Sarah has just started her final year as an undergraduate student on a BA (Hons) International Tourism Management course and she also works as a part-time waitress at the Mexican Sunrise restaurant. She is usually very bubbly and enthusiastic in her work and well liked by regular diners at the restaurant. However, Carlos Ramirez, the restaurant manager, has noticed that Sarah has looked worried and preoccupied during her recent shifts and this is beginning to affect how she deals with the customers. So, he asks her if she can come to see him in his office after her current shift finishes.

Carlos said, ‘Hi, Sarah, come in and have a seat and don’t look so worried – I’m not about to sack you! It’s just that I’ve noticed lately that you don’t appear to be quite your effervescent self with the customers and I wondered if there was a problem I could help with.’ Relieved, Sarah said, ‘Well, you’re right, I am a bit worried about something. When I started the final year of my course, the tutors told me that a major part of this year was going to be taken up with the individual research project and this will account for 30 per cent of my final marks and have a major impact on the degree I get. As if that wasn’t bad enough, they then scared us out of our wits by saying it would be the real test of how good we are and, because we have never done anything like this before, we had better get on with it quickly because we will have to deal with things like research philosophy, deduction and induction, hypothesis testing, collecting empirical data and probably use inferential statistics to analyse this. My God, it’s like another language and I don’t think I can cope.’

Carlos smiled, ‘Ah, so that’s it. I knew there was something up. Okay, Sarah, let’s see if we can’t put your mind at rest a little over some of these things. When I was in your position I felt the same. I felt like I needed to be Einstein to be able to do it, but I learned that, really, all this research stuff is not as daunting as you think. A lot of it is new jargon that you haven’t encountered before and, once you learn the research language a little, it will not be so frightening. Let me give

<table>
<thead>
<tr>
<th>Research Reality Scenario</th>
<th>Do I Need to Be Einstein to Do It?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah has just started her final year as an undergraduate student on a BA (Hons) International Tourism Management course and she also works as a part-time waitress at the Mexican Sunrise restaurant. She is usually very bubbly and enthusiastic in her work and well liked by regular diners at the restaurant. However, Carlos Ramirez, the restaurant manager, has noticed that Sarah has looked worried and preoccupied during her recent shifts and this is beginning to affect how she deals with the customers. So, he asks her if she can come to see him in his office after her current shift finishes.</td>
<td>Carlos said, ‘Hi, Sarah, come in and have a seat and don’t look so worried – I’m not about to sack you! It’s just that I’ve noticed lately that you don’t appear to be quite your effervescent self with the customers and I wondered if there was a problem I could help with.’ Relieved, Sarah said, ‘Well, you’re right, I am a bit worried about something. When I started the final year of my course, the tutors told me that a major part of this year was going to be taken up with the individual research project and this will account for 30 per cent of my final marks and have a major impact on the degree I get. As if that wasn’t bad enough, they then scared us out of our wits by saying it would be the real test of how good we are and, because we have never done anything like this before, we had better get on with it quickly because we will have to deal with things like research philosophy, deduction and induction, hypothesis testing, collecting empirical data and probably use inferential statistics to analyse this. My God, it’s like another language and I don’t think I can cope.’</td>
</tr>
</tbody>
</table>
you an example. Remember when you first came to work here, you were a little lost because of the jargon we use in the restaurant until I explained it for you in terms you were already familiar with?’ Sarah nodded. ‘Well, it’s pretty much the same with research,’ Carlos said, and continued, ‘You know more than you think you do. Do you remember when I asked you to come up with some ideas on how we could improve the service in the restaurant?’ Sarah nodded again. ‘Well, you did, and some very good ones as well. So how did you do it?’

Sarah replied, ‘I’d already had some ideas from what I’d read and studied on the course, from my experience of working here and I went to suss out how a couple of other restaurants operated. Then I thought, well, if we could do X then that might improve Y because I could see the connection between the two. So, if you remember, we set this up as a trial for a couple of weeks to see if it was true.’

‘And how did we decide whether it was or not?’ Carlos asked. ‘We compared the restaurant’s performance before the trial with its performance during the trial and then I wrote this up in a report for you, which proved my original thoughts were right,’ said Sarah.

