluster 3</td>
</tr>
</tbody>
</table>
is of least concern to this customer type; however it still scores above average with a final cluster centre of 4.592.

Consumers of this type were found in all ACORN categories, with half in the ABC classifications and half in the DEF categories. However the largest group of consumers overall was found in the A - Thriving ACORN classification (33.7%). 24.5% of these were classed as being in the highest Acorn group, Group 1 – Wealthy Achievers, Suburban areas. In respect of gender this cluster consists of 75.5% females and 24.5% males. All age ranges are represented in this cluster, with slightly more being under 45 years (59.2%) than over (40.8%). The majority of consumer households in this cluster have 2 adults (66.3%), although 18.4% have one adult, 9.2% three adults, 5.1% four adults and 1% five adults. 40.8% of households have no children, 21.4% no dependent children, and of the 37.8% that do have children, 16.4% had one child, 15.3% two children, and 6.1% three children. The ages of children in the household is spread over the 0-19 year range, with 21.9% being below 11 years, and 15.8% aged 12-19 years. The chief income earner in the household is fairly evenly split between being the respondent (49%) and their partner or spouse (45.9%). 67.3% of chief income earners are in full-time employment, whereas of those respondents who are not the chief income earners, 11.2% are in full-time employment, 20.4% in part-time work and 4.1% retired. The tenure of this group’s property displays higher figures for ownership by mortgage (44.9%) than outright ownership (27.6%) or private rental (22.4%). Car ownership is high in this cluster with 47% having one car in the household, and 36.8% having two. Only 9.1% do not own a car and 7.1% own 3+ vehicles.
**Cluster 2 - Ethical, advocate, A & H concerned shoppers**

Consumers in this type, as with Cluster 1, rate product quality as their top priority when purchasing a product during a top-up shop. This is scored only marginally above all aspects of E&SR. In respect of E&SR factors this group is most concerned about advertising and communications then animal and human rights (the opposite to Cluster 1) and then product heritage. Price is ranked below all of the aforementioned factors. The least concern is shown for 'product design and packaging' (as with Cluster 1) and promotions. This cluster differentiates between these factors well, but no one factor scores either extremely highly (above 6.000) or extremely lowly (less than 2.000).

Consumers of this type tend to run in an arc across the age ranges, peaking in the 45-54 years age bracket, and having a greater number of respondents in the 45 years + age range (61.1%). There is a higher proportion of females in this group (73.3%) than males (26.6%), the closest to the sample population of the three clusters (sample: female = 70.5%, male = 29.5%). This consumer type is spread across all ACORN classifications, but with considerably higher numbers found in the D – Settling category (28.9%), the A – Thriving category (25.6%) and the E – Aspiring category (22.2%).

Most households in this cluster contain 2 adults (69%), although equal numbers of 12.2% are single adult households and three adult households. Four and six adult households account for 3.3% each. This cluster displays similar large percentages of consumers with either no children (35.6%) or no dependent children (34.5%). Households with dependent children are split over a full range of sizes - one child (11.1%), two children (7.8%), three children (6.6%), four children (3.3%) and five children (1.1%). Children within this cluster range across the board from 0-19 years, but with a lower proportion falling into the 0-11 years age bracket (12.7%) than 12-19 year olds (17.2%). A higher proportion of respondents stated that they were the chief
income earner in the household (53.3\%) than stated it was their partner or spouse (42.2\%). Of these chief income earners, 65.6\% are in full-time employment and only 5.6\% in part-time work, whilst 17.8\% are retired. The number of respondents who have a mortgage on their house (44.4\%) is slightly lower than that of Cluster 1, however a higher number own their home outright (35.5\%). 51.1\% of respondents have one car and 32.2\% two cars, similar to Cluster 1. However in contrast to Cluster 1, there is a lower number of households owning 3+ cars (4.4\%) and a higher number of households who do not own a car at all (12.2\%).

**Cluster 3 – Ethical, conservative, A & H concerned shoppers**

This type of consumer scores very low on all aspects in comparison to Clusters 1 and 2. The most concern is shown for the E&SR factor of ‘advertising and communications’, but, with a final cluster centre of 4.069, it is the only factor scored above the average of 4.000 for this group: meaning this consumer is quite conservative in expression. Product quality and price are important to this type of consumer, being ranked next highest. The other E&SR concerns followed with ‘animal and human rights’ taking precedence over ‘product heritage’. The lowest scoring factor for this cluster is that of ‘pack size’, but it is very closely scored to product range, product design and packaging, and promotions.

Consumers in this type tend to fall into the younger age ranges, with 71.9\% being under the age of 45 years. No respondents in this group are over the age of 64 years. This cluster is very different in its gender split as it contains more males (53.1\%) than females (46.9\%) – the opposite of the other two clusters. 68.8\% of households contain two adults; whereas 18.8\% contain only one adult, and 6.2\% contain three adults, the same as contain four adults. A large percentage of this cluster was found to have no
children (46.9%), whereas only 9.4% have no dependent children. Two children is the most common size of family (21.9%), with 15.6% having one child and 6.3% having three children. For the 43.7% of households that do have children, 29.7% are aged 0-11 years and 14% 16-19 years. The largest group of this type of consumer is found in the A – Thriving ACORN classification (37.5%). However overall more consumers are found in the D, E and F categories (62.5%). A higher proportion of respondents are chief income earners in this cluster (62.5%) than in the other two clusters. 75% of these chief income earners are in full-time work, 15.6% in part-time work, and none retired, unlike the other two clusters. In respect of tenure a much larger proportion of respondents have a mortgage (53.1%) than owns their home outright (15.6%) or are privately renting (18.8%). This cluster has the largest number of consumers living in local authority housing (12.5%). It also has the largest number of the consumers with one car in the household (65.6%). 25% have two cars and 9.4% no cars. No respondent has three or more cars.

9.5. Summary

The use of cluster analysis in this chapter has resulted in a number of highly interpretable clusters, determining that shoppers are not a homogenous group, and furthermore that within a particular group of shoppers (E&SR consumers) specific segments can be identified as having different motivations driving their behaviour. It has identified that consumers can be classified into different groups based on the varying levels of importance of the shopping offer, and E&SR issues to them, which influence their shopping choice decisions in four different situations. Cluster analysis has also established differences in the importance of certain factors, which in turn can be related to the demographic characteristics displayed by each of the consumer types.
Analysis of the store main shop model revealed six distinct clusters, identified as: Ethical, conservative, globally concerned shoppers; Traditional extremist, locally concerned shoppers - Drivers; Traditional extremist, globally concerned shoppers - Non drivers; Ethical, advocate, locally concerned shoppers - Drivers; Ethical, advocate, globally concerned shoppers - Non-drivers; and, Traditional, indifferent, globally concerned shoppers.

With regard to the store top-up shop model three distinct clusters were identified: Ethical, conservative, shoppers; Traditional, extremist shoppers; and, Ethical, advocate, shoppers.

Five distinct clusters were identified from the product main shop model: Ethical, advocate, A & H concerned shoppers; Traditional, extremist, A & C concerned shoppers; Ethical, advocate, A & C concerned shoppers; Ethical, indifferent, A & C concerned shoppers; and, Ethical, conservative, A & H concerned shoppers.

The product top-up shop model revealed three distinct cluster types, identified as: Traditional, extremist, A & C concerned shoppers; Ethical, advocate, A & H concerned shoppers; and, Ethical, conservative, A & H concerned shoppers.

This study has developed a taxonomy that describes the market segments relative to each shopping activity, based upon the principles of Jarratt (1996) by looking at the areas of store, product or E&SR that are of influential importance to shopping choice decisions. Analysis of the data indicates that the different components of both store and product offerings and E&SR issues are considered separately by consumers in their shopping choice decisions, so supporting the findings of Jarratt that the separation of
elements aids understanding. The results of this analysis confirm the basic validity of
the proposed model of E&SR grocery shopping behaviour (see Section 4.9) as an
appropriate basis for market segmentation of the E&SR shopper population. It allows
the determination of each market segment, and distinguishes the motivations and
influences behind the shopping activity for each.
10.1. Introduction

The previous chapters have outlined the theoretical and empirical background to this study, and discussed both qualitative and quantitative findings. This final chapter begins by summarising each stage of the research, then evaluating its outcomes in terms of the research questions raised, before a discussion of the main findings is given. Implications associated with the research are then presented with regard to theory, management, government policy and ethical organisations. Finally limitations of the current study and directions for possible future research are identified.

10.2. Summary of Findings

10.2.1. Previous Research

The literature to date has postulated a number of ways in which consumers make decisions, with the empirical work undertaken identifying a variety of factors that may influence store patronage and product purchase and lead to E&SR behaviour.

Shopping motivations and needs have been shown to influence consumers’ shopping behaviour, with shopping choice decisions being based on their attitude to the tangible and intangible elements of store image and product attributes. Motivations may vary according to the type of shop (main shop, top-up shop, multi-store, single store) or product (branded, own-label) in question (de Chernatony & Dall’Olmo Riley, 1998), with perceived risk (Mason & Mayer, 1972; Dash et al, 1976b), loyalty (Osman, 1993) and satisfaction of needs (Hutcheson & Moutinho, 1988) having an impact here. Specifically, there is a requirement to recognise that the shopping activity itself may
satisfy more than one need at a time, some not related to the purchase of goods (Foxall & Goldsmith, 1994). Furthermore, within the context of grocery shopping, recognition of the changing nature of the retail structure that can affect shopping choices is required: increasing retailer power (especially supermarkets), own-label brands; as well as changing consumer demand and behaviour: convenience, snacking, return to top-up shopping (Keynote, 2003b).

An understanding of the process by which attitudes are formed and patronage/purchase decisions made is an important goal for retailers to try and achieve in order for them to develop a favourable image for their offering which will appeal to their target market. The way attitudes are formed has been related to several theories and models: learning; expectancy-value; functional approach; and, the cognition-affect-conation paradigm. The cognition-affect-conation paradigm has become universally accepted over time, with models such as the Theory of Reasoned Action (Fishbein & Ajzen, 1975) and the Theory of Planned Behaviour (Schifter & Ajzen, 1985; Ajzen, 1991) coming to the fore. However models that have looked at attitudes and E&SR behaviour have, like much of the past research, focused only on one area e.g. the environment (Hines et al, 1986; Amyx et al, 1994), both of which are based on the TRA/TPB. Despite a lengthy and reputable heritage to support the use of the TPB, its relevance to the E&SR consumer has been questioned; such that additional measures of ethical obligation and self-identity have been incorporated (Kurland, 1995; Sparks et al, 1995; Shaw et al, 2000). This extended TPB model provides some commonly agreed foundations on which a greater understanding of E&SR behaviour can perhaps be built.

Attitudes may be formed, acquired or modified through influences arising from four main sources: information exposure, group membership, environment, and want
satisfaction (Chisnall, 1995). There is general academic agreement that information plays an important part in the formation of attitudes and the interpretation and impact of this information, especially in relation to E&SR issues, depends on the message and who sent it (Crane & Ennew, 1995). Many retail organisations do not recognise this fact despite author's such as Kapherer (1992) stating that an essential dimension of the brand's identity is being able to communicate effectively to the target audience what the brand represents; and this neglect is particularly noticeable when talking to E&SR consumers, who state they have difficulty finding relevant information to guide their decisions. The formation of attitudes is linked to motivation and hence behaviour, with information being an important link in informing a consumer of how closely their own values and beliefs are reflected in the store/product (Knox et al., 1994), so motivating them to behave in a given manner: the more favourable an attitude towards an object i.e. store or product, the more likely a positive behaviour will be performed i.e. patronage, purchase. Actual behaviour was found to be influenced by past and present information sources which results in both 'established concerns' and current concerns' (Shaw & Clarke, 1999), elements of which are drawn on in E&SR decision-making. Furthermore grocery shopping decisions are influenced by the perceived risk associated with the behaviour in question (Mason & Mayer, 1972; Dash et al., 1976a; Korgaonkar, 1982). Taking prior literature into account this suggests that providing and communicating unambiguous E&SR information about a product/store will aid decision-making as risk perceptions are lessened as knowledge is increased, so making E&SR purchases easier for consumers.

As such E&SR consumers have been identified as being more complex than simple socio-economic and demographic variables can display, which may explain some of the historical discrepancies between studies. Suggestions have been made that the different
and inconsistent scales used in the past need to be harnessed into a rational measure for
the pursuit of effective assessment (Roberts, 1996). Past research has defined many
different types of consumer concerned with one or more E&SR issue (green, ethical,
socially responsible, environmentally concerned) so the need for an all encompassing
term was required: the ethical and socially responsible consumer (E&SR consumer),
defined as ‘a consumer who takes into account the public consequences of his or her
private consumption or who attempts to use his or her purchasing power to bring about
social change, and feels a moral obligation to improve the welfare of consumers,
communities, and the wider environment’. Furthermore the focus of these studies was
on a single concern: recycling (Hopper & Nielsen, 1991), pollution (Cordano & Hanson
Frieze, 2000); or one product category: nappies (Follows & Jobber, 2000), cosmetics
(Prothero, 1996), so limiting the generalisability of results. The E&SR consumer has
been characterised in past studies as being younger, well-educated, middle to upper
class (Kinnear et al, 1974; Arbuthnot, 1977) and predominantly female (Balderjahn,
1988; Minton & Rose, 1997), although there are also studies that suggest these findings
are not absolute (Reizenstein et al, 1973; Prothero, 1990; Roberts, 1996).

At first, academic research focused on traditional classifications of consumers
(demographic, geographic) in order to try and identify segments of consumers
(Anderson & Cunningham, 1972; Webster, 1975). The problem of this is that these
measures are ineffective in explaining behaviour on their own. The use of
psychographics such as attitude, values and lifestyle has increased, helping retail
strategists gain greater insight into consumer behaviour. An alternative approach to
market segmentation is the use of shopper typologies based on shopping orientations
(Tauber, 1972; Westbrook & Black, 1985; Jarrat, 1986). This is seen as valuable in that
it relates directly to retail choice activity, and in the context of E&SR shopping
categorising shoppers by their different motives alongside the recognition of influential store/product choice criteria should gain greater insight into the personal and social motives (Tauber, 1972) of E&SR shopping behaviours.

10.2.2. Qualitative Findings

The original research in this thesis aimed to investigate the nature of E&SR grocery shopping behaviour and the role that influential shopping choice criteria play in the decision-making process. Initial investigations were carried out through the use of seven focus group interviews with main shoppers in the household, filtered for some knowledge of E&SR issues. In light of the limitations aforementioned, this stage was seen as exploratory in order to elicit areas of influence on shopping choice and shopping behaviours.

This work supports and extends the findings of Foxall & Goldsmith (1994) by distinguishing that grocery shopping is a multi-dimensional activity, with results suggesting it can be seen as a 2x2 matrix of shopping situations (Figure 6.1). Furthermore this research upholds their conclusions that different shopping activities involve different shopping choices for the respondent, so denoting the aspects of need and motivation relating to them varies, and advocates de Chernatony & Dall’Olmo Riley’s (1998) work that these may differ across product fields and consumer segments.

Analysis of the qualitative data identifies that the factors of store image that influence grocery shopping can be classified into a typology of eleven specific sets. Additionally the E&SR factors mentioned by respondents can be classified into a typology of seven specific sets. These may be further refined into three broad groups: food quality and safety; human rights and ethical trading; and environmental issues. Much of what was
discussed related store image factors to the shopping consideration of what store to visit, and E&SR issues to which product to buy, although this was not absolute.

Information sources and knowledge of issues were found to be key aspects in influencing consumer’s behaviour, so supporting the work of Shaw & Clarke (1999) who found it essential to making informed conscious decisions, especially when received from independent companies. Dissatisfaction was found with the current standards and comprehension of labelling which was closely linked to a distrust of large companies. E&SR corporate behaviour of companies was therefore considered important to consumers and influenced many to shop at stores such as the Co-op (due to their policies on issues such as Fair Trade) and support local stores rather than multinationals, so upholding the work of Creyer & Ross (1997).

Associations were seen between E&SR issues and types of shopper; in addition to gender, age and social group the geographical location (urban/rural) of customers is a variable, which affects the degree of sensitivity to specific E&SR factors. These emerging differences in sensitivity to particular issues across the breadth of characteristics and behaviours of E&SR consumers suggest that further segmentation/typologies of the E&SR consumer are possible.

