## 5

# DEVELOPING THE CONCEPTUAL FRAMEWORK



You can also do this for yourself by viewing the video specifically on the conceptual framework contained in the Video Links section of the Companion Website (study.sagepub.com/brotherton).

## Research in Action



#### **Critical Success Factors in Hotels**

Before attempting to complete the questionnaire it is important, for the validity of this research, that all respondents have the same understanding of the concepts/terms used in this questionnaire. Therefore, we would ask that you take a few minutes to read and digest the definitions and examples provided here, before you respond to the questions, to ensure there is no misunderstanding of our usage of the terminology throughout the questionnaire.

**Critical Success Factors (CSFs)** are defined here as: the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the company.

CSFs are not Corporate or Business Objectives, they are the factors critical to success in meeting such objectives. In short, they are not ends, but the means to these ends. A useful way to think of the difference between the objectives and CSFs is that the former are usually prefixed with 'To', and the latter with 'By'. The following example should help to illustrate this difference:

Objective - To maintain our position as market leader.

CSF – By improving the standard of our customer service.

## Research Reality Scenario



## What Are These Things Known as Variables?

Bill is Assistant General Manager at the Eldorado theme park and has worked in the tourism industry for 10 years, since gaining a Higher National Diploma qualification when he was younger. He is currently studying, on a part-time basis, for an MA in tourism management at the University of Rutland. Penny, the General Manager of Eldorado, has a BA and an MA in tourism management and is keen to help Bill fulfil his potential and gain the MA qualification.

During their regular weekly meeting, Penny has noticed that Bill has seemed less confident than usual and, at the end of the last meeting, asked him, 'Is there something wrong, Bill? You seem to be distracted in some way. Is there anything I can do to help?'

Bill was a little embarrassed, but replied, 'Well, yes, there is something I'm worried about and you probably can help, but I have been too embarrassed to ask you because you might think I'm stupid for not understanding it.'

Penny laughed, 'Come on, Bill, we've known each other long enough for you to know that won't be the case.'

'Okay,' said Bill, 'It's to do with my MA course. We have just started the Research Methods module and the tutor gave a lecture last week on conceptual frameworks and variables that went straight over my head. I'm a practical man, not some academic theorist, so when you get someone rambling on about independent, dependent, intervening and moderating variables and how important these are for doing research, not only does it scare me rigid but also I don't understand the jargon.'

'Ah, I see,' said Penny. 'Well, the good news is it's not as bad as you think and the bad news is that you are going to kick yourself when I explain it because you do know what these are but not in the terms that the academic used. Okay, you can look at me sceptically, but I'll prove it to you. Do you remember last year, when we had the problem of our marketing effort not delivering the extra numbers of visitors we wanted?' Bill nodded. 'And', Penny continued, 'I asked you to investigate this for us to find out why?' Bill nodded again. 'How did you explain to me what was happening?' asked Penny.

Bill replied, 'Well, I said that, although the extra marketing spend and effort should have led to a higher number of visitors, the fact that our marketing messages tended to create some less than positive impressions of the park among potential visitors and that our competitors launched their campaigns around the same time diluted the effect our messages might have had.'

'Exactly,' said Penny. 'Well, let's just think about what you've said for a moment. Getting more visitors was seen to be dependent on increasing the marketing spend and effort, but that relationship didn't materialise in the way we expected

it to because of the other factors you identified. So, let's translate that into "variablespeak". The marketing spend/effort we can change separately – independently – of the number of visitors we have. We can manipulate or control this, but we can't control its effects – that is, how many more or fewer visitors it generates, agreed?'

'Agreed,' said Bill.

'So,' Penny continued, 'which is the independent variable and which is the dependent variable?'

'That's obvious,' Bill retorted. 'Because the number of visitors is, at least to some degree, dependent on or influenced by our marketing effort, that must be the dependent variable and the thing we can change independently of it is our marketing spend/effort, so that must be the independent variable.'

'Spot on, Bill,' Penny exclaimed. 'You see, I told you that you knew what they were and you do. Now let's address the others. You said that our competitors' marketing campaigns diluted or reduced the effect our marketing effort had on increasing visitor numbers. So, what type of variable is that?'

'I guess it was a moderating variable,' Bill replied nervously, 'because it wasn't something that happened as a direct consequence of our extra marketing effort, but had an impact from outside of the relationship between extra effort and visitor numbers.'

'Same again, Bill,' Penny said, 'you've got it in one.'

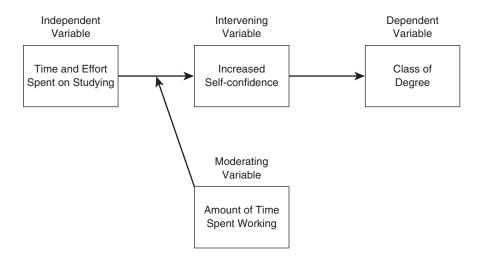
'Okay,' Bill said, now more confident, 'so the unintended, more negative perceptions our messages created must be the intervening variable in this scenario because they occurred as a result of us activating the campaign and intervened to alter the relationship we expected between the extra effort and higher visitor numbers.'

Penny smiled and said, 'Absolutely. So, do you need any more tuition on this?'