‘Exactly,’ said Carlos. ‘So, let me put this into research jargon for you, because this is what you did, you conducted a piece of research! You began by examining existing evidence on how to organise restaurant service, then you used this to formulate some educated guesses, or hypotheses, on likely causes and effects. What we then did, through our trial, was to set up a type of experiment to test your hypotheses to see if they were correct or not. How did we find these out? By analysing the restaurant’s performance figures, or data, and then we came to the conclusion that this information indicated the original hypotheses were correct. So, when you wrote up these findings in the report, this gave us the rationale for changing the service system.’

‘Wow, when you put it like that, I guess I do know more than I thought I did and maybe it’s not going to be such a worry after all. Thanks, Carlos – you’ve put my mind at rest and I think I’ll be okay now. It’s really very good of you to take the time and trouble to help me in this way.’

‘No problem, Sarah’, Carlos said, ‘After all, I do have an ulterior motive. If you’re happier and more relaxed, you’ll be back to your old self at work and the customers will be happier again.’

‘Ah,’ said Sarah, ‘what was it you said about Einstein earlier? I think you are smarter than you let on!’

In this respect you may find it helpful to visit the Video Links Section of the Companion Website (study.sagepub.com/brotherton) to view the ‘Battling Bad Science’ video via the link provided there.

To explore further and think about the efficacy of the traditional view of the scientific method and these characteristics, go to the Video Links section of the Companion Website (study.sagepub.com/brotherton) and view the ‘Monty Python’ and ‘The Scientific Method Is Crap’ videos via the links provided.
### TABLE 1.1 Exploratory, descriptive and explanatory research compared

<table>
<thead>
<tr>
<th>Exploratory research</th>
<th>Descriptive research</th>
<th>Explanatory research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide first descriptions of the key facts and actors involved in a situation or phenomenon</td>
<td>Accurately and systematically describe a situation, phenomenon or problem</td>
<td>Verify the predictive ability of a principle or theory</td>
</tr>
<tr>
<td>Produce an empirically based picture of what is happening</td>
<td>Develop descriptive inferences regarding relationships, processes and mechanisms</td>
<td>Test existing theories and empirical findings to develop better explanations</td>
</tr>
<tr>
<td>Collect a large amount of relatively unstructured information to develop a range of ideas to help build tentative propositions</td>
<td>Providing a ‘picture’ of the what, who, when and where to create a context for further investigation</td>
<td>Specify and explain why and how the mechanism of an underlying process works</td>
</tr>
<tr>
<td>Investigate the feasibility of conducting further research into the issues</td>
<td>Identify possible associations and/or correlations</td>
<td>Synthesise differing topics/issues and/or theoretical perspectives into a more unified structure</td>
</tr>
<tr>
<td>Identify the key focus for issues and begin to develop more refined research questions for further inquiry</td>
<td>Record and document the effects of changes, interventions etc.</td>
<td>Test, develop and refine an existing theory so that it becomes a more complete and useful explanation</td>
</tr>
<tr>
<td>Explore the possibilities for new research directions and techniques</td>
<td>Synthesise raw data by classification and categorisation</td>
<td>Enhance the value of an existing theory by applying it to develop a better understanding of a new context or problem</td>
</tr>
<tr>
<td>Provide empirical data as a basis for the development of theoretical propositions</td>
<td>Identify linkages in terms of sequences, chains, steps etc.</td>
<td>Generate stronger, more complete, empirical evidence to support or refute an existing theoretical explanation</td>
</tr>
</tbody>
</table>