10.2.3. Quantitative Findings

A face-to-face questionnaire-based survey was utilised to investigate the areas emerging from the previous literature and qualitative findings relating to influences on shopping choice decisions, E&SR attitudes and shopping behaviour. It was conducted among shoppers with some knowledge of E&SR factors (assessed through a filter questionnaire) in the South West of England. E&SR variables were measured in terms
of importance and later reduced by means of factor analysis. This procedure found that E&SR concerns can be split into different groups for store shopping decisions – global and local; and product shopping decisions – product heritage, animal and human rights, and advertising and communications. Multiple regression was then used to investigate the effect of both E&SR concerns and store image factors in the four shopping situations identified in the qualitative stage. Findings support Foxall & Goldsmith’s (1994) theory that the importance of influential choice factors differs depending on the shopping situation. The four shopping situation models were found to be generalisable and transferable through the use of split sampling.

To investigate the determinants of behaviour, the Extended TPB model was incorporated into the questionnaire following the guidelines of Ajzen (2002). Findings from correlations and multiple regression analysis suggest that E&SR behaviour cannot be attributed to one factor in isolation, but rather to a number of factors acting in combination. In the store models the constructs of attitude and PBC were found to give most explanation, whereas in the product models it was attitude and ethical obligation, although PBC still played an important role. Self Identity was not found to be as important as the aforementioned constructs, contrary to the findings of Sparks & Shepherd (1992).

Cluster analysis was utilised to investigate whether E&SR shoppers were a homogenous group. Results support the work of Jarratt (1996) and extend it further by relating it to E&SR shopper types. So separating elements of the retail environment and suggesting that specific E&SR consumer segments can be identified as having different motivations driving their behaviour, based on the varying levels of importance of the shopping offer and E&SR issues, which influence shopping choice decisions in four
different situations. These differences can also be related to the shopper characteristics displayed by each of the clusters.

10.3. Research Outcomes

Prior to discussing the extent to which this study has attained its objective of gaining further understanding of the role of E&SR issues in consumer’s grocery shopping choice decisions, a review of the research questions, initially developed as propositions during the literature review, will be given.

10.3.1. Factors of Influence in Grocery Shopping Decisions and Behaviour

RQ1: What factors including ethical and social responsibility issues influence consumers’ grocery shopping choice decisions and behaviour?

The literature review indicated several factors of concern to consumers relating to both store image and E&SR issues. Given the time that had elapsed since certain studies (Kunkel & Berry, 1968; Lindquist, 1974) and the narrow focus of others, it was considered that limitations could be brought to the research if further explorations of these areas were not undertaken. Qualitative data analysis through the use of content analysis identified a typology of eleven specific sets of store image factors (convenience of location, convenience of accessibility, quality of merchandise, assortment of merchandise, price of merchandise, promotions, store atmosphere, sales personnel, convenience of other facilities, convenience of other services, reputation on adjustments), comprising of forty-seven sub-components (Table 6.1.). Additionally a typology of seven specific sets of E&SR issues (food, drink & product safety, advertising, animal welfare, honest labelling, ethical trading, human rights, the environment) were established, comprising of fifty-two sub-components (Table 6.2.).
RQ2: How important are ethical and social responsibility factors compared to other traditional store image/product attribute aspects in grocery shopping choice decisions?

The qualitative research identified a 2x2 matrix comprising of two shopping occasions (main and top-up) and two shopping considerations (store and product), such that four shopping situations arise: store main shop, store top-up shop, product main shop, product top-up shop (Figure 6.1). Content analysis suggested that the factors most influential in shopping choice decisions may vary depending on the shopping activity undertaken. Quantitative data analysis in the form of multiple regression analysis confirmed this was the case and established the following factors of greatest importance:

<table>
<thead>
<tr>
<th>Model</th>
<th>Important Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store main shop model</td>
<td>availability of customer facilities; global E&amp;SR issues; local E&amp;SR issues</td>
</tr>
<tr>
<td>Store top-up shop model</td>
<td>factors of E&amp;SR; customer facilities; and, promotions</td>
</tr>
<tr>
<td>Product main shop model</td>
<td>product heritage; animal and human rights; product quality; promotions</td>
</tr>
<tr>
<td>Product top-up shop model</td>
<td>product heritage; promotions; and, product quality</td>
</tr>
</tbody>
</table>

These are upheld by the findings of the focus group grids, which established top store image components that included: quality of merchandise, freshness of produce (product quality); special offers, low prices (promotions); and top E&SR concerns to include: animal testing, live exports (animal and human rights); recyclable products, organically produced products (product heritage); pollution, sustainable forests (global issues); and selling local and British produce, supporting the local economy (local issues). The only
difference between the qualitative and quantitative data analysis' findings is the lack of evidence to support customer facilities as a major concern in the focus group results.

10.3.2. Attitudes and Grocery Shopping Decisions

RQ3: How do attitudes to ethics and social responsibility issues influence grocery shopping behaviour?

Evidence was found to suggest that E&SR behaviour cannot be attributed to one factor in isolation, but rather to a number of factors acting in combination. The greatest influence on behavioural intention in the two store models were attitude and PBC. There was also a strong correlation between self-identity and intention, especially in the store main shop model. In the product models the greatest influence came from attitude and ethical obligation, although PBC still played an important part, especially in the store top-up model. Strong correlations were also shown between self-identity and intention. Subjective norm demonstrated the least influence on intention in all four situations.

10.3.3. Types of E&SR Consumer within the context of Grocery Shopping

RQ4: Are there different buyer types within the sector of E&SR consumers which may be differentiated and segmented by their concerns?

The use of cluster analysis on the quantitative data revealed that there are a number of highly interpretable clusters within the main body of E&SR consumers, each having different motivations driving their behaviour. Again these clusters differed depending on which of the four the shopping situations were being studied.
The situation of store main shop identified six distinct clusters (ethical, conservative, globally concerned shoppers; traditional, extremist, locally concerned shoppers; traditional, extremist, globally concerned shoppers; ethical, advocate, locally concerned shoppers; ethical, advocate, globally concerned shoppers; and traditional, indifferent, globally concerned shoppers), whilst three clusters were revealed relating to the store top-up shop situation (ethical, conservative shoppers; traditional, extremist shoppers; and, ethical, advocate shoppers).

Five distinct clusters were identified from the product main shop situation (ethical, advocate, A&H concerned shoppers; traditional, extremist, A&C concerned shoppers; ethical, advocate, A&C concerned shoppers; ethical, indifferent, A&C concerned shoppers; and ethical, conservative, A&H concerned shoppers), whereas the product top-up shop situation revealed three distinct cluster types (traditional, extremist, A&C concerned shoppers; ethical, advocate, A&H concerned shoppers; and, ethical, conservative, A&H concerned shoppers).

These findings show that these are different buyer types within the broader segment of E&SR consumers. Each cluster has distinct shopping motivations that are pertinent to the shopping occasion and consideration in question. This highlights the need for retailers to recognise the market they are catering for and adapt their strategies accordingly.

10.4. Discussion of Findings

As previously stated the initial objective of this study was to gain further understanding of the role of E&SR issues in consumer's grocery shopping choice decisions and behaviour. To do this the study had to link to many other areas of academic research in
order to set the field of study in context and account for the internal and external influences on consumer decision-making. Understanding the relationship between motives and specific behaviour (E&SR behaviour) was found to be central to this study and will be linked throughout the following discussion.

Theories of motivation applied to consumer behaviour have suggested that a single product can only satisfy a single need, however Foxall & Goldsmith (1994) acknowledge that actually a single purchase may satisfy many needs or wants more or less at the same time and so proposed it was a multi-dimensional activity. The results of the qualitative exploration in this study confirm this proposition and extend it in relation to grocery shopping by finding four shopping situations that may be viewed as a 2x2 matrix (Figure 6.1). Each of these different shopping activities involve different shopping choices for the respondent, so denoting the aspects of need and motivation relating to them vary, upholding the work of Tauber (1972) and Morris (1987).

Exploring the concerns that contribute to E&SR grocery shopping choice requires consideration of the areas of store image and product attributes along with E&SR concerns. Fundamental to this is the concept of branding and the need to comprehend the importance of brand identity in building consumers' perceptions of the retailers offering and reducing perceived risk. The concept of the Double Vortex Brand Model (de Chernatony & Dall’Olmo Riley, 1998) that recognises each of a brand’s elements are not equal in importance but may alter between product categories and consumer segments, is supported by this study. Results show that elements that make up the 'brand' (store image components, product attributes, E&SR factors) differ by E&SR consumer type depending on the shopping occasion (main shop, top-up shop) and shopping consideration (store patronage, product purchase), and confirms Hirschman et
al's conclusions that a retailer should determine what the major dimensions are within each market the store (or product) is operating.

Elements of store image and E&SR were elicited via qualitative focus group discussions. One may generalise from the findings that influences on shopping motivations and behaviour are found in varying degrees among the factors listed in Table 6.1 (store image factors) and Table 6.2 (E&SR factors), with further analysis of the evidence suggesting that these vary according to the shopping occasion and shopping consideration in question. With regard to the store image components, the typology not only updates the work of Zimmer & Golden (1988) by recognising that not all of the factors mentioned in the original study are applicable to today's shopper, but also makes it relevant to the UK retail environment. The factors of store image mentioned as most influential in shopping choices by the qualitative sample were convenience of location, layout of the store and ease of use, quality and assortment of merchandise, and price, fundamentally supporting the findings of Lindquist (1974) and Keynote (2003b). These results are confirmed by the quantitative analysis of important issues, with one exception: 'customer facilities' is ranked highly in store models in the survey but not supported by the focus group results. The relationship between quality and price (Dodds et al., 1991) is realised, with many respondents stating that value is key, so confirming the work of Hutcheson & Moutinho (1998).

The proposed typology of E&SR grocery shopping factors (Table 6.2) forms a unique contribution to knowledge in the field of E&SR consumer research, as no previous classification (or scale) of this nature has been compiled. In respect of the E&SR issues it contains, evidence suggests that 'close to home' issues, such as buying local products and supporting local businesses, are of greater concern to E&SR consumers than wider
global concerns. Additionally it appears that the provenance of foodstuffs is more important than ethical pedigree of other products (i.e. food safety is more important than the availability of recycling/environmentally friendly products). Although many respondents indicated that price is an important consideration, a number stated that they were willing to pay more for E&SR products (supported by 73.6% of the quantitative filter questionnaire), which upholds the findings of Mintel's 1989 survey (in Prothero, 1990), especially in the product areas of toiletries and fresh produce.

In terms of how these factors influence shopping behaviour it is clear that conventional store image criteria such as convenience, price and range tend to predominate decision-making, even amongst this selected population of respondents, and this relates to both store and product choice. There is undoubtedly dissonance suffered by E&SR customers due to a lack of behavioural control, which revolves around trading-off certain store image elements (convenience in particular), against the retail brand's ethical and socially responsible positioning. Similarly decisions about product choice often involve trade-offs between price and food quality/safety. The lack of information readily available to aid decision-making, particularly regarding food safety and honest labelling issues, is perceived as unhelpful in alleviating concerns, a fact regarded as extremely important especially by shoppers with young families.

The study of behaviour within this research project finds that the TPB has a major advantage over the TRA in explaining E&SR grocery shopping intentions, and similarly the Extended TPB has superiority over the TPB in product decisions. This provides further evidence for the predictive effects of measures of PBC (Schelel et al, 1990; van Rym & Vinokur, 1990) in applications of the TPB, and ethical obligation (Randall & Gibson, 1991; Kurland, 1995) when examining these constructs in applications of the
TPB that involve E&SR consumers. Shaw et al's (2000) statement that the standard TPB is deficient in that it only focuses on self-interested motives and is therefore less relevant to E&SR consumers who are not solely motivated by self interest but also the needs of others and moral considerations, finds support from this study.

Multiple regression analysis broadens the work of Shaw et al (2000) by addressing different E&SR shopping situations. The current study not only takes into account the four different shopping situations generated from the qualitative findings but ensures it is grounded in an overall measure of E&SR behaviour, so overcoming the shortfalls of only being applicable to one product category, or one area of concern. Compared with previous studies in a similar context (e.g. Shaw et al, 2000 with an adjusted $R^2$ of 24% for the Extended TPB) all models in this research would appear to provide stronger predictive capability of behavioural intentions (adjusted $R^2$: 55% store main shop; 48% store top-up shop; 45% product main shop; 37% product top-up shop). When looking at the Extended TPB model the results of this study are consistent with the findings of previous research (Granberg & Holmberg, 1990; Kurland, 1995; Ratts et al, 1995; Shaw et al, 2000) in so far as ethical obligation is an important factor in product choice, but contrary to findings on self-identity (Sparks and Shepherd, 1992; Sparks and Guthrie, 1998). The combination of the effects of the regression results is potentially confounding, but the lack of multicollinearity suggests that the independent effects represent a true reflection of the measured variables' influence on shopping intentions. It would appear therefore that when faced with an ethical and socially responsible shopping decision, individuals' perceptions of the amount of control that they can effect over their decision making, and the extent to which they feel they have an ethical or moral obligation to consider E&SR issues when making grocery shopping decisions, are the key factors that encapsulate differences in decision making, particularly when
making choices between product alternatives. It is possible therefore that the wide range of E&SR issues that are included in the analysis through the identified salient beliefs are captured in the attitude and ethical obligation effects rather than those associated with self-identity (which is reflected in high values of the relevant correlation coefficients).

Similarly the subjective norms effects are not significant, and indeed negative in each of the developed models. Previous research has also shown similar results, finding this variable to be non-significant (Randall & Gibson, 1991; Kurland, 1995) and in some instances of a low negative value (Beck and Ajzen, 1991). A suggestion for the low explanatory effect of the subjective norm is given by Vallerland et al, (1992) who state that it may be due to it being concerned with a more remote concept i.e. what important others think. This notion, which may be particularly relevant to this behavioural context, is consistent with the findings of Shaw and Clarke (1999) who identify that individuals often feel isolated in their ethical concerns. Yet it is conceivable that shoppers who perceive that they are empowered through knowledge to make ethical and socially responsible decisions, do not feel the need to take account of ‘influential others’ and that this is internalised into their ethical obligation. This proposal finds support from the qualitative findings which suggest that the more information people have about organisations the more likely they are to act on it e.g. purchase, boycott, and confirms the conclusions of King (1991) who found that many consumers have become more confident in their purchase decisions and less tolerant of products and services that do not contribute to their own values.

Stone (1954) was the first author to identify the ‘ethically motivated’ shopper type, which has subsequently been evidenced by others (Balderjahn, 1988; Schwepker &
Cornwell, 1991; Roberts, 1996). This study extends this research by identifying that E&SR consumers are not a homogenous group but can be further segmented according to their concerns. The approach taken splits the shopping environment into three areas (store image, product attributes and E&SR issues) based on Jarratt's findings that consumer consider the components of the total shopping offer separately – so extending her approach to be applicable to E&SR shopping motivations.

Evidence suggests that the characteristics of the E&SR consumer can no longer be so narrowly defined as 'younger, well-educated, middle to upper class (Kinnear et al., 1974; Arbuthnot, 1977) and predominantly female (Balderjahn, 1988; Minton & Rose, 1997). Demographic characteristics from both qualitative and quantitative results found both genders and a wide range of ages and social classes to be concerned with certain aspects of E&SR, so supporting McGoldrick's (1990) statement that segmentation based solely on these variables is difficult when lifestyle trends cut across traditional classifications. Combining traditional characteristics with psychographic and behavioural measures is needed to comprehend the profile of the E&SR consumer.