'No thanks,' Bill said. 'You were right, I did know it all along. I just got confused by the different terminology and jargon.'

'That's right,' Penny replied. She then went on to say mischievously, 'So you created a conceptual framework that identified and included all the key variables, specified the nature of the relationship between these, hypothesised what the nature and direction of the cause–effect mechanism was between the independent and dependent variables, identified other variables that acted to alter this prediction and stated how and why it would work.'

Bill laughed and said, 'Now, wait a minute, I'll be thinking of myself as some sort of genius soon!'



**FIGURE 5.1** Stating the relationship between variables

### Research in Action



#### Identifying Moderating Variables via Data Analysis

A preliminary analysis of the phase 1 questionnaire results suggested that it might be possible to subdivide the critical success factor (CSF), critical skills and competencies (CSC) and critical performance measures (CPM) items into the categories of People, Products and Processes. However the factor analysis\* conducted on the phase 2 results did not support such an ex ante contention as the factors generated by this procedure did not correspond with such a categorisation. The factor analysis results for the CSF items could be interpreted in two different ways. First, the CSFs placed into Factor Two – namely, Location, Size and Range of Products – may be seen to be concerned with the 'physical' nature of BASS Taverns' provision, with those placed into Factor One more concerned with the 'human' aspects. However, this is an interpretation we reject because we would expect such a categorisation might reasonably place CSF 1 (Quality of the Tavern's Premises) in the 'physical' rather than the 'human' category. Thus a more robust way of interpreting these results may be to regard the CSFs placed in Factor Two to be those largely outside of the individual Licensed House Managers' (LHMs) control and hence more strategic in nature, whereas those in Factor One are subject to local control and are more operational in character.

Source: © Brotherton, B. and Watson, S., Shared priorities and the management development process: a case study of Bass Taverns, *Tourism and Hospitality Research (The Surrey Quarterly Review)*, 2000. Reproduced with permission of Palgrave Macmillan.

\*Factor analysis is generally known as a 'data reduction' technique and is explained further in Chapter 9. It is a statistical technique used to explore the extent to which the data can be grouped together into separate categories (or factors) to represent different dimensions of the concept(s) being investigated.



To review and strengthen your understanding of constructs, concepts and variables you may find it helpful to examine the additional resources provided on the Companion Website (study.sagepub.com/brotherton). Here, in the Video Links section, you will find links to video material dealing with the nature and roles of the different types of variables and the relationships these have with research questions. In the Web Links section you will also find links to material dealing with similar issues.

#### **Key Concept**



#### The Conditions for Causality

The first condition is that what is regarded as the cause must happen before the effect, otherwise it could not be regarded as a potential cause. This is known as the 'temporal' or time condition.

The second is that there are not any other possible cause(s) of the effect. If there are other variables that can cause the same effect, either in conjunction with the one we are specifying or independent of it, then the cause–effect relationship specified in our hypothesis would only be, at best, partially true and, at worst, false or erroneous. This is known as the elimination of alternative causes condition.

The third is that the condition of covariation can be met. This simply means that both variables, or sets of variables, in the cause and effect categories vary together – that is, when prices change, there is always some change in consumer demand for the product or service.

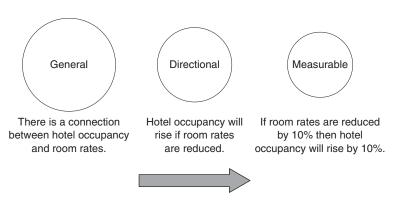


FIGURE 5.2 The stages of hypothesis development

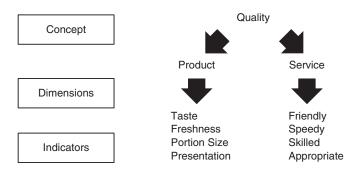
#### **Key Concept**



#### The Characteristics of a Good Hypothesis

#### Good hypotheses:

- 1. are written as statements not questions.
- 2. are objective and do not include any subjective terms, personal opinions or value judgements.
- 3. suggest or postulate a relationship between at least two variables.
- 4. are derived from, and linked to, the literature on which they are based.
- 5. should be stated in a direct, explicit and concise form and be 'uni-dimensional', i.e. they test only one relationship at a time.
- 6. are testable you should be able to accept or reject the hypothesis on the basis of the empirical evidence.
- 7. should be non-trivial they should be statements of some importance or significance.
- 8. must be internally consistent the logic expressed in them must be sound.
- 9. connect the theoretical and real worlds by framing aspects of the former in such a way that these can be measured and tested in the latter.
- 10. tell you exactly what type of data needs to be collected for them to be tested.



**FIGURE 5.3** Operationalising a concept



See the video specifically on operationalisation available via the appropriate link in the Video Links section of the Companion Website (study.sagepub.com/brotherton).



If you would like to see examples of how many of these issues associated with establishing validity and reliability in the development of measurement scales are dealt with in actual hospitality/tourism studies I would recommend consulting the journal paper downloadable links included in the Sage Journal Papers section for this chapter on the Companion Website (study.sagepub.com/brotherton). In addition, the Bangor University link contained in the Web Links section deals specifically with the issues of measurement, validity and reliability.