### TABLE 1.2 Pure and applied research compared

<table>
<thead>
<tr>
<th>Pure research</th>
<th>Applied research</th>
</tr>
</thead>
<tbody>
<tr>
<td>The pursuit of knowledge is undertaken for its own sake and its value is assessed by academic peers</td>
<td>Research is regarded as ‘utilitarian’, having a practical use value, and is undertaken in response to a specific problem or issue arising in the real world, being judged on its ability to provide satisfactory solutions</td>
</tr>
<tr>
<td>The researcher has, in theory, total freedom to select problems and subjects to research</td>
<td>The selection of research problems and questions is more focused on the problems and concerns of practitioners</td>
</tr>
<tr>
<td>The quality of the research is measured by the standards of scholarship and the requirements of academic rigour</td>
<td>Research can be ‘quick and dirty’ or may accord with accepted scientific standards. Concern may be more focused on the practical rather then the ‘academic’ value of the work</td>
</tr>
<tr>
<td>The key focus lies with the ‘credibility’ of the research design and the rigour of its implementation</td>
<td>The key focus lies in the extent of the generalisability of the findings to explain and provide solutions for real-world problems</td>
</tr>
<tr>
<td>The primary objective is to make a contribution to basic, theoretical knowledge</td>
<td>The primary objective is to generate results that have a practical application and value</td>
</tr>
<tr>
<td>Success is measured by the acceptance and significance of the outcomes to peers in the same scientific community</td>
<td>Success is measured by the ‘use value’ of the outcomes in the real world in that they facilitate greater understanding and enable more effective solutions to be devised</td>
</tr>
</tbody>
</table>
FIGURE 1.1 The inductive approach to research

FIGURE 1.2 The deductive approach to research
<table>
<thead>
<tr>
<th>Area of research activity</th>
<th>Percentage involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>New product/service development</td>
<td>44</td>
</tr>
<tr>
<td>Market research</td>
<td>55</td>
</tr>
<tr>
<td>Competitor intelligence</td>
<td>26</td>
</tr>
<tr>
<td>Site/location feasibility</td>
<td>35</td>
</tr>
<tr>
<td>New equipment evaluation</td>
<td>4</td>
</tr>
<tr>
<td>Recipe/dish development</td>
<td>2</td>
</tr>
<tr>
<td>Menu development</td>
<td>4</td>
</tr>
<tr>
<td>Pilot/test studies</td>
<td>17</td>
</tr>
<tr>
<td>Employee surveys</td>
<td>26</td>
</tr>
<tr>
<td>Customer surveys</td>
<td>42</td>
</tr>
<tr>
<td>Raw material/supply sourcing</td>
<td>4</td>
</tr>
<tr>
<td>Advertising effectiveness</td>
<td>37</td>
</tr>
<tr>
<td>Service quality measurement</td>
<td>33</td>
</tr>
<tr>
<td>Benchmarking</td>
<td>44</td>
</tr>
<tr>
<td>Environmental scanning</td>
<td>4</td>
</tr>
<tr>
<td>Energy management</td>
<td>4</td>
</tr>
<tr>
<td>Investment analysis/appraisal</td>
<td>17</td>
</tr>
<tr>
<td>IT systems/applications</td>
<td>20</td>
</tr>
<tr>
<td>Ecommerce</td>
<td>13</td>
</tr>
<tr>
<td>Business process re-engineering</td>
<td>9</td>
</tr>
<tr>
<td>Facilities design</td>
<td>9</td>
</tr>
<tr>
<td>Other areas:</td>
<td></td>
</tr>
<tr>
<td>economic impacts of tourism</td>
<td>4</td>
</tr>
<tr>
<td>sales force management</td>
<td>2</td>
</tr>
<tr>
<td>revenue planning and management</td>
<td>2</td>
</tr>
<tr>
<td>distribution and channel management</td>
<td>2</td>
</tr>
<tr>
<td>training assessment</td>
<td>2</td>
</tr>
<tr>
<td>tourism master planning</td>
<td>2</td>
</tr>
<tr>
<td>tourism sector reviews</td>
<td>2</td>
</tr>
<tr>
<td>destination branding</td>
<td>2</td>
</tr>
<tr>
<td>visitor management plans</td>
<td>2</td>
</tr>
<tr>
<td>customer/marketing studies</td>
<td>2</td>
</tr>
<tr>
<td>cultural and heritage tourism</td>
<td>2</td>
</tr>
<tr>
<td>consumer choice criteria</td>
<td>2</td>
</tr>
<tr>
<td>accommodation quality standards</td>
<td>2</td>
</tr>
<tr>
<td>brand research</td>
<td>2</td>
</tr>
<tr>
<td>skills audits</td>
<td>2</td>
</tr>
</tbody>
</table>

Finally, the Web Links section of the Companion Website (study.sagepub.com/brotherton) has a series of links to further material relating to this chapter that may prove useful in helping you to think about the issues discussed in this chapter.