With respect to differences in the characteristics of shoppers some interesting results emerge from the qualitative stage which suggest that in addition to age, gender and social group the geographical location (urban/rural) of customers is a variable which affects the degree of sensitivity to specific E&SR factors. More E&SR concerns were elicited from urban dwellers than rural ones, so indicating support for the work of Schwepker & Cornwell (1991) and Lowe & Pinhey (1982), whilst being contrary to that of Prothero (1990). The presence of young children in the household also appears to increase concern for E&SR issues and supports the notion that life-stage has a significant effect on E&SR behaviour (Peattie, 1995).
The E&SR shopper typologies developed through the use of cluster analysis determines that different levels of attribute importance can be related to each of the shopper types identified for both store and product choices. Focusing on more than one area of concern takes into account Newholm's (2005, p.108) recommendation 'that specific consumer practices should not be seen in isolation'. Acknowledgement of these consumer profiles will enable retailers to implement more focused segmentation strategies through greater insight into consumer motivation, such that satisfaction and brand loyalty may be achieved.

10.5. Theoretical Implications

By integrating consumer behaviour and decision-making approaches, this study has provided an additional dimension to E&SR research in that it provides an understanding of the influences on E&SR shopping behaviour in terms of beliefs, attitudes and perceptions, and how these interact with different shopping choice decisions. Initially it has expanded knowledge in this area by establishing that there are two different shopping occasions (main shop, top-up shop) and two different shopping considerations (store patronage, product purchase) for which consumers have different needs and motivations. Each of these shopping situations can be explained by the model depicted in Figure 10.1.
Stage 1 identifies the influential store choice criteria that come from the determinants of store/product image and E&SR. These will vary depending on the shopping situation being studied, but will be based upon items found in the two typologies this study has produced from its qualitative research: 1) a typology of store image components, which includes many of the elements suggested in past research (Kunkel & Berry, 1968; Lindquist, 1974; Zimmer & Golden, 1988), but also several new 'updated' ones (e.g. loyalty cards); and 2) a typology of E&SR issues to encompass all areas of concern.
elicited from the past research and current investigation, the like of which has not previously been compiled.

Stage 2 accounts for the decision-making process and behavioural intention. This study recognises the improved predictability of the Extended TPB through the additional measures of ethical obligation and self-identity. Each of the elements may be calculated using indirect measures relevant to the shopping situation. However an indirect measure of PBC is recommended as this was found to be a stronger predictor of behaviour, supporting the findings of Notani (1998).

Stage 3 takes account of the information gained on shopping choice factors and behaviour and uses it to identify customer types according to their concerns (attitude) and characteristics. Recognition of these different qualities then enables the segmentation of the E&SR market, reflective of the shopping situation under study.

This model takes into account both store image components and E&SR issues, so giving a clearer vision of the concerns of consumer segments during different shopping activities, and should prove useful to retailers, manufacturers, academics and ethical organisations alike: retailers and ethical organisations will be able to establish the concerns of their market, so helping them to communicate effectively with their target audience; it will aid retailers in identifying the influential factors associated with the type of shopping activity undertaken at their store (main shop, top-up shop), so helping them to refine those areas of their offering that appeal to their market; it will provide retailers and manufacturers with information as to the importance of different product attributes so aiding decision making in their research and the development of new products; it will facilitate retailers, manufacturers and ethical organisation in developing
a clear brand position; and it will assist academics in understanding influences on shopping behaviour among different E&SR customer segments. A key finding of the research is that information is vital to aid consumers in making informed grocery shopping decisions, and this model will help highlight those factors of importance to different target markets so organisations can increase communications in these areas and make E&SR shopping easier for their customers.

A particular aspect of this study that has progressed the field of E&SR research is the development of the E&SR shopping behaviour scale. This will permit more consistent results to be obtained in future research as the measures and concepts utilised will be consistent, so enabling comparisons between studies.

10.6. Management Implications

When considering the implications for retail managers of these findings it is important to recognize that there is considerable variability in the extent of influence of E&SR factors on shoppers' choice decisions both between store and product, but in general it emerged that established store image factors remain dominant in these decisions and these need to be appropriately addressed. That said, there are clearly opportunities to focus on particular aspects of the retail offer which may assist E&SR customers in their decision-making and in overcoming dissonance, as well as communicating relevant messages about the ways to achieve this.

Brand positioning for both stores and products is key, implemented through a clearly defined brand identity which consumers can see as representing their core values. Enabling this will help consumers to reduce the levels of perceived risk associated with E&SR purchases. Furthermore if a brand satisfies a consumer on both the tangible and
intangible elements brand loyalty is likely to be displayed, so giving the organisation a competitive advantage in a crowded marketplace.

Retail strategy should recognise that the emerging differences in sensitivity to particular issues across the breadth of the characteristics and behaviours of E&SR consumers identified may permit segmentation opportunities for targeting with specific products or retail formats. Nevertheless, traditional store/product are considered by this segment of consumers in addition to E&SR aspects, so management needs to recognise that important retail environment cues (merchandise quality, assortment, availability, cleanliness, sales personnel) are essential to encouraging store patronage alongside E&SR considerations (transparency, traceability). Additionally retailers should look at ways of minimising consumer dissonance of having to ‘trade-off’ certain aspects of the retail offering against their E&SR values, rather than solely focusing on factors that will increase satisfaction, and look at fundamental ways in which they can make E&SR purchases ‘easy’ for consumers.

With regard to the marketing mix product policies must represent the target markets needs which include providing appropriate choice alternatives that are readily available and fairly priced. Honest labelling, overpackaging, understandable use of language and recyclable components are some of the main attributes organisations need to encompass into their product ranges in order to appeal to their customers’ concerns. Ranges should include locally sourced produce wherever possible, the heritage of which needs to be communicated to the consumer. There are obvious possibilities here for own-label ranges to adapt to cater for such a market. Price has to be seen as being fair – not necessarily low - in relation to quality so that value is perceived. Additionally retail price should be seen as having a realistic profit margin, with a fair price going to
suppliers and workers. Communication strategies should focus on engaging with shoppers with respect to their wide-ranging beliefs about E&SR shopping and the control they have over decision-making so helping make purchasing choices easy. For product decisions, retailers’ and manufacturers’ strategies should focus on the message (communicated through media and packaging) that shoppers have the opportunity to ‘make a difference’ and make a specific positive ethical/moral contribution by shopping for products that offer an advantage in this respect. This together with clearer labelling and PR information on specific issues should aid and ‘speed-up’ shopping decisions.

Distribution strategy needs to identify the type of market the organisation is operating in so that the differences found in shopping occasion and shopping consideration may be taken into account, so enabling the appropriate placement of product ranges.

10.7. Implications for Government Policy

This study has identified a few key findings that may be of interest to public policymakers in the areas of planning, product development, labelling, health, education and advertising/promotions.

Firstly there are implications for the Department of Trade and Industry, local councils and government planning departments regarding the proposed developments of out-of-town shopping centres. With the changing habits of shoppers heralding a return to top-up shopping, as identified by Keynote (2003b), and the weight of opinion of E&SR shoppers that they prefer to ‘shop and buy local’, questions whether further development of large out-of-town supermarkets are warranted. The research suggests the redevelopment of in-town sites would benefit shoppers and communities alike, as well as regenerating central urban areas.
Secondly there are implications for the Department for Environment, Food and Rural Affairs (DEFRA), the Department of Trade and Industry and Trading Standards regarding the legislation covering the manufacture and production of food and groceries. Focus group members considered it to be too lenient in terms of how products were being produced, with many respondents feeling that certain product origins were unclear and the minimum levels enforced by government insufficient. Of particular concern was the area of organic and free-range produce, where consumers found it difficult to establish what these actual terms meant and found that they could vary from one product to another. These factors introduced dissonance into the shopping activity as it made consumers uncertain as to what they were actually purchasing and consuming. Additionally respondents questioned whether organic imports were produced to the same regulations in their country of origin as they would be in the UK. Clearer indications by all regulatory bodies as to what is meant by these terms, and what the minimum standards are to comply with being sold under these titles is required.

Thirdly, there are implications for the Food Standards Agency regarding the regulations and legislation for labelling, facts which were criticised by many qualitative respondents. They felt that although basic information could be found on a label, much of what the product contained was in scientific terms that they could not understand. Furthermore, these respondents felt there was a lack of clarity about how products were labelled and sold, feeling the titles such as ‘95% fat free’ and ‘no added sugar’ were misleading in what they were trying to represent. There is a need for clearer, honest labelling on products which gives information that will aid consumer decision-making, rather than hinder it. A minimum font size was suggested for certain aspects.
Fourthly, there are implications for the Department of Health, the Department of Education and Skills and the Advertising Standards Agency concerning the amount of advertising and promotions aimed at children. This area was considered a particular concern for all respondents with children/grandchildren, as well as many others. It was felt that the government should have some law or regulation protecting children from being targeted by companies, especially those producing 'junk' food. Educational advertising or public relations informing children of healthy eating was also considered appropriate.

Finally there are implications for competition policy, as The European Community has rules to ensure free competition in the Single Market. However it may be questioned whether or not smaller stores are able to compete in a marketplace dominated by large multinational retailers, especially those trading in an E&SR manner that do not have the same profit margins.

10.8. Implications for Ethical Organisations

The findings of this research bode well for ethical organisations, as it gives a clearer indication of the different types of concern to various consumer groups. This would help such organisations with targeting future campaigns at appropriate audiences. One of the most clear areas of interest to ethical organisations was the finding that consumers want more 'unbiased' information on E&SR issues in order to be able to make their shopping choice decisions. Respondents at the qualitative stage stated that trust was important in this area, and hence felt that an independent organisation e.g. the Soil Association, would offer a less biased opinion than a multi-national retailer. The quantitative stage also supports this, finding that almost 70% of respondents wanted to do what ethical organisations wanted them to do. This gives such organisations a
strategic direction by informing consumers of concerns, and more importantly stressing why performing a particular behaviour would benefit consumers, communities and the wider environment.

10.9. Research Limitations

Although findings suggest the influential shopping choice factors and the Extended TPB provide a useful framework for investigating E&SR shopping behaviour, it is recognised that this is a purely local study looking at a sample of consumers from a particular geographical region - the South West of England - and with some inherent bias in its demographic composition. The findings cannot therefore be seen as generalised indications of shopping behaviour and influences across the population at large, which is exacerbated by the pattern of retail grocery competition in the UK. Nevertheless the consistency between the qualitative and quantitative stages, conducted on different samples, and secondly with other E&SR studies, provides support for the approach taken.

This research is limited in its use of regression analysis to identify associations between variables as it is not possible to derive causal relationships from this approach. Hence the influence of the various TPB factors on grocery shopping behavioural intentions can only be regarded as indicative and not as discrete one-way effects. Nevertheless the qualitative research suggests that consumers' behaviour is dependent on their E&SR attitudes and beliefs. The construction of the variables in the model (albeit from first principles to include relevant items derived from qualitative grounding in the adapted measures used) may overlook structural inter-relationships in the constructs which might be revealed through the future use of structural equation modelling.
The study is cross-sectional in its approach, rather than longitudinal, therefore changes in influential choice factors and behaviour cannot be seen over time. This means it is not possible to categorically state that \( a \) causes \( b \), as the study is only looking at one time frame. Although this does not invalidate the findings of this research, future research may wish to revisit the methodologies of this study to account for any differences. Furthermore it has to be recognised that the results are measures of behavioural intention rather than actual behaviour based upon a predominantly qualitative study.

The model of E&SR Grocery Shopping Behaviour does not account specifically for behaviour being moderated by other situational/environmental factors. It covers a range of product markets which could be variable, and although giving a good account of the variance, they do not explain it all, meaning that there may be other factors of influence that need further exploration.

10.10. Future Research

This study has provided important insights into the nature of E&SR shopping behaviour, and as such has major implications for the development of advanced communications and E&SR marketing strategies aimed at this increasingly significant segment of consumers. Although the typology proposed encapsulates E&SR consumer concerns at the current time, it is thought likely that future research may be needed periodically to 'update' these concerns. However, it is only thought that the subcomponents will change/increase, as the larger categories should encompass any new areas.
The scale developed to measure E&SR shopping may be used in the application of conjoint analysis to explore the trade-offs that occur in the different shopping occasions. Further research is therefore required into the extent consumers' ethical and socially responsible grocery shopping behaviour is influenced by the different attributes of retail and product brands, and its effect on loyalty and satisfaction.

There is an opportunity for future research to take full account of the national and international dimensions in E&SR grocery shopping across a wider range of consumers, and so assess the stability of these findings. Although model fit in this study is generally good, even the best model results do not account for around 45% of the explanation in variance of behavioural intentions, thus providing scope for the inclusion of further explanatory factors in future analysis. These could include the contingency effects of inter-relationships between the TPB variables, and those specifically relating to characteristics of shoppers such as family composition, age, socio-economics and income. This latter factor may be an issue in limiting actual E&SR behaviour as good moral intentions may not always be fulfilled in the reality of a shopping environment. Product availability, price, convenience, and service factors amongst others are all aspects of a complex consumer decision process in which disposable income would clearly pay a part.

Clear distinctions were found between the results for store and product choice; however it was not found to be so great between the shopping occasions of main and top-up shop. Further research is needed in this context to establish whether or not this distinction is meaningful in the context of E&SR grocery shopping. Additionally structural equation modelling of the factors of store image and E&SR could be undertaken to establish whether there are any structural inter-relationships between
constructs, which have been overlooked. Such an analysis will provide an insight into the nature and role of those factors driving E&SR consumer choice.

Further research may wish to take an interpretivist approach and use methods such as observation and participant observation in store to assess actual behaviour rather than just behavioural intent, and investigate socially constructed behaviour within the context of the individual and family.

10.11. The Next Step

As a research exercise the lessons and conclusions drawn from the research presented here has given the author a broader and more open definition of what constitutes E&SR grocery shopping behaviour. The recognition of the unique contribution of the E&SR behavioural scale and model of E&SR Grocery Shopping Behaviour put a different perspective on the research agenda for the future of this field, which can only prove to be more rewarding and revealing than the theoretical discussions of single concerns and product areas that have predominated this field hitherto.
REFERENCES


Key Note (2004), *The ABCI Consumer*, Hampton, Mddx:Key Note Ltd

Key Note (2003a), *Supermarket Own Labels*, Hampton, Mddx:Key Note Ltd

Key Note (2003b), *Trends in Food Shopping*, Hampton, Mddx:Key Note Ltd

Key Note (2002), *The Green & Ethical Consumer*, Hampton, Mddx:Key Note Ltd


359


362


Osgood, C.E. Suci, G.J. & Tannenbaum, R.H. (1957), The measurement of meaning, Urbana, IL: University of Illinois Press.


Strachan, J. (1997), 'Multiples Target the Home Front', *Marketing Week*, Issue.19, No.46/2 (February, 21), pp.34.


Todd, D.J. (1979), 'Mixing Qualitative and Quantitative Methods: Triangulation in Action', Administrative Science Quarterly, Vol.24, December, pp.602-611


Wasik, J. (1992), 'Marketing is Confusing, but Patience will Pay Off', *Marketing News*, October 12, pp.16-17.


