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Measuring Journal Quality: Developing a Multi-Item Measure and investigating its Usefulness in Marketing

By

Andrew Shorrock Hirst

A Doctoral Thesis

Submitted in partial fulfilment of the requirement for the award of

The Degree of Doctor of Philosophy of Loughborough University

October, 1999
Abstract

The research journal especially in marketing, is now not only the primary communication method, but is also used to evaluate an academic's research contribution. Measuring the quality of research journals has also become more complex as a result of the rapid increase in the number of journals published. In marketing research, scientists have professed the use of sophisticated or more sensitive techniques yet little has been done to improve the measurement of research journals. This thesis investigates the use of alternative measurement techniques to explore this important aspect of the academic environment.

Historically two dominant methodologies have been used to measure the quality of journals: Peer review and Citation Analysis. However these methods have been criticised and academics have been sceptical of the results, taking the opinion that these methods create bias in the results. Previous methods have also taken a one-dimensional view of journal quality with little time devoted to uncovering the criteria that governs that quality. The research applied marketing methodologies that combined qualitative and quantitative research techniques to explore the problem. Four critical research questions were examined in this study.

What are the important elements of journal research standing?
38 items were found to be important elements of journal research standing.

Is journal research standing a multi-dimensional construct?
Three underlying dimensions represented the construct journal research standing, these were Reputation, Reviewing Standards and Content Quality.

Do academics acknowledge the multiple dimensions of journal research standing?
Academics acknowledged the differences between dimensions for ten selected marketing journals.

What moderating factors affect academic opinions of journal research standing?
Academic attitudes towards a journal's research standing are moderated by their country of origin, familiarity and research fit. Attitudes towards a journal may also be moderated when academics have a paper rejected from that particular journal.

Keywords: Journal Quality, Prestige, Journal Research Standing, Scalcment, Conjoint Analysis, Marketing.
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Without mentioning my friends would be of the utmost disservice to them. They provide me with an environment that I could not do without. Their support has been essential to my life and, I would not swap them for anything. In no particular order John, Dave, Ken and Chip; my house mates especially John; Vicky and Colin, Staggy, all the friends I’ve met along the way, and the ones I’ve always known, and Rachel who has made writing up the most enduring and beautiful time of my life. THANKS! I Owe you all at least 300.

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Dedicated to Daisy Shorrock and in the memory of Ernest Shorrock
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Chapter 1 - Introduction

Research journals are the primary method for communicating scientific knowledge. Due to progress in communication technology, the academic community has developed into a global community. Frequently researchers collaborate with academics from different countries. One of the drivers for these collaborations is the technical demand of modern research techniques. Nations are no longer insular to their own research network but integrate their research with that of other countries. Modern library facilities means that journal articles can be acquired easily through reference databases. In recent years however journals have not only become the mode of communication but have also become a measure of research quality.

Evaluating the research quality of other academics and institutions can be difficult for two reasons. The first is that the evaluator will be unlikely to have the knowledge that is required to evaluate and compare a wide variety of research. The second reason is that the process of evaluating research is time consuming. However modern research journals are in some way peer reviewed. This means that articles are scrutinised before publication, and thus the quality of the research is evaluated by the journal. Journals are therefore used as a surrogate measure of research quality.

Publishing in a high quality journal can have a major impact on career prospects, research funding and other parts of academic life. Research bodies closely monitor the research output of academic departments. In the UK a Research Assessment Exercise (RAE) is conducted every four or five years. One of the key measures for this is research output in peer reviewed journals and in the United States, faculties assess tenure positions on the basis of output in peer reviewed research journals.

The internationalisation of research has made it difficult to compare journal from different nations as research traditions influence the style and content of a journal. Over recent decades there has also been an explosion of new journals, partly driven by a demand from academics for more research outlets. This has exacerbated the problem of comparing journals and made it difficult for assessment panels to keep up with developments.
A common belief, irrespective of topic content, is that journals are not all equal. In an ideal world all journals would have the same research quality, however journals are considered to have different standards. In order to make comparisons between journals we must understand the criteria that differentiate the quality of journals. By understanding these criteria journals can be used more effectively to compare the research output of academics. The lack of research specifically devoted to understanding these criteria is the motivation behind this research. Previous research on the quality of journals has utilised the assumption, that academics are impartial and share the same understanding of research quality.

This research aims to explore the perceived hierarchy that academics hold of research journals. In the modern context research journals are those journals that are concerned with primary research and with establishing facts about the world we live in. They are different from regular journals because they have an editorial review system that either selects expert reviewers or an editor who is considered an expert to select articles for inclusion in the journal. This research specifically aims to investigate this type of journal.