Appendix I

A Classification of Store Image Components
(Kunkel & Berry, 1968, p.26)

1) **Price of Merchandise:**
   a) Low prices
   b) Fair or competitive prices
   c) High or non-competitive prices
   d) Values, except with specific regard to premiums, such as stamps, or quality of merchandise

2) **Quality of Merchandise:**
   a) Good or poor quality of merchandise
   b) Good or poor department(s), except with respect to assortment, fashion, etc.
   c) Stock brand names

3) **Assortment of merchandise:**
   a) Breadth of merchandise
   b) Depth of merchandise
   c) Carries a brand I like

4) **Fashion of merchandise**

5) **Sales Personnel:**
   a) Attitude of sales personnel
   b) Knowledgeability of sales personnel
   c) Number of sales personnel
   d) Good or poor service

6) **Locational convenience:**
   a) Location from home
   b) Location from work
   c) Access
   d) Good or poor location

7) **Other convenience factors:**
   a) Parking
   b) Hours store is open
   c) Convenience with regard to other stores
   d) Store layout with respect to convenience
   e) Convenience (in general)

8) **Services:**
   a) Credit
   b) Delivery
   c) Restaurant facilities
   d) Other services (Gift consultants, layaway plans, baby strollers, escalators, etc)

9) **Sales Promotions:**
   a) Special sales, including quality or assortment of sales merchandise
   b) Stamps and other promotions
   c) Fashion shows and other special events

10) **Advertising:**
    a) Style and quality of advertising
    b) Media and vehicles used
    c) Reliability of advertising

11) **Store atmosphere:**
    a) Layout of store without respect to convenience
    b) External and internal décor of store
    c) Merchandise display
    d) Customer type
    e) Congestion
    f) Good for gifts, except with respect to quality, assortment or fashion of merchandise
    g) "Prestige" store

12) **Reputation on adjustments:**
    a) Returns
    b) Exchange
    c) Reputation for fairness
Appendix II

Store Image Attribute Groups

(Lindquist, 1974, p.31-34)

1) Merchandise
   a) Quality
   b) Selection or Assortment
   c) Styling or Fashion
   d) Guarantees
   e) Pricing

2) Service
   a) Service - general
   b) Sales clerk service
   c) Presence of Self-service
   d) Ease of merchandise return
   e) Delivery service
   f) Credit policies
   g) Phone orders

3) Clientele
   a) Social class appeal
   b) Self-image congruency
   c) Store personnel

4) Physical Facilities
   a) Facilities such as elevators, lighting, air conditioning and washrooms
   b) Store Layout

5) Convenience
   a) Convenience - general
   b) Locational convenience
   c) Parking

6) Promotion
   a) Sales promotions
   b) Advertising
   c) Displays
   d) Trading stamps
   e) Symbols and colours

7) Store Atmosphere
   a) Atmosphere congeniality e.g. warmth, acceptance, ease

8) Institutional Factors
   a) Conservative/modern projection of the store
   b) Reputation
   c) Reliability

9) Post transaction satisfaction
   a) Merchandise in use
   b) Returns
   c) Adjustments
Appendix III(a)

Final List of Image Descriptor Categories
(Zimmer & Golden, 1988, p.281)

Attribute-Specific
- Good layout or appearance
- Bad physical condition of store
- Good quality merchandise
- Medium quality merchandise
- Variable quality
- Low quality merchandise
- Positive comments about advertising
- Negative comments about advertising
- Positive comments about a sale
- Negative techniques used during or in relation to a sale
- Good selection
- Average selection
- Bad selection
- Good service
- Acceptable service
- Adequate service
- Poor service
- Positive comments about credit
- Negative comments about credit
- Positive comments about catalogue
- Bad catalogue service
- Good guarantees or returns
- Negative comments about guarantees or returns
- Good impression of salespeople
- Good location
- Bad location
- Positive comments about prices
- Negative comments about prices
- Low prices
- Moderate prices
- High prices
- Good reputation

Global
- General or overall positive comments
- General or overall negative comments
- Upgraded
- Tacky or low class
- Store in trouble

Label
Comments about the type of store

Prototype and exemplars
Similar to other stores

Products
- Good for specific products
- Negative comments about specific products
- Satisfactory clothing
- Bad clothing
- Good for repairs

Behaviour
Shopping patterns or shopping frequency

Miscellaneous
- No opinion or unfamiliar
- Other – comments that fit in no other category
Appendix III(b)

Image Descriptors Used in Previous Literature

(Zimmer & Golden, 1988, p.285-286)

<table>
<thead>
<tr>
<th>Store Image Attributes (Lindquist 1974)</th>
<th>Other Store Image Attributes Used in the literature</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Merchandise</strong></td>
<td>Good/Bad Value γ</td>
</tr>
<tr>
<td>a) Quality γ *</td>
<td>Shows newest styles before/after other stores</td>
</tr>
<tr>
<td>b) Selection or Assortment γ *</td>
<td>Carries/does not carry brand names γ</td>
</tr>
<tr>
<td>c) Styling or Fashion γ</td>
<td>Interesting/uninteresting merchandise</td>
</tr>
<tr>
<td>d) Guarantees γ *</td>
<td>Merchandise is/is not clearly marked</td>
</tr>
<tr>
<td>e) Pricing γ *</td>
<td>Friendly/unfriendly γ</td>
</tr>
</tbody>
</table>

| **2) Service**                         | Lay-away available/not available                  |
| a) Service - general γ *               | Adequate/inadequate number of salespeople γ      |
| b) Sales clerk service γ *             | Fast/slow checkout γ                              |
| c) Presence of Self-service            | Pleasant/unpleasant customers                     |
| d) Ease of merchandise return γ *      | Friends do/do not shop there                      |
| e) Delivery service                    | Attractive/unattractive décor γ                   |
| f) Credit policies γ *                 | Near/not near other stores I want to shop at      |
| g) Phone orders                        | Assertive/passive                                 |

| **3) Clientele**                       | Objective/impulsive                               |
| a) Social class appeal γ               | Comfortable/uncomfortable                        |
| b) Self-image congruency               | Intimate/social                                   |
| c) Store personnel γ *                 | Formal/casual                                     |

| **4) Physical Facilities γ ***         | Fair/unfair γ                                     |
| a) Facilities such as elevators, lighting, air conditioning and washrooms | Honest/dishonest                                  |
| b) Store Layout γ *                    | Been in community a long/short time               |

| **5) Convenience**                     | Non-Attribute Specific Image Dimensions Used in Literature |
| a) Convenience - general γ             | Good/bad overall impression γ *                   |
| b) Locational convenience γ *          | Improving/falling behind γ *                      |
| c) Parking                             | High/low calibre                                  |

| **6) Promotion**                       | Enjoyable/not enjoyable γ                         |
| a) Sales promotions γ *                | A nice/not a nice place to shop γ                 |
| b) Advertising γ *                     | Evaluations of specific products (e.g. food, clothing, etc.) γ * |
| c) Displays γ                          | Store like other/unique γ                         |

| **7) Store Atmosphere**                |                                          |
| a) Atmosphere congeniality e.g. warmth, acceptance, ease γ |                                          |

| **8) Institutional Factors**           |                                          |
| a) Conservative/modern projection of the store γ |                                          |
| b) Reputation γ *                      |                                          |
| c) Reliability γ                       |                                          |

| **9) Post transaction satisfaction**   |                                          |
| a) Merchandise in use                  |                                          |
| b) Returns γ *                         |                                          |
| c) Adjustments                         |                                          |

---

* the list of articles from which these image descriptors were compiled can be found in Zimmer & Golden, 1988. A γ denotes descriptors present in Zimmer & Golden's original 220 themes. An * denotes those descriptors represented in the final 47 image categories.
Appendix IV

Focus Group Recruitment Questionnaire

Juliet Memery
Plymouth Business School
University of Plymouth
Plymouth
Devon

Recruited for Group No..........................
Date......................................
Time......................................
Recruiter Name.............................

RECRUITMENT QUESTIONNAIRE

Good morning/afternoon. I am conducting a market research survey on grocery retailing and issues of ethics and social responsibility. Would you mind answering a few questions please?

Q1. Do you or any of your closest friends or relatives work, or have they worked in any of the following jobs? (CLOSE IF OTHER THAN ACCOUNTANCY OR NONE)

Accountancy 1  ⇒ Q2.
Journalism, PR or Advertising 2 CLOSE
In a Supermarket or for a Supermarket 3 CLOSE
Marketing or Market Research 4 CLOSE
Design 5 CLOSE
None of these 6 ⇒ Q2.

Q2. Have you been to a market research 'group discussion' before?

No 1  ⇒ Q6.
Yes 2 ⇒ Q3.

Q3. How many have you been to in all?

Three or more 1 CLOSE
Less than three 2 ⇒ Q4.

Q4. How long ago was the last one you went to?

Under 6 months 1 CLOSE
Over 6 months 2 ⇒ Q5.

Q5. Can you remember what subject(s) were discussed?

WRITE IN SUBJECT DISCUSSED. IF ANYTHING TO DO WITH GROCERY RETAILING, ETHICS, OR SOCIAL RESPONSIBILITY CLOSE INTERVIEW. IF NOT ⇒ Q6.

Subjects .............................................................................................................

Q6. Are you the main grocery shopper in your household?

No 1  ⇒ Q7.
Yes 2 ⇒ Q6.

Q7. Could you please answer YES or NO to each of the following questions?
ONLY RECRUIT IF ANSWER 'YES' TO 5 OR 6 QUESTIONS – DEFINITELY NO LESS THAN 4 YES’s.

1. Do you recycle plastics, glass and other materials? YES NO
2. Do you always try and buy organically produced fruit, vegetables and other groceries? YES NO
3. Have you ever gone out of your way to buy a product that claimed to pollute less (such as washing powder), or a product with biodegradable materials? YES NO
4. Do you ever pay more for environmentally friendly products?  
   YES  NO

5. Would you consider boycotting a company and its products on the basis that you did not agree with its policies and/or trading activities?  
   YES  NO

6. Do you usually try and buy products that say 'not tested on animals'?  
   YES  NO

CLASSIFICATION DETAILS

<table>
<thead>
<tr>
<th>Participant</th>
<th>Children (WRITE IN No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20 yrs</td>
<td>1 CLOSE</td>
</tr>
<tr>
<td>20-34 yrs</td>
<td>2 CHECK QUOTA</td>
</tr>
<tr>
<td>35-44 yrs</td>
<td>3 CHECK QUOTA</td>
</tr>
<tr>
<td>45-54 yrs</td>
<td>4 CHECK QUOTA</td>
</tr>
<tr>
<td>55+</td>
<td>5 CLOSE</td>
</tr>
<tr>
<td>None</td>
<td>CHECK QUOTA</td>
</tr>
<tr>
<td>Under 5 yrs</td>
<td>CHECK QUOTA</td>
</tr>
<tr>
<td>5-11 yrs</td>
<td>CHECK QUOTA</td>
</tr>
<tr>
<td>11-16 yrs</td>
<td>CHECK QUOTA</td>
</tr>
<tr>
<td>Over 16 yrs</td>
<td>CHECK QUOTA</td>
</tr>
</tbody>
</table>

What is the occupation of the chief wage earner in the household?

WRITE IN ......................................................................................................

Social Class

| A | 1 | CHECK QUOTA |
| B | 2 | CHECK QUOTA |
| C1 | 3 | CHECK QUOTA |
| C2 | 4 | CHECK QUOTA |
| D | 5 | CHECK QUOTA |
| E | 6 | CHECK QUOTA |

Working Status of Respondent

| Working Full-time | 1 | RECRUIT |
| Working Part-time | 2 | A |
| Non-working       | 3 | MIX |

Marital Status

| Live alone | 1 | CHECK QUOTA |
| Only adult in household (Children under 18yrs) | 2 | CHECK QUOTA |
| Live with other adults / children over 18 yrs | 3 | CHECK QUOTA |
| Married / live with partner | 4 | CHECK QUOTA |

Sex

| Female | 1 | CHECK QUOTA |
| Male   | 2 | CHECK QUOTA |

PLEASE CHECK ALL QUOTAS AND, IF RESPONDENT COMPLIES, INVITE TO ATTEND A GROUP DISCUSSION. EXPLAIN:

- THE GROUP WILL LAST 2 HOURS
- AN INCENTIVE OF £20.00 WILL BE PAID
- REFRESHERS WILL BE PROVIDED
- THE SESSION WILL BE AUDIOTAPE AND MAY BE VIDEOED
- REASSURE RESPONDENT OF CONFIDENTIALITY
- EXPLAIN IT IS IMPORTANT TO ARRIVE AT LEAST 5-10 MINUTES BEFORE THE START OF THE SESSION

FIRST NAME ...................................................................................................
SURNAME ...........................................................................................................
ADDRESS .........................................................................................................

TELEPHONE NUMBER: Home ...........................................................................
                        Mobile .................................................................................

I declare that this interview was conducted personally by the undersigned in accordance with my instructions and the MRS Code of Conduct.

Signature .......................................................... Date ................................

PRINT ..................................................
Appendix V(a)

Face-to-Face Survey Filter Questionnaire

Juliet Memery  
Plymouth Business School  
University of Plymouth  
Plymouth  
Devon  
Recruited for Group No.............  
Date.....................................  
Time.....................................  
Recruiter Name.......................  

PARTICIPANT FILTER QUESTIONNAIRE

Good morning/afternoon. I am conducting a market research survey on food and grocery retailing in the South West. Would you mind answering a few questions please?

Q1. Are you a permanent resident in the local area? (NO TOURISTS)
   NO 0  CLOSE
   YES 1  ⇒ Q2.

Q2. Are you the main grocery shopper in your household?
   (i.e. do they make or equally share the decision on where to shop or what to buy)
   NO 0  CLOSE
   YES 1  ⇒ Q3.

Q3. Could you please answer YES or NO to each of the following questions?
   a) Do you normally recycle plastics, glass and other materials?  YES 1  NO 0
   b) Do you always try and buy organically produced fruit, vegetables and other groceries?  YES 1  NO 0
   c) Do you try and support local and British suppliers through buying their products and/or using their stores?  YES 1  NO 0
   d) Do you ever pay more for environmentally friendly products?  YES 1  NO 0
   e) Would you consider boycotting a company and its products on the basis that you did not agree with its policies and/or trading activities?  YES 1  NO 0
   f) Do you usually try and buy products that say “not tested on animals”?  YES 1  NO 0

• IF 3 OR LESS YES’s: Thank respondent for their time and close interview.
• IF 4 OR MORE YES’s: Ask if willing to complete a 15-minute questionnaire, for which their name will be entered into a £50 prize draw.
Appendix V(b)

Face-to-Face Survey Main Questionnaire

The following pages contain the main questionnaire implemented in Phase 3 of the research study's data collection – the face-to-face questionnaire survey.
Q1. What town/city(s) do you normally go to in order to do your food and grocery shopping?
Please write in ........................................................................

Q2. What store(s) do you normally use for:

<table>
<thead>
<tr>
<th>Your main shop?</th>
<th>Your 'top-up' shop?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(By main shop it is meant the largest single shop that is done in a period)</td>
<td>(By 'top-up' shop it is meant the smaller more regular shops that are done in a period e.g. for bread, milk etc)</td>
</tr>
<tr>
<td>Aldi</td>
<td>□</td>
</tr>
<tr>
<td>Alldays</td>
<td>□</td>
</tr>
<tr>
<td>Asda</td>
<td>□</td>
</tr>
<tr>
<td>Budgens</td>
<td>□</td>
</tr>
<tr>
<td>Co-op</td>
<td>□</td>
</tr>
<tr>
<td>Costcutter</td>
<td>□</td>
</tr>
<tr>
<td>Farm Shops</td>
<td>□</td>
</tr>
<tr>
<td>Iceland</td>
<td>□</td>
</tr>
<tr>
<td>Lid</td>
<td>□</td>
</tr>
<tr>
<td>Local stores in village/town/city</td>
<td>□</td>
</tr>
<tr>
<td>Marks &amp; Spencer</td>
<td>□</td>
</tr>
<tr>
<td>Safeway</td>
<td>□</td>
</tr>
<tr>
<td>Sainsbury</td>
<td>□</td>
</tr>
<tr>
<td>Somerfield</td>
<td>□</td>
</tr>
<tr>
<td>Spar</td>
<td>□</td>
</tr>
<tr>
<td>Tesco</td>
<td>□</td>
</tr>
<tr>
<td>Waitrose</td>
<td>□</td>
</tr>
<tr>
<td>Other (write in)</td>
<td>□</td>
</tr>
</tbody>
</table>

A main shop?

| More than once a week                  | □                   |
| Once a week                            | □                   |
| Every two weeks                        | □                   |
| Once a month                           | □                   |
| Less than once a month                 | □                   |

A ‘top-up’ shop?

| Daily                                   | □                   |
| Every other day                         | □                   |
| 2-3 times a week                        | □                   |
| Once a week                             | □                   |
| Less than once a week                   | □                   |
Q4. What form of transport do you use to get to the store:

<table>
<thead>
<tr>
<th>For your main shop?</th>
<th>For your ‘top-up’ shop?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot</td>
<td>Foot</td>
</tr>
<tr>
<td>Car</td>
<td>Car</td>
</tr>
<tr>
<td>Public bus</td>
<td>Public bus</td>
</tr>
<tr>
<td>Train</td>
<td>Train</td>
</tr>
<tr>
<td>Shopper Free bus</td>
<td>Shopper Free bus</td>
</tr>
<tr>
<td>Motorbike</td>
<td>Motorbike</td>
</tr>
<tr>
<td>Bicycle</td>
<td>Bicycle</td>
</tr>
<tr>
<td>Other (write in)</td>
<td>Other (write in)</td>
</tr>
</tbody>
</table>

Q5. How far do you travel to get to the store:

<table>
<thead>
<tr>
<th>For your main shop?</th>
<th>For your ‘top-up’ shop?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 mile</td>
<td>Less than 1 mile</td>
</tr>
<tr>
<td>1 – 2.5 miles</td>
<td>1 – 2.5 miles</td>
</tr>
<tr>
<td>2.6 – 5 miles</td>
<td>2.6 – 5 miles</td>
</tr>
<tr>
<td>Over 5 miles</td>
<td>Over 5 miles</td>
</tr>
</tbody>
</table>

Q6. Do you usually shop on your own or with others:

<table>
<thead>
<tr>
<th>When doing your main shop?</th>
<th>When doing your ‘top-up’ shop?</th>
</tr>
</thead>
<tbody>
<tr>
<td>On own</td>
<td>On own</td>
</tr>
<tr>
<td>With partner/spouse</td>
<td>With partner/spouse</td>
</tr>
<tr>
<td>With children</td>
<td>With children</td>
</tr>
<tr>
<td>With family (partner &amp; children)</td>
<td>With family (partner &amp; children)</td>
</tr>
<tr>
<td>With other adults</td>
<td>With other adults</td>
</tr>
</tbody>
</table>

In this survey I am trying to find out what makes people choose the stores they use and the products they buy when food and grocery shopping. I would be grateful if you indicate your answer by choosing from the scale of 1-7 on the statement cards I will show you. *(Show example so respondent understands).*
**Self Identity - SI store**

**Q7.** In general, how important are the following considerations to you when you decide **which store to use**? **SHOW CARD A**

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Extremely Unimportant</th>
<th>Extremely Important</th>
<th>Extremely Unimportant</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Price of merchandise</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b. Quality of merchandise at the store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c. Range of merchandise</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d. Location of store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e. Free car parking at the store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>f. Opening hours of store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>g. Cash point at store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>h. Petrol station at store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>i. Customer facilities at store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>j. Polite &amp; helpful sales personnel</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>k. Promotions at store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>l. Design &amp; layout of store</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>m. Returns, exchanges and credit facilities</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

**Self Identity - SI product**

**Q8.** When deciding **which product to purchase** how important, in general, are the following considerations to you? **SHOW CARD A**

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Extremely Unimportant</th>
<th>Extremely Important</th>
<th>Extremely Unimportant</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Price of product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b. Product quality</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c. Range in product line</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d. Variety of pack sizes</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e. Design and packaging of product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>f. Promotions on product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
There are also factors that could influence your choice of which store to use or what product to buy such as animal welfare, human rights, environmental issues & business practices. These come under the headings of ethics & social responsibility, which are terms I will be using in the following questions.

**Ethics** – the basic moral principles of how people and companies treat each other.

**Social responsibility** – ensuring the social and financial well-being of individuals, the community and the environment.

**SHOW PICTURES**: These pictures represent our interpretation of 1) an ethical and socially responsible store, and 2) an ethical and socially responsible product. Please could you study these for a moment before answering the following questions. In view of this:

**Self Identity**

Q9. Do you consider yourself as someone who considers *ethics and social responsibility issues* to be important? SHOW CARD A

<table>
<thead>
<tr>
<th>Extremely Unimportant</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

**Perceived Ethical Obligation**

Q10. Do you feel you have an ethical obligation to consider *ethics and social responsibility issues*? SHOW CARD A

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

**Self Identity – E&SR store**

Q11. In general how important are the following factors to you when you decide *which store to use*: SHOW CARD A

<table>
<thead>
<tr>
<th>For your main grocery shop</th>
<th>For your top-up grocery shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b. Dealing with oppressive regimes</td>
<td>1</td>
</tr>
<tr>
<td>c. Exploitation of developing countries</td>
<td>1</td>
</tr>
<tr>
<td>d. The Ozone Layer &amp; use of CFC’s</td>
<td>1</td>
</tr>
<tr>
<td>e. Pollution from transportation of goods</td>
<td>1</td>
</tr>
<tr>
<td>f. Factory/Intensive farming of products sold</td>
<td>1</td>
</tr>
<tr>
<td>g. Social/employment policy of the store</td>
<td>1</td>
</tr>
<tr>
<td>h. Support community by selling local produce</td>
<td>1</td>
</tr>
<tr>
<td>i. Availability of Organic products</td>
<td>1</td>
</tr>
<tr>
<td>j. Availability of free range products</td>
<td>1</td>
</tr>
<tr>
<td>k. Availability of Fairtrade products</td>
<td>1</td>
</tr>
</tbody>
</table>
**Self Identity – E&SR product**

Q12. When deciding *which product to purchase* how important, in general, are the following factors to you ... SHOW CARD A

<table>
<thead>
<tr>
<th></th>
<th>Extremely Unimportant</th>
<th>Extremely Important</th>
<th>Extremely Unimportant</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>When doing a main grocery shop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Product safe for consumption</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>b. Free from Genetically Modified ingredients</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>c. Recyclable or Biodegradable packaging</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>d. Product not overpackaged</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>e. Animal testing of product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>f. Transportation of live animals</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>g. Exploitation of developing countries</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>h. Use of child labour to produce goods</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>i. The Ozone Layer &amp; the use of CFC's</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>j. Forest destruction</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>k. Honest &amp; clear labelling of product origin &amp; ingredients</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>l. No Artificial Additives / Preservatives in Product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>m. No misrepresentation of product on packaging</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>n. No misleading advertising of product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>o. It is an organic product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>p. It is a free range product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>q. It is a Fairtrade product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
### Attitude (direct)

**Q13.** In general how favourable is your attitude towards ethics and social responsibility issues ... SHOW CARD B

<table>
<thead>
<tr>
<th></th>
<th>Extremely Unfavourable</th>
<th></th>
<th>Extremely Favourable</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. When doing a main food and grocery shop?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. When doing a 'top-up' food and grocery shop?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. When purchasing a product during a main shop?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. When purchasing a product during a 'top-up' shop?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### Behavioural Beliefs – strength – Attitude (indirect)

**Q14.** How likely do you believe your use of a store like this will ... SHOW CARD C & indicate store picture

<table>
<thead>
<tr>
<th></th>
<th>Extremely Unlikely</th>
<th></th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Encourage retailers to behave in an ethical &amp; socially responsible way</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Encourage retailers to stock ethical &amp; socially responsible products</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. Withdraw support from non-ethical companies</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### Behavioural Beliefs – strength – Attitude (indirect)

**Q15.** How likely do you believe your purchase of a product like this will ... SHOW CARD C & indicate product picture

<table>
<thead>
<tr>
<th></th>
<th>Extremely Unlikely</th>
<th></th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Result in a fair price for ethical and socially responsible producers</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Prevent the exploitation of ethical &amp; socially responsible producers</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. Encourage retailers to stock ethical &amp; socially responsible products</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. Withdraw support from non-ethical companies</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
**Behavioural Beliefs – strength - Attitude (indirect)**

**Q16.** How likely do you believe *your awareness* of ethical and social responsibility issues will ... SHOW CARD C

<table>
<thead>
<tr>
<th>Extremely Unlikely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

- a. Result in you using a store whose location is not convenient?
- b. Result in you purchasing a product that is not readily available?
- c. Result in you purchasing a product that is more expensive?
- d. Involve purchasing a quality product?
- e. Give you peace of mind?

**Intention (direct)**

**Q17.** The next time you go food and grocery shopping *how likely are you to* ... SHOW CARD C & pictures

<table>
<thead>
<tr>
<th>Extremely Unlikely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

- a. Use a store like this for a main shop?
- b. Use a store like this for a ‘top-up’ shop?
- c. Purchase a product like this during a main shop?
- d. Purchase a product like this during a ‘top-up’ shop?

**Perceived Behavioural Control – self efficacy (direct)**

**Q18.** How easy is it for you to *use an ethical and socially responsible stores*?... SHOW CARD D & store picture

<table>
<thead>
<tr>
<th>Extremely Difficult</th>
<th>Extremely Easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

- a. When doing your main shop?
- b. When doing your ‘top-up’ shop?

**Perceived Behavioural Control – controllability (direct)**

**Q19.** How *much control* do you believe you have over *using a store like this*? SHOW CARD E & store picture

<table>
<thead>
<tr>
<th>No Control</th>
<th>Complete Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

- a. When doing your main shop?
- b. When doing your ‘top-up’ shop?
**Control Beliefs – power - Perceived Behavioural Control (indirect)**

Q20. Do you expect .................. SHOW CARD F & store picture

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

| a. Obtaining information regarding which stores are concerned with ethics and social responsibility issues will be difficult? |
| b. Location of an E&SR retail outlet to be inconvenient? |
| c. The price of products in an E&SR retail outlet to be higher than in a non-E&SR store? |
| d. Work/family commitments to place high demands on your time? |

**Control Beliefs – strength - Perceived Behavioural Control (indirect)**

Q21. Is ............... a factor which makes it more difficult for you to use of this type of store? SHOW CARD F & store picture

<table>
<thead>
<tr>
<th>Extremely Difficult</th>
<th>Extremely Easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

| a. Obtaining information regarding which stores are concerned with ethics and social responsibility issues |
| b. The location of the retail outlet |
| c. The price of products in the retail outlet |
| d. Work/family commitments versus time |

**Perceived Behavioural Control – self efficacy (direct)**

Q22. How easy is it for you to purchase an ethical & socially responsible product? ... SHOW CARD D & product picture

<table>
<thead>
<tr>
<th>Extremely Difficult</th>
<th>Extremely Easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

| a. When doing your main shop? |
| b. When doing your ‘top-up’ shop? |

**Perceived Behavioural Control – controllability (direct)**

Q23. How much control do you believe you have over purchasing this type of product? SHOW CARD E & product picture

<table>
<thead>
<tr>
<th>No Control</th>
<th>Complete Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
**Control Beliefs – power - Perceived Behavioural Control (indirect)**

**Q24.** Do you expect ...................... SHOW CARD F & product picture

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

- a. Obtaining information regarding which products are produced in an ethical and socially responsible way will be difficult?
- b. The location of a E&SR retail outlet that stocks such products to be inconvenient?
- c. The price of E&SR products to be higher than non-E&SR products?
- d. The range of E&SR products to be more limited than non-E&SR products?
- e. The availability of E&SR products in supermarkets to be limited?
- f. Work/family commitments to place high demands on your time?

**Control Beliefs – strength - Perceived Behavioural Control (indirect)**

**Q25.** Is ...................... a factor which makes it more difficult for your to purchase of this type of product? SHOW CARD F & product picture

<table>
<thead>
<tr>
<th>Extremely difficult</th>
<th>Extremely easy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

- a. Obtaining information regarding which products are produced in an ethical and socially responsible way
- b. The location of a retail outlet that stocks such products
- c. The price of products
- d. The limited range of products
- e. The availability of products in supermarkets
- f. Work/family commitments versus time
Normative Beliefs – strength- Subjective Norm (indirect)

Q26. How likely is it that you should take into account ethics and social responsibility issues: SHOW CARD C

<table>
<thead>
<tr>
<th></th>
<th>Extremely Unlikely</th>
<th>Extremely Likely</th>
<th></th>
<th>Extremely Unlikely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When using a store</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Your family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Your friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Ethical organisations (e.g. charities, environmental groups)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Multinational companies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Extremely Unlikely</th>
<th>Extremely Likely</th>
<th></th>
<th>Extremely Unlikely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When buying a product</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Motivation to comply - Subjective Norm (indirect)

Q27. Generally speaking, how much do you want to do what the following groups think you should do? SHOW CARD G

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Your family</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b. Your friends</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c. Ethical organisations (e.g. charities, environmental groups)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>d. Multinational companies</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Subjective Norm – injunctive (direct)

Q28. Do most people who are important to you approve of you taking ethical and social responsibility issues into account when grocery shopping?

<table>
<thead>
<tr>
<th>Strongly Disapprove</th>
<th>Strongly Approve</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Subjective Norm – descriptive (direct)

Q29. Do most people who are important to you take ethical and social responsibility issues into account when grocery shopping themselves?

<table>
<thead>
<tr>
<th>Completely false</th>
<th>Completely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
**Outcome evaluation – Attitude (indirect)**

Q30. Finally could you please indicate how important you believe each of the following issues are. SHOW CARD A

<table>
<thead>
<tr>
<th></th>
<th>Extremely Unimportant</th>
<th></th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Gaining a fair price for ethical and socially responsible producers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Preventing the exploitation of ethical and socially responsible producers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. Encouraging retailers to behave in an ethical and socially responsible way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. Encouraging retailers to stock these types of products.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e. Withdrawing support from non-ethical companies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f. Using a store which is not convenient in location but behaves in an ethical and socially responsible way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g. Purchasing a product which is not readily available but which is produced in an ethical &amp; socially responsible way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h. Purchasing a product which is more expensive but which is produced in an ethical &amp; socially responsible way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i. Purchasing a quality product.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j. Your peace of mind.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

• Thank respondent for helping and ask if they could spend a minute longer to give a few personal details to help with the data analysis.
• Ask for their name, address & telephone number so that they may be entered into the £50 prize draw. Assure them of confidentiality of this data.
• They cannot be entered if not given, as will need to confirm they took part and contact them.
CLASSIFICATION DETAILS

Gender:
- Female □ 1 CHECK QUOTA
- Male □ 2 CHECK QUOTA

Age:
- Under 20 yrs □ 0 CLOSE
- 20-24 yrs □ 1 CHECK QUOTA
- 20-34 yrs □ 2 CHECK QUOTA
- 35-44 yrs □ 3 CHECK QUOTA
- 45-54 yrs □ 4 CHECK QUOTA
- 55-64yrs □ 5 CHECK QUOTA
- 65yrs+ □ 6 CHECK QUOTA

Home Postcode:
(please specify) ..........................................................

No. Adults in household (incl. respondent)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>□</td>
<td>1</td>
<td>□</td>
<td>4</td>
<td>□</td>
</tr>
<tr>
<td>2</td>
<td>□</td>
<td>2</td>
<td>□</td>
<td>5</td>
<td>□</td>
</tr>
<tr>
<td>3</td>
<td>□</td>
<td>3</td>
<td>□</td>
<td>6+</td>
<td>□</td>
</tr>
</tbody>
</table>

Number of dependent children in household
(under 16yrs, or under 19yrs in fulltime education)

<table>
<thead>
<tr>
<th>0-4 yrs</th>
<th>5-11 yrs</th>
<th>12-15 yrs</th>
<th>16-19 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 □ 1</td>
<td>6 □ 1</td>
<td>11 □ 1</td>
<td>16 □ 1</td>
</tr>
<tr>
<td>2 □ 2</td>
<td>7 □ 2</td>
<td>12 □ 2</td>
<td>17 □ 2</td>
</tr>
<tr>
<td>3 □ 3</td>
<td>8 □ 3</td>
<td>13 □ 3</td>
<td>18 □ 3</td>
</tr>
<tr>
<td>4 □ 4</td>
<td>9 □ 4</td>
<td>14 □ 4</td>
<td>19 □ 4</td>
</tr>
<tr>
<td>5+ □ 5</td>
<td>10 □ 5+</td>
<td>15 □ 5+</td>
<td>20 □ 5+</td>
</tr>
</tbody>
</table>

Total number of children in household

Which member of your household, either yourself or related to you, would you say is the CHIEF INCOME EARNER, that is the person with the largest income, whether from employment, pensions, state benefits, investment or any other source?

- Self □ 1 Partner/spouse □ 2 Other adult (please specify) ..........................................................

What is the occupation of the chief income earner in the household?