The raison d'être of this research is to examine that which is succinctly presented by Page, Campell and Meadows (1997): ‘There is no single reliable measure of quality in a journal – and what is good quality for one reader may not be to another – particularly in fields where there are differences of philosophy. The standing of the editor and the editorial board are indicators, as is that of the publisher and of any sponsor. If a journal is covered by the relevant abstracting and indexing (secondary) services that also suggests that it is of a reasonable standard’. This study sets out to answer the following research questions.

1.1 Research Questions

What are the important elements of journal research standing?

Is journal research standing a multi-dimensional construct?

Do academics acknowledge the multiple dimensions of journal research standing?

What moderating factors affect academic opinions of journal research standing?
1.2 Defining the Construct

The literature relating to evaluating journals has used a variety of constructs and often these have been used interchangeably or have been confused with other constructs. This has made it difficult to compare journal quality literature, but more fundamentally the literature rarely explores the meaning behind these constructs. In this section various constructs used in previous research are introduced and examined.

One research paper (Martin and Irvine, 1983) explored the meaning of some of these measurement constructs. Martin and Irvine (1983) considered that quality, importance and impact are three separate terms and issues in assessing research. They describe quality as those properties that dictate the way a piece of research has been carried out. They also consider that quality is not absolute but determined by others who may not place the same estimate of quality on the given paper, and may also evaluate the quality of a paper differently as their academic circumstance changes. Havey and Green (1993) comment that ‘...quality is a relative concept, that different interest groups or stakeholders in higher education have different priorities and their focus of attention may be different’.

An alternative idea of quality is the notion fitness for purpose. If the idea of fitness for purpose is applied to journals then a journal may be considered high quality because it achieves its own aims. Research by Day and Peters (1994) relied on the editorial policy (or mission statement) for each journal and then judged their fit empirically with a sample of readers/users. Such a methodology would not be appropriate in this research because the results are specific to a journal and not comparable across a range of journals. Using this concept of quality it is possible that all journals can be considered high quality.

Martin and Irvine (1983) consider importance as the potential influence on surrounding research activities. The construct importance has also been used to measure journals. This construct, according to Martin and Irvine (1983), is similar to impact, importance is considered as the potential impact. Therefore it is dependent on the views of academics and suffers from similar limitations to impact.
Impact is described by Martin and Irvine (1983) as the actual impact on surrounding research activities, which could be affected by the prestige, language and availability of the publishing journal. Measuring the impact of research has also been thought to provide an indicator of the standard of research journals (Garfield, 1979). This is based on the assumption that the greater the impact on future research the better the journal or research will be. Calculating the impact of a journal has often been used in association with citation scoring techniques (Garfield, 1979) and has been used to produce rank orders of journals. Common sense would suggest that measuring the impact of research on future research would be a good way of determining the standard of a journal. However, problems arise when we consider the time lag of new research and the difficulty in assessing an article’s real impact on any new research.

The time lag is often referred to as the half-life. This is the decay rate of an article’s usefulness. For most research this occurs within eight years (Meadows, 1998). There is no certainty to the length of this period. For example Einstein’s theories were not recognised for several decades after their first publication but now are heavily used in physics. Other work that is less dramatic or more popular may be referred to (and hence have impact) immediately after publication. Both works have had an impact but in completely different ways. In this example Einstein’s work would have been said to have little or no impact if the time analysis period had been short, but a long analysis period would have clearly recognised its considerable impact.

Another interesting concept that has been used to rate research, and subsequently research journals, is the construct or notion of international excellence. The use of international excellence was explicitly used to describe high quality research counted in the Research Assessment Exercise in 1996 (RAE96). In RAE96 an explicit distinction was made between international and national excellence. The assessment reflected the global nature of academic research and implied that to be considered the best then recognition must be achieved at a globally competitive level. This is similar to many areas such as sport (e.g. Tennis) where there is global competition. High national standing recognises the fact that research, although of a considerably high standard can vary dramatically across nations. Competing at a global level will also mean that standards will be higher since the number of academics in each field will be
The notion of prestige was seen as a more appropriate construct that those already mentioned, as prestige can be considered a form of social hierarchy. Prestige describes the reputation in people’s mind owing to association to various ideas like success. It concerns the notion of superiority in quality. Journals could be measured by this because, to some degree, academics from a similar background will consider a journal to be prestigious. It can also be considered as a relevant construct because it relates to academic career advancement and provides a benchmark to evaluate themselves against others.