(WRITE IN) ........................................................................................................
Working status of chief income earner

- Full-time work
- Part-time work
- Self employed
- Registered unemployed
- Permanently sick/disabled
- Housewife in employment
- Housewife not in employment
- Student
- Retired
- YTS / apprenticeship

Working status of respondent (if not the chief income earner)

- Full-time work
- Part-time work
- Self employed
- Registered unemployed
- Permanently sick/disabled
- Housewife in employment
- Housewife not in employment
- Student
- Retired
- YTS / apprenticeship

SE Group

<table>
<thead>
<tr>
<th>SE Group</th>
<th>Code</th>
<th>Quota</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>1</td>
<td>CHECK QUOTA</td>
</tr>
<tr>
<td>C1</td>
<td>2</td>
<td>CHECK QUOTA</td>
</tr>
<tr>
<td>C2</td>
<td>3</td>
<td>CHECK QUOTA</td>
</tr>
<tr>
<td>DE</td>
<td>4</td>
<td>CHECK QUOTA</td>
</tr>
</tbody>
</table>

Type of tenure

- Owned outright
- Rented / private
- Rented / local authority
- Owned / mortgage
- Other (please specify)

Cars in household

- None
- One
- Two
- Three+

Name of respondent: .................................................................
Address of respondent: ...........................................................
Telephone number: ....................................................................

Thank respondent for their time in helping complete this questionnaire. *Winners of draw will be notified by post at the end of the research study.*
Do not pollute or destroy the Environment

Promote healthy foods

Support & sell Fair Trade products

Store easy to access & use for people with disabilities

Do not stock products made by child labour

Have a traceable supply chain

Follow equal opportunity & pay policies

No unethical promotions targeting children

Support & sell a range of organic & free-range products

Provide recycling facilities

Sell local & British produce

Help & support the local economy

Sell recyclable products

Help & support small suppliers

Fair pricing policies for suppliers & customers

Support & sell Fair Trade products

The Responsible Store
Appendix V(d)

Face-to-Face Survey Main Questionnaire
Visual Aid – Product

Produced & stored in a hygienic manner

- Fairly priced
- Pollution free production & transportation
- Product fit for use & tamperproof
- Not tested on animals
- Product not over packaged
- Free from artificial additives & preservatives
- No false representation of product through pictures or adverts
- Allergy/health warnings displayed
- Clearly labelled for ingredients and origin
- GM Free ingredients
- Health & safety procedures followed
- Recyclable packaging
- No child labour used in production
- Fair pay & conditions for producer & workers

The Responsible Product

394
### Appendix VI

**Focus Group Sample Details**

<table>
<thead>
<tr>
<th>Focus Group 1:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td>Mixed</td>
</tr>
<tr>
<td>Age range:</td>
<td>20-24yrs (not still living with parents)</td>
</tr>
<tr>
<td>Children:</td>
<td>No children</td>
</tr>
<tr>
<td>Location name:</td>
<td>Drake, Plymouth, Devon</td>
</tr>
<tr>
<td>Location postcode:</td>
<td>PL4</td>
</tr>
<tr>
<td>Total population:</td>
<td>Plymouth = 240,718  Drake = 15,200</td>
</tr>
<tr>
<td>Location classification:</td>
<td>City</td>
</tr>
<tr>
<td>JICNARS socio-economic group:</td>
<td>C2DE</td>
</tr>
<tr>
<td>Acorn type definition:</td>
<td>C.8. Better-off Executives, Inner City Areas</td>
</tr>
<tr>
<td>% of population in C.8.22 category:</td>
<td>n/a</td>
</tr>
<tr>
<td>National average in C.8.22 category:</td>
<td>n/a</td>
</tr>
<tr>
<td>Competitors within 5 mile radius:</td>
<td>Co-op, Tesco Metro, Plymco, Spar, Sainsbury, Asda, Alldays, One Stop</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus Group 2:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td>All Male</td>
</tr>
<tr>
<td>Age range:</td>
<td>25-44yrs</td>
</tr>
<tr>
<td>Children:</td>
<td>No children</td>
</tr>
<tr>
<td>Location name:</td>
<td>Compton, Plymouth, Devon</td>
</tr>
<tr>
<td>Location postcode:</td>
<td>PL3</td>
</tr>
<tr>
<td>Total population:</td>
<td>Plymouth = 240,718  Compton = 11,200</td>
</tr>
<tr>
<td>Location classification:</td>
<td>City</td>
</tr>
<tr>
<td>JICNARS socio-economic group:</td>
<td>AB(C1)</td>
</tr>
<tr>
<td>Acorn type definition:</td>
<td>B.4. Affluent Executives, Family Areas</td>
</tr>
<tr>
<td>% of population in B.4.11 category:</td>
<td>n/a</td>
</tr>
<tr>
<td>National average in B.4.11 category:</td>
<td>n/a</td>
</tr>
<tr>
<td>Competitors within 5 mile radius:</td>
<td>Co-op, Tesco Metro, Plymco, Spar, Sainsbury, Asda, Alldays, One Stop</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus Group 3:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td>All Female</td>
</tr>
<tr>
<td>Age range:</td>
<td>35-44yrs</td>
</tr>
<tr>
<td>Children:</td>
<td>Younger children living at home</td>
</tr>
<tr>
<td>Location name:</td>
<td>Chudleigh, Devon</td>
</tr>
<tr>
<td>Location postcode:</td>
<td>TQ13</td>
</tr>
<tr>
<td>Total population:</td>
<td>4,963</td>
</tr>
<tr>
<td>Location classification:</td>
<td>Market town</td>
</tr>
<tr>
<td>JICNARS socio-economic group:</td>
<td>ABC1</td>
</tr>
<tr>
<td>Acorn type definition:</td>
<td>A.1. Wealthy achievers, Suburban areas</td>
</tr>
<tr>
<td>% of population in A.1.5 category:</td>
<td>7.0%</td>
</tr>
<tr>
<td>National average in A.1.5 category:</td>
<td>2.7%</td>
</tr>
<tr>
<td>Competitors within 5 mile radius:</td>
<td>Co-op, Tesco, Plymco, Spar, Sainsbury</td>
</tr>
</tbody>
</table>
### Focus Group 4:

| Gender: | All Female |
| Age range: | 20-34yrs |
| Children: | Younger children living at home |
| Location name: | Slades Road, St Austell, Cornwall |
| Location postcode: | PL25 |
| Total population: | 19,590 |
| Location classification: | Market town |
| JICNARS socio-economic group: | C1C2 |
| Acorn type definition: | D.10. Skilled workers, Home owning areas, D.10.30. Established Home Ownning Areas, Skilled Workers |
| % of population in D.10.30. category: | 13.8% |
| National average in D.10.30. category: | 4.0% |
| Competitors within 5 mile radius: | Co-op, Tesco, Lidl, Iceland, Asda |

### Focus Group 5:

| Gender: | All Female |
| Age range: | 45-54yrs |
| Children: | Older children living at or left home |
| Location name: | Westbury, Wiltshire |
| Location postcode: | BA13 |
| Total population: | 10,200 |
| Location classification: | Market town |
| JICNARS socio-economic group: | ABC1 |
| Acorn type definition: | B.5. Well-Off workers, Family Areas, B.5.13. Home owning Family Areas |
| % of population in B.5.13. category: | 4.4% |
| National average in B.5.13. category: | 2.1% |
| Competitors within 5 mile radius: | Co-op, One Stop, Forbuoys, Aldi, Tesco, Lidl, Iceland, Asda, Kwik Save, Safeway, Plymco, Alldays, M & W |

### Focus Group 6:

<p>| Gender: | All Female |
| Age range: | 35-44yrs |
| Children: | Younger children living at home |
| Location name: | Prince Charles Road, Exeter, Devon |
| Location postcode: | EX4 |
| Total population: | Exeter = 113,825 |
| Location classification: | City |
| JICNARS socio-economic group: | C2DE |
| % of population in E.11.33. category: | 5.5% |
| National average in E.11.33. category: | 2.7% |
| Competitors within 5 mile radius: | Co-op, Tesco, Iceland, Asda, Alldays, Somerfield, Sainsbury, Dillons, Plymco, M &amp; W, One Stop |</p>
<table>
<thead>
<tr>
<th>Focus Group 7:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td>All Female</td>
</tr>
<tr>
<td>Age range:</td>
<td>55-64yrs</td>
</tr>
<tr>
<td>Children:</td>
<td>Older children that are no longer living at home</td>
</tr>
<tr>
<td>Location name:</td>
<td>Bishopston, Bristol</td>
</tr>
<tr>
<td>Location postcode:</td>
<td>BS7</td>
</tr>
<tr>
<td>Total population:</td>
<td>Bristol = 380,615 Bishopston = 52,216</td>
</tr>
<tr>
<td>Location classification:</td>
<td>City</td>
</tr>
<tr>
<td>JICNARS socio-economic group:</td>
<td>ASCI</td>
</tr>
<tr>
<td>Acorn type definition:</td>
<td>C.6. Affluent Urbanities, Town and City Areas</td>
</tr>
<tr>
<td>% of population in C.6.16. category:</td>
<td>32.3%</td>
</tr>
<tr>
<td>National average in C.6.16. category:</td>
<td>1.2%</td>
</tr>
<tr>
<td>Competitors within 5 mile radius:</td>
<td>Co-op, Tesco, Somerfield, Alldays, Waitrose</td>
</tr>
</tbody>
</table>
Appendix VII(a)

Focus Group Discussion Outline

INTRODUCTION

• Thank you all for coming to this discussion group this evening.
• Please feel free to help yourself to refreshments both now and during the session.
• Today's meeting is forming part of a sponsored PhD project being undertaken at the University of Plymouth.
• For those of you who have not participated in a group discussion before I would ask you to speak openly and honestly about your views and opinions on the subjects raised, and to participate as much as possible in the discussion.
• The session will be taped, but you are assured that all views and opinions given will be treated confidentially. Is this alright with everybody?
• The aim of the today's discussion is to find out about your food and grocery shopping behaviour and patterns, looking at things such as price, location etc, but with a special interest in the area of ethics and social responsibility.
• From your recruitment questionnaire it appears that you do give some consideration to these factors which is why you have been invited here today.
• I will start by looking at your basic shopping habits.
• Lead into Question 1 ......

QUESTION 1: (Individually)

• WHERE do you normally do your food & grocery shopping?
• WHAT STORE do you normally use?
• HOW OFTEN do you go?
• Do you go ON YOUR OWN or WITH OTHERS?
• Do you use any OTHER STORES for food & grocery shopping?

QUESTION 2: (Individually)

• You say you normally use ............
• WHY do you choose to shop at this store?*
• WHAT FACTORS influence your choice?*

* WRITE DOWN ANY REOCCURRING FACTORS ON PAPER & PUT ON BOARD
**QUESTION 3:** (Whole group)

- These factors are known as 'store image factors.
- Are there ANY OTHER FACTORS you would like to add here?*
- WHY are these important considerations?
*WRITE DOWN ANY OTHER FACTORS MENTIONED ON PAPER AND ADD TO BOARD

**QUESTION 4:** (Individually)

- WHAT do you understand by Ethics & Social Responsibility in retailing?
- How do you think it affects food & grocery retailing?

**QUESTION 5:** (Whole Group)

- WHAT OTHER FACTORS would you consider to come under the heading of Ethics & Social Responsibility in food & grocery retailing?*
*WRITE DOWN FACTORS ON PAPER AND STICK TO BOARD
- Are there ANY OTHER things you would like to add here?*
*ADD ANY MORE TO LIST ON BOARD

**QUESTION 6:** (Whole Group)

GIVE OUT GRIDS & PENS

- Look at all of the factors we have listed on the board and consider those that are IMPORTANT CONSIDERATIONS to you when you go food & grocery shopping.
- Only looking at one side of the grid could you WRITE DOWN the 10 most important factors to you ranking them so that the most important factor is at No. 1 and the least important at No. 10. Do not fill in the other side yet.

**QUESTION 7:** (Individually)

- Could you tell us what your two most important considerations were from your list?
- WHY have you placed these factors here?

**QUESTION 8:** (Whole group)

SEPARATE OUT LISTS INTO STORE IMAGE AND E & SR

- Looking at just the store image factors we have identified, could you write down on the grid the 5 most important factors you would consider when going food & grocery shopping.
QUESTION 9 (Individually)

- Could you tell us what your most important consideration was from your list?
- WHY is this factor most important to you?

QUESTION 10: (Whole group)

- Looking at just the ethical and social responsibility factors we have identified, could you write down on the grid the 5 most important factors you would consider when going food & grocery shopping.

QUESTION 11: (Individually)

- Could you tell us what your most important consideration was from your list?
- WHY is this factor most important to you?

QUESTION 12: (Whole group)

- Look at the factors that you have said are important to you. Do you consider these issues for all of your food & grocery shopping, or just for certain products?
- Could you unfold each grid. For each factor you have identified could you tick the product categories you would consider them for, and leave blank the ones that you do not.

QUESTION 13: (Whole Group)

- Think back to when you first became aware of the E & SR issues we have discussed here today.
- WHO OR WHAT made you aware of them? Media? Other People?
- WHAT changed your attitude towards these factors?

QUESTION 14: (Whole group)

- How easy do you find it to obtain information about these topics?
- What could grocery retailers do to make it easier for you?

QUESTION 15: (Individually)

- Do you consider any of the stores/supermarkets you use to be more ethically and socially responsible than the others?
- WHY do you perceive this?

QUESTION 16: (Whole group)

- We are trying to make people more aware of ethics and social responsibility in food & grocery retailing. What advice do you have for us?

GIVE SUMMARY OF DISCUSSION WITH MAIN POINTS

- Is there any thing we have missed?
Appendix VII(b)

Focus Group Grids

The grids shown in this appendix were used towards the end of the focus group discussions to elicit the ten most importance factors of shopping choice to respondents out of all the store image, product attribute and E&SR issues mentioned. In addition to ranking the factors of influence/concern, they were also asked to tick the product categories they applied to. The exercise was then repeated to elicit the five most important store image/product attribute factors (choosing from just the traditional store image/product attribute factors), and subsequently the five most important E&SR issues (picking solely from the E&SR issues).

<table>
<thead>
<tr>
<th>Overall Factors of Importance in Grocery Shopping</th>
<th>Fresh Fruit &amp; Vegetables</th>
<th>Fresh Meat &amp; Fish</th>
<th>Canned Meat &amp; Fish</th>
<th>Dairy Produce</th>
<th>Bread &amp; Morning Goods</th>
<th>Pasta, Rice &amp; Pulses</th>
<th>Non-alcoholic Beverages</th>
<th>Alcoholic Beverages</th>
<th>Personal Hygiene Products</th>
<th>Laundry &amp; Household Items</th>
<th>Paper Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>4.</td>
<td>3.</td>
<td>2.</td>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ethics &amp; Social Responsibility Factors of Importance in Grocery Shopping</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh Fruit &amp; Vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh Meat &amp; Fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canned Meat &amp; Fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy Produce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bread &amp; Morning Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pasta, Rice &amp; Pulses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-alcoholic Beverages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcoholic Beverages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Hygiene Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry &amp; Household Items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5.</th>
<th>4.</th>
<th>3.</th>
<th>2.</th>
<th>1.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Store Image / Product Attribute Factors of Importance in Grocery Shopping</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh Fruit &amp; Vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh Meat &amp; Fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canned Meat &amp; Fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy Produce</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bread &amp; Morning Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pasta, Rice &amp; Pulses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-alcoholic Beverages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcoholic Beverages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Hygiene Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry &amp; Household Items</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix VIII(a)

Item-Total Statistics for Reliability Analysis

Store Main Shop

The Item-total statistics shown in this appendix relate to the Reliability Analysis carried out for the store main shopping model in relation to the Factor Analysis discussed in Chapter 7, section 7.3.1.

**TABLE VIII.A 1: ITEM-TOTAL STATISTICS, RELIABILITY ANALYSIS: STORE MAIN SHOP**

<table>
<thead>
<tr>
<th>When deciding on a store for a main shop …</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Squared multiple correlation</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of no animal testing of products sold</td>
<td>54.136</td>
<td>101.735</td>
<td>.545</td>
<td>.405</td>
<td>.897</td>
</tr>
<tr>
<td>Importance of not dealing with oppressive regimes</td>
<td>54.259</td>
<td>101.033</td>
<td>.693</td>
<td>.675</td>
<td>.889</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>54.009</td>
<td>103.735</td>
<td>.631</td>
<td>.631</td>
<td>.892</td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; non-use of CFC's</td>
<td>53.950</td>
<td>100.605</td>
<td>.683</td>
<td>.516</td>
<td>.889</td>
</tr>
<tr>
<td>Importance of no pollution from transportation of goods</td>
<td>54.459</td>
<td>99.044</td>
<td>.662</td>
<td>.582</td>
<td>.890</td>
</tr>
<tr>
<td>Importance of no factory/intensive farming of products sold</td>
<td>54.123</td>
<td>97.314</td>
<td>.715</td>
<td>.590</td>
<td>.887</td>
</tr>
<tr>
<td>Importance of social/employment policy of the store</td>
<td>53.723</td>
<td>98.987</td>
<td>.649</td>
<td>.455</td>
<td>.891</td>
</tr>
<tr>
<td>Importance of support for the community by selling local produce</td>
<td>53.723</td>
<td>102.932</td>
<td>.648</td>
<td>.475</td>
<td>.891</td>
</tr>
<tr>
<td>Importance of the availability of organic products</td>
<td>54.782</td>
<td>103.130</td>
<td>.445</td>
<td>.357</td>
<td>.905</td>
</tr>
<tr>
<td>Importance of the availability of free range products</td>
<td>53.891</td>
<td>100.410</td>
<td>.697</td>
<td>.643</td>
<td>.889</td>
</tr>
<tr>
<td>Importance of the availability of Fair Trade products</td>
<td>54.155</td>
<td>99.309</td>
<td>.696</td>
<td>.646</td>
<td>.888</td>
</tr>
</tbody>
</table>
Appendix VIII(b)

Item-Total Statistics for Reliability Analysis

Store Top-up Shop

The Item-total statistics shown in this appendix relate to the Reliability Analysis carried out for the store top-up shopping model in relation to the Factor Analysis discussed in Chapter 7, section 7.3.2.

<table>
<thead>
<tr>
<th>When deciding on a store for a top-up shop</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Squared multiple correlation</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of no animal testing of products sold</td>
<td>50.423</td>
<td>172.10832</td>
<td>.63333</td>
<td>.525</td>
<td>.936</td>
</tr>
<tr>
<td>Importance of not dealing with oppressive regimes</td>
<td>50.605</td>
<td>168.889</td>
<td>.786</td>
<td>.789</td>
<td>.930</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>50.409</td>
<td>168.709</td>
<td>.783</td>
<td>.746</td>
<td>.930</td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; non-use of CFC's</td>
<td>50.264</td>
<td>167.921</td>
<td>.791</td>
<td>.670</td>
<td>.929</td>
</tr>
<tr>
<td>Importance of no pollution from transportation of goods</td>
<td>50.746</td>
<td>168.560</td>
<td>.740</td>
<td>.655</td>
<td>.931</td>
</tr>
<tr>
<td>Importance of no factory/intensive farming of products sold</td>
<td>50.482</td>
<td>165.456</td>
<td>.791</td>
<td>.672</td>
<td>.929</td>
</tr>
<tr>
<td>Importance of social/employment policy of the store</td>
<td>50.982</td>
<td>166.475</td>
<td>.728</td>
<td>.595</td>
<td>.932</td>
</tr>
<tr>
<td>Importance of support for the community by selling local produce</td>
<td>50.027</td>
<td>173.844</td>
<td>.679</td>
<td>.518</td>
<td>.934</td>
</tr>
<tr>
<td>Importance of the availability of organic products</td>
<td>51.277</td>
<td>171.297</td>
<td>.593</td>
<td>.489</td>
<td>.938</td>
</tr>
<tr>
<td>Importance of the availability of free range products</td>
<td>50.318</td>
<td>167.067</td>
<td>.798</td>
<td>.734</td>
<td>.929</td>
</tr>
<tr>
<td>Importance of the availability of Fair Trade products</td>
<td>50.696</td>
<td>165.035</td>
<td>.778</td>
<td>.698</td>
<td>.930</td>
</tr>
</tbody>
</table>
Appendix VIII(c)

Item-Total Statistics for Reliability Analysis

Product Main Shop

The Item-total statistics shown in this appendix relate to the Reliability Analysis carried out for the product main shopping model in relation to the Factor Analysis discussed in Chapter 7, section 7.3.3.

TABLE VIII.C.1: ITEM-TOTAL STATISTICS RELIABILITY ANALYSIS: PRODUCT MAIN SHOP

<table>
<thead>
<tr>
<th>When deciding on a product during a main shop ...</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Squared multiple correlation</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance that the product is safe for consumption</td>
<td>89.882</td>
<td>245.091</td>
<td>.441</td>
<td>.364</td>
<td>.934</td>
</tr>
<tr>
<td>Importance that the product is free from genetically modified ingredients</td>
<td>90.773</td>
<td>225.501</td>
<td>.711</td>
<td>.613</td>
<td>.928</td>
</tr>
<tr>
<td>Importance of recyclable or biodegradable packaging on product</td>
<td>91.046</td>
<td>226.391</td>
<td>.739</td>
<td>.653</td>
<td>.928</td>
</tr>
<tr>
<td>Importance the product is not overpackaged</td>
<td>91.032</td>
<td>233.630</td>
<td>.587</td>
<td>.456</td>
<td>.931</td>
</tr>
<tr>
<td>Importance of no animal testing of product</td>
<td>90.841</td>
<td>228.217</td>
<td>.641</td>
<td>.611</td>
<td>.930</td>
</tr>
<tr>
<td>Importance of no transportation of live animals</td>
<td>91.036</td>
<td>226.848</td>
<td>.672</td>
<td>.656</td>
<td>.930</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>90.850</td>
<td>234.484</td>
<td>.644</td>
<td>.706</td>
<td>.930</td>
</tr>
<tr>
<td>Importance of no use of child labour to produce goods</td>
<td>90.623</td>
<td>234.090</td>
<td>.588</td>
<td>.666</td>
<td>.931</td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; the non-use of CFC's</td>
<td>90.923</td>
<td>226.821</td>
<td>.719</td>
<td>.689</td>
<td>.928</td>
</tr>
<tr>
<td>Importance of no forest destruction</td>
<td>90.873</td>
<td>225.509</td>
<td>.770</td>
<td>.693</td>
<td>.927</td>
</tr>
<tr>
<td>Importance of honest &amp; clear labelling of product origin &amp; ingredients</td>
<td>90.264</td>
<td>236.853</td>
<td>.681</td>
<td>.670</td>
<td>.930</td>
</tr>
<tr>
<td>Importance of no artificial additives / preservatives in product</td>
<td>91.105</td>
<td>231.701</td>
<td>.588</td>
<td>.514</td>
<td>.931</td>
</tr>
<tr>
<td>Importance of no misrepresentation of product on packaging</td>
<td>90.468</td>
<td>236.606</td>
<td>.600</td>
<td>.715</td>
<td>.931</td>
</tr>
<tr>
<td>Importance of no misleading advertising of product</td>
<td>90.505</td>
<td>231.265</td>
<td>.681</td>
<td>.766</td>
<td>.929</td>
</tr>
<tr>
<td>Importance it is an organic product</td>
<td>91.900</td>
<td>227.570</td>
<td>.598</td>
<td>.558</td>
<td>.932</td>
</tr>
<tr>
<td>Importance it is a free range product</td>
<td>91.068</td>
<td>228.347</td>
<td>.705</td>
<td>.661</td>
<td>.928</td>
</tr>
<tr>
<td>Importance it is a Fair Trade product</td>
<td>91.177</td>
<td>229.653</td>
<td>.706</td>
<td>.667</td>
<td>.928</td>
</tr>
</tbody>
</table>
Appendix VIII(d)

Item-Total Statistics for Reliability Analysis

Product Top-up Shop

These Item-total statistics relate to the Reliability Analysis carried out for the product top-up shop model in relation to the Factor Analysis (Chapter 7, Sec 7.3.4).

**TABLE VIII.D.1: ITEM-TOTAL STATISTICS, RELIABILITY ANALYSIS: PRODUCT TOP-UP SHOP**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Squared multiple correlation</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance that the product is safe for consumption</td>
<td>85.746</td>
<td>387.981</td>
<td>.428</td>
<td>.374</td>
<td>.897</td>
</tr>
<tr>
<td>Importance that the product is free from genetically modified ingredients</td>
<td>86.718</td>
<td>364.194</td>
<td>.660</td>
<td>.553</td>
<td>.890</td>
</tr>
<tr>
<td>Importance of recyclable or biodegradable packaging on product</td>
<td>87.114</td>
<td>361.225</td>
<td>.740</td>
<td>.614</td>
<td>.888</td>
</tr>
<tr>
<td>Importance the product is not overpackaged</td>
<td>86.827</td>
<td>329.550</td>
<td>.285</td>
<td>.097</td>
<td>.946</td>
</tr>
<tr>
<td>Importance of no animal testing of product</td>
<td>86.823</td>
<td>365.306</td>
<td>.648</td>
<td>.628</td>
<td>.890</td>
</tr>
<tr>
<td>Importance of no transportation of live animals</td>
<td>87.032</td>
<td>364.049</td>
<td>.667</td>
<td>.672</td>
<td>.890</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>86.896</td>
<td>365.875</td>
<td>.705</td>
<td>.766</td>
<td>.889</td>
</tr>
<tr>
<td>Importance of no use of child labour to produce goods</td>
<td>86.641</td>
<td>365.492</td>
<td>.692</td>
<td>.769</td>
<td>.890</td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; the non-use of CFC’s</td>
<td>86.955</td>
<td>360.628</td>
<td>.744</td>
<td>.715</td>
<td>.888</td>
</tr>
<tr>
<td>Importance of no forest destruction</td>
<td>86.841</td>
<td>360.299</td>
<td>.775</td>
<td>.740</td>
<td>.888</td>
</tr>
<tr>
<td>Importance of honest &amp; clear labelling of product origin &amp; ingredients</td>
<td>86.359</td>
<td>368.414</td>
<td>.712</td>
<td>.667</td>
<td>.890</td>
</tr>
<tr>
<td>Importance of no artificial additives / preservatives in product</td>
<td>87.150</td>
<td>366.192</td>
<td>.651</td>
<td>.579</td>
<td>.890</td>
</tr>
<tr>
<td>Importance of no misrepresentation of product on packaging</td>
<td>86.527</td>
<td>367.958</td>
<td>.673</td>
<td>.791</td>
<td>.890</td>
</tr>
<tr>
<td>Importance of no misleading advertising of product</td>
<td>86.573</td>
<td>366.027</td>
<td>.709</td>
<td>.806</td>
<td>.889</td>
</tr>
<tr>
<td>Importance it is an organic product</td>
<td>87.977</td>
<td>363.721</td>
<td>.641</td>
<td>.585</td>
<td>.890</td>
</tr>
<tr>
<td>Importance it is a free range product</td>
<td>87.209</td>
<td>360.038</td>
<td>.749</td>
<td>.716</td>
<td>.888</td>
</tr>
<tr>
<td>Importance it is a Fair Trade product</td>
<td>87.341</td>
<td>362.052</td>
<td>.719</td>
<td>.694</td>
<td>.888</td>
</tr>
</tbody>
</table>
Appendix IX(a)

Item-Total Statistics for the Extended TPB

Store Main Shop

The Item-total statistics shown in this appendix relate to the Reliability Analysis carried out for the store main shopping model in relation to the Extended Theory of Planned behaviour in Chapter 8, Section 8.2.1, Table 8.1.

TABLE IX.A.1: ITEM-TOTAL STATISTICS, RELIABILITY ANALYSIS, Ext TPB: STORE MAIN SHOP

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Squared multiple correlation</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage retailers to behave in an E&amp;SR way</td>
<td>102.486</td>
<td>1544.461</td>
<td>.813</td>
<td>.806</td>
<td>.833</td>
</tr>
<tr>
<td>Encourage retailers to stock E&amp;SR products</td>
<td>101.877</td>
<td>1472.273</td>
<td>.843</td>
<td>.814</td>
<td>.824</td>
</tr>
<tr>
<td>Withdraw support from non-E&amp;SR companies</td>
<td>105.359</td>
<td>1540.423</td>
<td>.758</td>
<td>.638</td>
<td>.844</td>
</tr>
<tr>
<td>Result in using a store whose location is not convenient</td>
<td>108.164</td>
<td>1678.174</td>
<td>.581</td>
<td>.354</td>
<td>.885</td>
</tr>
<tr>
<td>Give peace of mind</td>
<td>97.241</td>
<td>1591.325</td>
<td>.604</td>
<td>.378</td>
<td>.883</td>
</tr>
<tr>
<td>Importance of family influence</td>
<td>48.868</td>
<td>494.133</td>
<td>.645</td>
<td>.574</td>
<td>.537</td>
</tr>
<tr>
<td>Importance of friends influence</td>
<td>49.841</td>
<td>496.098</td>
<td>.674</td>
<td>.583</td>
<td>.520</td>
</tr>
<tr>
<td>Importance of ethical organisations influence</td>
<td>43.286</td>
<td>544.087</td>
<td>.419</td>
<td>.186</td>
<td>.696</td>
</tr>
<tr>
<td>Importance of multi-national companies influence</td>
<td>58.077</td>
<td>732.811</td>
<td>.262</td>
<td>.082</td>
<td>.753</td>
</tr>
<tr>
<td>Easy to use E&amp;SR store for main shop</td>
<td>3.9455</td>
<td>3.1112</td>
<td>.6084</td>
<td>.3702</td>
<td>-</td>
</tr>
<tr>
<td>Control over using E&amp;SR store for main shop</td>
<td>3.9364</td>
<td>2.9731</td>
<td>.6084</td>
<td>.3702</td>
<td>-</td>
</tr>
<tr>
<td>Importance of no animal testing of products sold</td>
<td>54.1364</td>
<td>101.7347</td>
<td>.5445</td>
<td>.4045</td>
<td>.8972</td>
</tr>
<tr>
<td>Importance of not dealing with oppressive regimes</td>
<td>54.2591</td>
<td>101.0330</td>
<td>.6933</td>
<td>.6746</td>
<td>.8888</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>54.0091</td>
<td>103.7351</td>
<td>.6314</td>
<td>.6306</td>
<td>.8923</td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; non-use of CFC's</td>
<td>53.9500</td>
<td>100.6048</td>
<td>.6829</td>
<td>.5164</td>
<td>.8891</td>
</tr>
<tr>
<td>Importance of no pollution from transportation of goods</td>
<td>54.4591</td>
<td>99.0440</td>
<td>.6616</td>
<td>.5823</td>
<td>.8901</td>
</tr>
<tr>
<td>Importance of no factory/ intensive farming of products sold</td>
<td>54.1227</td>
<td>97.3136</td>
<td>.7146</td>
<td>.5901</td>
<td>.8869</td>
</tr>
</tbody>
</table>

cont ...
<table>
<thead>
<tr>
<th>Importance of employment/social policy of the store</th>
<th>54.5591</th>
<th>98.9874</th>
<th>.6487</th>
<th>.4545</th>
<th>.8909</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of support for the community by selling local produce</td>
<td>53.7227</td>
<td>102.9319</td>
<td>.6477</td>
<td>.4753</td>
<td>.8913</td>
</tr>
<tr>
<td>Importance of the availability of organic products</td>
<td>54.7818</td>
<td>103.1303</td>
<td>.4446</td>
<td>.3566</td>
<td>.9045</td>
</tr>
<tr>
<td>Importance of the availability of free range products</td>
<td>53.8909</td>
<td>100.4995</td>
<td>.6965</td>
<td>.6429</td>
<td>.8885</td>
</tr>
<tr>
<td>Importance of the availability of Fair Trade products</td>
<td>54.1545</td>
<td>99.3093</td>
<td>.6957</td>
<td>.6458</td>
<td>.8882</td>
</tr>
</tbody>
</table>
Appendix IX(b)

Item-Total Statistics for the Extended TPB
Store Top-up Shop

The Item-total statistics shown in this appendix relate to the Reliability Analysis carried out for the store top-up shopping model in relation to the Extended Theory of Planned behaviour in Chapter 8, Section 8.2.1, Table 8.2.