This thesis explores the issue of measuring research journals to determine the factors that render one journal to be considered ‘better’ than another journal. The different constructs discussed (quality, impact, importance and prestige) capture in some way the construct that we wish to investigate. However, because they have been used interchangeably by different researchers to create various hierarchies of journals, this has caused confusion. The lack of conceptual development has made it difficult to compare the ideas and the results of previous research studies. Therefore the term journal research standing is coined in this research to describe the construct. This term specifically deals with position and status of research journals. This term is used instead of prestige since prestige was thought, to be more ambiguous and could have different connotations and be regarded differently by different academics.

Journal research standing is a measure of a journal’s status within a research discipline. The construct does not consider the subject matter of the journal. It examines the reasons why a journal is placed at a point on a graded scale. In essence it is similar to prestige, but looks specifically at the reasons why one journal would be thought to have superior quality to another. In other words, journal research standing enables the production of a ladder or hierarchy.

1.3 Contribution of the Research

This thesis is the first thorough investigation of journal research standing. The research, rather than using measures like the number of citations or ill-defined
single item scales like 'quality' constructs, a framework based on the opinions of experts is developed and key issues explored. In particular the contribution of this thesis is to provide:

- A multi-dimensional framework that indicates the key dimensions that affect the research standing of academic journals
- A valid and reliable instrument to measure perceptions of journal research standing
- The research also will provide an international perspective on the standing of ten selected journals.

The research will be particularly relevant to funding bodies and assessment panels and academic departments wishing to use journals as an assessment tool, and to academic researchers who are trying to increase their own research standing. The research will also be relevant to publisher considering launching a new journal or involved in maintaining the standing of existing journals.

1.4 Outline of Thesis

In chapter 2 we will discuss the literature on journal evaluation. The chapter explains in detail the two main techniques used in previous research. It also discusses factors that may affect academics' perceptions of journals. In chapter 3 a methodology for improving journal evaluation is examined. In particular it details the scale development methodology and the use of conjoint analysis. Chapter 4 provides a detailed examination of the key dimensions that form the construct journal research standing. The chapter also examines the factors that can affect academic perceptions of the construct. Chapter 5 details the construction of a questionnaire and the hypotheses that will be examined in an international mail survey. In Chapter 6 quantitative analysis of the scale items is conducted. Chapter 7 examines the affects of moderating variables and demonstrates the use of conjoint analysis. Chapter 8 discusses the finding of the research. The conclusions drawn from this research are detailed in chapter 9 and the implications of the research, the limitations and avenues for further research are illustrated.
Chapter 2 - Literature Review

2.1 Introduction

As part of the research process the initial enquiry revolved around desk research (or literature review). The primary aim of the literature review was to investigate the array of current methods being used to measure journals. Initially the search was restricted to understanding the current methods used to assess business and management research journals. It was thought that much of the literature would have been generated by the Information and Library Studies discipline. This was not the case, some seminal pieces have been produced in Physics (Singleton, 1976) and many other disciplines. This meant that the review had to be broad to ensure a balanced view and that important research was covered by this review. Therefore a comprehensive cross discipline search was conducted.

The debate on what method should be used to measure journal research standing still centres around two dominant methodologies (Jones, Brinn and Pendlebury, 1996), citation analysis and peer review. Citation analysis measures the extent to which articles are cited (or referenced) by other published material\(^1\). Peer review studies take a snapshot of academic opinion regarding various journals chosen for the study (Luke and Doke, 1987). The review focuses on these methods and evaluates their suitability as measurement instruments.

Citation analysis can be performed in two ways. Firstly, citations can be counted manually. This is extremely time consuming and practically impossible in the modern academic environment due to the growth in research output and the number of research journals. The second method is to use an American database produced by the Institute of Scientific Information (ISI), called the Science Citation Index or the Social Science Citation Index (Garfield, 1979a; Virgo, 1977). The database enables the researcher to count, in various ways, the number of citations received by either an author/article or a journal. This study evaluates its use as a tool to evaluate journals.

\(^1\) There are many other ways of using citation to investigate bibliographic structures within scientific communication. See Garfield, 1979b. Hamel and Mazze, 1973
Peer review, in the context of evaluating journals, has come to mean rating journals on a single five point scale, evaluating concepts such as prestige, importance and quality. Questionnaires or telephone surveys have been conducted, to either large representative samples or to small expert samples, respectively, with the aim of ranking or rating a selection of journals. An alternative to both these methods has been the informal and unstructured judgements made by peers and departmental panels in their attempt to evaluate themselves and others for comparative purposes.

This chapter is split into two distinct halves. These halves relate to the two methods briefly described above. Each part starts with the description of the method and the manner in which it has been used in past research. For citation analysis a description of the different approaches of using citations and for peer review a summary of the different studies are presented. Each section is concluded by a discussion of the key issues which have led to their controversy.

### 2.2 Citation Studies

Citation studies are those that use the references or citations noted by academics when writing research papers. The act of referencing is referred to as citing.

> When one document (A) mentions or refers to another document (B), the latter has been cited by the former as a source of information, as support for a point of view, as authority for a statement of fact, etc. The term citation is used to indicate not only the fact that document B has been cited in a reference or document A, but also the description of document B contained in the reference. In this sense, citation and reference are frequently used interchangeably. (Journal Citation Report, 1996)

The documents in the context of this study are academic journals. When the references for all a journal’s articles are collated, each academic journal will produce a large selection of references. By comparing the references (citations) in one journal with other journals, the journals can be classified into groups. Often journals are grouped by the quantity of references made to a journal by other journals, this is known as a citation rate. When we discuss a journal citation we are only concerned...
with the information given in a citation which refers us to a particular journal. The other information contained in a citation is redundant in this instance and has no bearing on the analysis. When we perform a citation count (or analysis) we are analysing the articles contained in journals for citations to other articles in other journals, but when the number of citations are calculated they indicate only the number of citations for a particular journal or issue of a journal.

2.2.1 The meaning of citation

The fundamental meaning of what citations can represent has only recently been discussed (Luukkonen, 1997). A citation rate could be considered as an output variable i.e. a journal citation in another journal could be the product of the journal the citation is taken from. The more the journal is cited the better the product in the sense that the articles are being used to further knowledge and are used more often than a competing citation from another journal. Issues already covered illustrate that measurement error can and does occur when using this variable. The following short discussion illustrates that citations are also used to infer a variety of constructs and this has compounded the problem of measuring journals. The discussion also seeks to identify what citations really measure.

Scientometrics, a journal dedicated to investigating bibliographic structures (i.e. how references or citations are used) within the academic research environment, still debates the usefulness and appropriateness of analysing these citations when classifying journals. Luukkonen (1997) discusses the meaning of citations and the reasons for citing particular research. Her research explains two schools of thought, the Latourian and Mertonian.

The Mertonian view, discussed here, believes that citations are an institutional system of reward and recognition. According to Luukkonen's (1997) research this view is adopted by authors of citation studies to purport the usefulness of citation as a tool to evaluate research, i.e. the greater the number of citations received by an author/paper/journal the higher the standing of the author/paper/journal. In light of this, citation studies in general have implied several reasons for a journal/article...
receiving a high citation rate. These have ranged from quality (Jobber and Simpson, 1988), prestige (Peritz, 1994) and importance (Poole and Regoli, 1981) to 'something or other' (Singleton, 1976). Although these may just be semantic differences it is still cause for confusion among academics. A more realistic view argued by Luukkonen (1997) (the Lartourian view) reflects the ‘chaotic use’ of citations. Academics tend to find articles that can best support their own ideas and themes. Luukkonen (1997) comments that 'In spite of the variety of uses references have a major function in scientific texts: that of mobilising allies in the defence of knowledge claims'. This may mean that articles are not purely chosen for their quality or standing.

However authors must to some degree include citations which will increase the quality of their own research and therefore include citations from quality journals (articles). Citations seem to measure in essence the popularity of the journal and indicate to some extent the usefulness of the research in those journals. This is summarised by Garfield (1979)

'A highly cited work is one that has been found to be useful by a relatively large number of people, or in a relatively large number of experiments.'

2.2.2 Approaches used to analyse citations

Citations can be used in a variety of ways to measure journals’ output. There are four popular ways: the straight citation rate; the impact factor; the immediacy index; and the self citation rate. These are discussed below.

The straight citation rate - This is the total number of citations to a journal within a given period (e.g. Gross and Gross, 1927). This is the simplest instrument to measure the number of citations a journal receives.