TABLE IX.B.1: ITEM-TOTAL STATISTICS, RELIABILITY ANALYSIS, Ext TPB: STORE TOP-UP SHOP

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Squared multiple correlation</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage retailers to behave in an E&amp;SR way</td>
<td>102.486</td>
<td>1544.461</td>
<td>.813</td>
<td>.806</td>
<td>.833</td>
</tr>
<tr>
<td>Encourage retailers to stock E&amp;SR products</td>
<td>101.877</td>
<td>1472.273</td>
<td>.843</td>
<td>.814</td>
<td>.824</td>
</tr>
<tr>
<td>Withdraw support from non-E&amp;SR companies</td>
<td>105.359</td>
<td>1540.423</td>
<td>.758</td>
<td>.638</td>
<td>.844</td>
</tr>
<tr>
<td>Result in using a store whose location is not convenient</td>
<td>108.164</td>
<td>1678.174</td>
<td>.581</td>
<td>.354</td>
<td>.885</td>
</tr>
<tr>
<td>Give peace of mind</td>
<td>97.241</td>
<td>1591.325</td>
<td>.604</td>
<td>.378</td>
<td>.883</td>
</tr>
<tr>
<td>Importance of family influence</td>
<td>48.868</td>
<td>494.133</td>
<td>.645</td>
<td>.574</td>
<td>.537</td>
</tr>
<tr>
<td>Importance of friends influence</td>
<td>49.841</td>
<td>496.098</td>
<td>.674</td>
<td>.583</td>
<td>.520</td>
</tr>
<tr>
<td>Importance of ethical organisations influence</td>
<td>43.286</td>
<td>544.087</td>
<td>.419</td>
<td>.186</td>
<td>.696</td>
</tr>
<tr>
<td>Importance of multi-national companies influence</td>
<td>58.077</td>
<td>732.811</td>
<td>.262</td>
<td>.082</td>
<td>.753</td>
</tr>
<tr>
<td>Easy to use E&amp;SR store for top-up shop</td>
<td>3.682</td>
<td>3.195</td>
<td>.695</td>
<td>.483</td>
<td>-</td>
</tr>
<tr>
<td>Control over using E&amp;SR store for top-up shop</td>
<td>3.791</td>
<td>3.052</td>
<td>.695</td>
<td>.483</td>
<td>-</td>
</tr>
<tr>
<td>Importance of no animal testing of products sold</td>
<td>50.423</td>
<td>172.108</td>
<td>.633</td>
<td>.525</td>
<td>.936</td>
</tr>
<tr>
<td>Importance of not dealing with oppressive regimes</td>
<td>50.605</td>
<td>168.887</td>
<td>.786</td>
<td>.789</td>
<td>.930</td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>50.409</td>
<td>168.709</td>
<td>.783</td>
<td>.746</td>
<td>.930</td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; non-use of CFC's (STFCFCSMN)</td>
<td>50.264</td>
<td>167.921</td>
<td>.791</td>
<td>.670</td>
<td>.929</td>
</tr>
<tr>
<td>Importance of no pollution from transportation of goods</td>
<td>50.746</td>
<td>168.556</td>
<td>.740</td>
<td>.655</td>
<td>.931</td>
</tr>
<tr>
<td>Importance of no factory/intensive farming of products sold</td>
<td>50.482</td>
<td>165.456</td>
<td>.791</td>
<td>.672</td>
<td>.929</td>
</tr>
</tbody>
</table>

cont ...
<table>
<thead>
<tr>
<th>Importance of employment/social policy of the store</th>
<th>50.982</th>
<th>166.475</th>
<th>.728</th>
<th>.595</th>
<th>.932</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of support for the community by selling local produce</td>
<td>50.027</td>
<td>173.844</td>
<td>.679</td>
<td>.518</td>
<td>.934</td>
</tr>
<tr>
<td>Importance of the availability of organic products</td>
<td>51.277</td>
<td>171.297</td>
<td>.593</td>
<td>.489</td>
<td>.938</td>
</tr>
<tr>
<td>Importance of the availability of free range products</td>
<td>50.318</td>
<td>167.067</td>
<td>.798</td>
<td>.734</td>
<td>.929</td>
</tr>
<tr>
<td>Importance of the availability of Fair Trade products</td>
<td>50.696</td>
<td>165.035</td>
<td>.778</td>
<td>.698</td>
<td>.930</td>
</tr>
</tbody>
</table>
Appendix IX(c)

**Item-Total Statistics for the Extended TPB**

**Product Main Shop**

The Item-total statistics shown in this appendix relate to the Reliability Analysis carried out for the product main shopping model in relation to the Extended Theory of Planned behaviour in Chapter 8, Section 8.2.1, Table 8.3.

**TABLE IX.C.1: ITEM-TOTAL STATISTICS, RELIABILITY ANALYSIS, Ext TPB: PRODUCT MAIN SHOP**

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Squared multiple correlation</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result in fair price for E&amp;SR producers</td>
<td>184.946</td>
<td>4327.148</td>
<td>.835</td>
<td>.837</td>
<td>.901</td>
</tr>
<tr>
<td>Prevent the exploitation of E&amp;SR producers</td>
<td>184.755</td>
<td>4341.054</td>
<td>.821</td>
<td>.837</td>
<td>.902</td>
</tr>
<tr>
<td>Encourage retailers to stock E&amp;SR products</td>
<td>182.682</td>
<td>4295.643</td>
<td>.795</td>
<td>.792</td>
<td>.904</td>
</tr>
<tr>
<td>Withdraw support from non-E&amp;SR companies</td>
<td>187.232</td>
<td>4359.083</td>
<td>.752</td>
<td>.653</td>
<td>.908</td>
</tr>
<tr>
<td>Result in purchasing a product that is not readily available</td>
<td>188.955</td>
<td>4523.386</td>
<td>.666</td>
<td>.619</td>
<td>.9143</td>
</tr>
<tr>
<td>Result in purchasing a product that is more expensive</td>
<td>186.186</td>
<td>4466.929</td>
<td>.672</td>
<td>.619</td>
<td>.914</td>
</tr>
<tr>
<td>Involve purchasing a quality product</td>
<td>178.423</td>
<td>4390.419</td>
<td>.672</td>
<td>.580</td>
<td>.914</td>
</tr>
<tr>
<td>Give peace of mind</td>
<td>178.732</td>
<td>4369.174</td>
<td>.664</td>
<td>.554</td>
<td>.915</td>
</tr>
<tr>
<td>Importance of family influence</td>
<td>48.614</td>
<td>478.403</td>
<td>.596</td>
<td>.539</td>
<td>.490</td>
</tr>
<tr>
<td>Importance of friends influence</td>
<td>50.227</td>
<td>487.848</td>
<td>.637</td>
<td>.541</td>
<td>.468</td>
</tr>
<tr>
<td>Importance of ethical organisations influence</td>
<td>43.341</td>
<td>522.929</td>
<td>.393</td>
<td>.167</td>
<td>.647</td>
</tr>
<tr>
<td>Importance of multi-national companies influence</td>
<td>58.041</td>
<td>718.770</td>
<td>.204</td>
<td>.074</td>
<td>.728</td>
</tr>
<tr>
<td>Easy to buy an E&amp;SR product during a main shop</td>
<td>4.250</td>
<td>2.618</td>
<td>.672</td>
<td>.451</td>
<td>-</td>
</tr>
<tr>
<td>Control over buying an E&amp;SR product during a main shop</td>
<td>4.227</td>
<td>2.332</td>
<td>.672</td>
<td>.451</td>
<td>-</td>
</tr>
<tr>
<td>Importance that the product is safe for consumption</td>
<td>89.882</td>
<td>245.091</td>
<td>.441</td>
<td>.364</td>
<td>.934</td>
</tr>
<tr>
<td>Importance that the product is free from genetically modified</td>
<td>90.773</td>
<td>225.501</td>
<td>.711</td>
<td>.613</td>
<td>.928</td>
</tr>
</tbody>
</table>

...cont
| Importance of recyclable or biodegradable packaging on product | 91.046 | 226.391 | .739 | .653 | .928 |
| Importance the product is not overpackaged | 91.032 | 233.629 | .587 | .456 | .931 |
| Importance of no animal testing of product | 90.841 | 228.217 | .641 | .611 | .930 |
| Importance of no transportation of live animals | 91.036 | 226.848 | .672 | .656 | .929 |
| Importance of no exploitation of developing countries | 90.850 | 234.484 | .644 | .706 | .930 |
| Importance of no use of child labour to produce goods | 90.623 | 234.090 | .588 | .666 | .931 |
| Importance of the ozone layer & the non-use of CFC’s | 90.923 | 226.821 | .719 | .689 | .928 |
| Importance of no forest destruction | 90.873 | 225.509 | .770 | .693 | .927 |
| Importance of honest & clear labelling of product origin & ingredients | 90.264 | 236.853 | .681 | .670 | .930 |
| Importance of no artificial additives / preservatives in product | 91.105 | 231.701 | .588 | .514 | .931 |
| Importance of no misrepresentation of product on packaging | 90.468 | 236.606 | .600 | .715 | .931 |
| Importance of no misleading advertising of product | 90.505 | 231.265 | .681 | .766 | .929 |
| Importance it is an organic product | 91.900 | 227.570 | .598 | .558 | .932 |
| Importance it is a free range product | 91.068 | 228.347 | .705 | .661 | .928 |
| Importance it is a Fair Trade product | 91.177 | 229.653 | .706 | .667 | .928 |
Appendix IX(d)

### Item-Total Statistics for the Extended TPB Product Top-up Shop

The Item-total statistics shown in this appendix relate to the Reliability Analysis carried out for the product top-up shopping model in relation to the Extended Theory of Planned behaviour in Chapter 8, Section 8.2.1, Table 8.4.

#### TABLE IX.D.1: ITEM-TOTAL STATISTICS, RELIABILITY ANALYSIS, Ext TPB: PRODUCT TOP-UP SHOP

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Squared multiple correlation</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result in fair price for E&amp;SR producers</td>
<td>184.946</td>
<td>4327.148</td>
<td>.835</td>
<td>.837</td>
<td>.901</td>
</tr>
<tr>
<td>Prevent the exploitation of E&amp;SR producers</td>
<td>184.755</td>
<td>4341.054</td>
<td>.821</td>
<td>.837</td>
<td>.902</td>
</tr>
<tr>
<td>Encourage retailers to stock E&amp;SR products</td>
<td>182.682</td>
<td>4295.643</td>
<td>.795</td>
<td>.792</td>
<td>.904</td>
</tr>
<tr>
<td>Withdraw support from non-E&amp;SR companies</td>
<td>187.232</td>
<td>4359.083</td>
<td>.752</td>
<td>.653</td>
<td>.908</td>
</tr>
<tr>
<td>Result in purchasing a product that is not readily available</td>
<td>188.955</td>
<td>4523.386</td>
<td>.666</td>
<td>.619</td>
<td>.914</td>
</tr>
<tr>
<td>Result in purchasing a product that is more expensive</td>
<td>186.186</td>
<td>4466.929</td>
<td>.672</td>
<td>.619</td>
<td>.914</td>
</tr>
<tr>
<td>Involve purchasing a quality product</td>
<td>178.423</td>
<td>4390.419</td>
<td>.676</td>
<td>.580</td>
<td>.914</td>
</tr>
<tr>
<td>Give peace of mind</td>
<td>178.732</td>
<td>4369.174</td>
<td>.664</td>
<td>.554</td>
<td>.915</td>
</tr>
<tr>
<td>Importance of family influence</td>
<td>48.614</td>
<td>478.403</td>
<td>.596</td>
<td>.539</td>
<td>.490</td>
</tr>
<tr>
<td>Importance of friends influence</td>
<td>50.227</td>
<td>487.848</td>
<td>.637</td>
<td>.541</td>
<td>.468</td>
</tr>
<tr>
<td>Importance of ethical organisations influence</td>
<td>43.341</td>
<td>522.929</td>
<td>.393</td>
<td>.167</td>
<td>.647</td>
</tr>
<tr>
<td>Importance of multi-national companies influence</td>
<td>58.041</td>
<td>718.770</td>
<td>.204</td>
<td>.074</td>
<td>.728</td>
</tr>
<tr>
<td>Easy to buy an E&amp;SR product during a top-up shop</td>
<td>3.923</td>
<td>3.222</td>
<td>.723</td>
<td>.522</td>
<td>-</td>
</tr>
<tr>
<td>Control over buying an E&amp;SR product during a top-up shop</td>
<td>3.755</td>
<td>2.816</td>
<td>.723</td>
<td>.522</td>
<td>-</td>
</tr>
<tr>
<td>Importance that the product is safe for consumption (PRSAFETU)</td>
<td>85.746</td>
<td>387.981</td>
<td>.428</td>
<td>.374</td>
<td>.897</td>
</tr>
</tbody>
</table>

cont ...
<table>
<thead>
<tr>
<th>Importance</th>
<th>Score1</th>
<th>Score2</th>
<th>Score3</th>
<th>Score4</th>
<th>Score5</th>
<th>Score6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance that the product is free from genetically modified ingredients</td>
<td>86.718</td>
<td>364.194</td>
<td>.660</td>
<td>.553</td>
<td>.890</td>
<td></td>
</tr>
<tr>
<td>Importance of recyclable or biodegradable packaging on product</td>
<td>87.114</td>
<td>361.225</td>
<td>.740</td>
<td>.614</td>
<td>.888</td>
<td></td>
</tr>
<tr>
<td>Importance the product is not overpackaged</td>
<td>86.827</td>
<td>329.550</td>
<td>.285</td>
<td>.097</td>
<td>.946</td>
<td></td>
</tr>
<tr>
<td>Importance of no animal testing of product</td>
<td>86.823</td>
<td>365.306</td>
<td>.648</td>
<td>.628</td>
<td>.890</td>
<td></td>
</tr>
<tr>
<td>Importance of no transportation of live animals</td>
<td>87.032</td>
<td>364.049</td>
<td>.667</td>
<td>.672</td>
<td>.890</td>
<td></td>
</tr>
<tr>
<td>Importance of no exploitation of developing countries</td>
<td>86.896</td>
<td>365.875</td>
<td>.705</td>
<td>.766</td>
<td>.889</td>
<td></td>
</tr>
<tr>
<td>Importance of no use of child labour to produce goods</td>
<td>86.641</td>
<td>365.491</td>
<td>.692</td>
<td>.769</td>
<td>.890</td>
<td></td>
</tr>
<tr>
<td>Importance of the ozone layer &amp; the non-use of CFC's</td>
<td>86.955</td>
<td>360.628</td>
<td>.744</td>
<td>.715</td>
<td>.888</td>
<td></td>
</tr>
<tr>
<td>Importance of no forest destruction</td>
<td>86.841</td>
<td>360.299</td>
<td>.775</td>
<td>.740</td>
<td>.887</td>
<td></td>
</tr>
<tr>
<td>Importance of honest &amp; clear labelling of product origin &amp; ingredients</td>
<td>86.359</td>
<td>368.414</td>
<td>.712</td>
<td>.667</td>
<td>.890</td>
<td></td>
</tr>
<tr>
<td>Importance of no artificial additives / preservatives in product</td>
<td>87.150</td>
<td>366.192</td>
<td>.651</td>
<td>.579</td>
<td>.890</td>
<td></td>
</tr>
<tr>
<td>Importance of no misrepresentation of product on packaging</td>
<td>86.527</td>
<td>367.958</td>
<td>.673</td>
<td>.791</td>
<td>.890</td>
<td></td>
</tr>
<tr>
<td>Importance of no misleading advertising of product</td>
<td>86.573</td>
<td>366.027</td>
<td>.709</td>
<td>.806</td>
<td>.889</td>
<td></td>
</tr>
<tr>
<td>Importance it is an organic product</td>
<td>87.977</td>
<td>363.721</td>
<td>.641</td>
<td>.585</td>
<td>.890</td>
<td></td>
</tr>
<tr>
<td>Importance it is a free range product</td>
<td>87.209</td>
<td>360.038</td>
<td>.749</td>
<td>.716</td>
<td>.888</td>
<td></td>
</tr>
<tr>
<td>Importance it is a Fair Trade product</td>
<td>87.341</td>
<td>362.052</td>
<td>.719</td>
<td>.694</td>
<td>.888</td>
<td></td>
</tr>
</tbody>
</table>
COPYRIGHT STATEMENT

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with its author, and that no quotation from the thesis and no information derived from it may be published without the author’s prior consent.