Impact factor - 'The impact factor is a measure of the frequency with which the average article in a particular journal has been cited in a particular year. Basically, it is a ratio between citations and published citable items corrected for frequency of publication, age of journals, and size of journal (in terms of the number of articles published)' (Leong, 1989). 'The journal impact factor will thus reflect an average citation per published article'(Garfield, 1972).
**Immediacy index** - This indicates the speed of which ‘a journal’s material is picked up and used’ (Garfield, 1979). ‘The immediacy index is the ratio of the number of citations which a journal receives in its most recently complete year of publication to the number of source items published by that journal during the same interval.’ (Tomer, 1986)

**Self-citation rate** - This measures is based on the amount of self citations a journal receives amongst the citations of articles in the journal.

This review of citation analysis focuses mainly on Impact Factor analysis. This is for a variety of reasons but primarily because Impact Factors are the most relevant and most widely used method. They are also created and used by ISI for ranking journals.

The straight citation approach does not allow for the relative sizes of journals i.e. the more articles published the more likely the journal will be cited. This means that journals with more articles in circulation will have an advantage over other newer journals, journals with fewer articles published, or journals with a smaller circulation. This therefore assists the older journals and the more prolific journals.

The immediacy index is based on the assumption that good papers or good journals are cited sooner than lower quality journals. Tomer (1986) using the Spearman coefficient found that ‘the utilisation of the impact factor or the immediacy index does not produce rank/order lists which are generally or significantly different from those produced upon the basis of unadjusted rates of citation, either in reference to papers published in specific years or papers published in all years. The list of journals ranked according to these various measures of citation do differ, but the coincidence of rank and order is so great as to indicate that the effect of either measure upon the quantitative ranking of larger numbers of journals is statistically insignificant’.

Self-citation measures assume that high scores indicate high quality. The impact factor is ‘a measure of the frequency with which the average article in a journal has been cited in a particular year’ (Journal Citation Report, 1996) and is calculated by the following equation:
The JCR impact factor is basically a ratio between citations and recent citable items published. Thus, the impact factor of journal X would be calculated by dividing the number of all current citations of source items published in journal X during the previous two years by the number of articles Journal X published in those two years.' (Journal Citation Reports, 1996).

It is possible to perform an impact factor analysis differently. For example Doyle and Arthurs (1995) used a ten year period in their assessment. Other ways of calculating the impact factor are available (Garfield, 1972), but this review focuses on the philosophy behind its use.

2.3 Problems with Citation Analysis

The number of citations a journal receives will depend on the type of journal; the quality of the articles contained in the journal; and other extraneous variables, such as circulation. Journal articles are not cited purely because the journal is of the highest quality. In this discussion it is important to isolate those issues which distort citation rates. Section 2.2.1 has already illustrated the difficulty of interpreting the meaning of citations. Assuming that citations are measuring to some degree the quality of research, the core issues that effect journal citations can be grouped into four main categories: the type of journal, the social and political network, the way citations are used (citing practice) and processing errors. These are discussed below.

2.3.1 Type of journal

A major factor which effects the number of citations a journal receives is the type of research the journal publishes. This often determines the way journals are perceived and used. The major differences between journals could be categorised by the following: The degree of specialisation, whether it is a review journal, and the emphasis on either the methodology or the theoretical development of the subject. It is also important to note that the symbolic value or prestige of the journal may also have an effect. Newman and Cooper (1993) found that the research plot of an article reflected the amount of citations it received. The research plot refers to the manner of research. They found that the 'research plots that explore change in a fundamental part
of an existing nomological network or import a relationship studied at one level of analysis and apply it in a second level' are more cited than other research plots.

Specialist journals, as the name implies, are created to serve a niche in the field of marketing. The Journal of Product Innovation Management could be considered a niche journal. When a journal serves a small niche it will stand to reason that only a small group of academics communicate upon that subject to deal with specific issues that may have less relevance to other academics. Due to the smaller audience the journal may receive less citations and thus in a citation study be ranked lower than a general journal, even though the standard of research is comparable.

2.3.2 Social and political research network

Citing practice is part of the social and political networks which disseminate research (Collin, Johansson, Svensson and Ulvenblad, 1996). The circulation of a journal has a significant effect on the impact factor score a journal receives. The greater the circulation the greater the number of citations (Peritz, 1994). A specific problem concerning the scope of circulation and its subsequent effect on the citation rate for journals can be due to the regional location of the journal (Luukonen, 1990). There are several reasons for this. Firstly, academics tend to over-cite their fellow countrymen. Often this will be because of local awareness of the research that is being carried out. Another reason is that local academics publish in their local journals. This benefits the citation rates of journals from larger national populations and disadvantages the smaller nations. This is likely to have an even greater effect on countries with obscure native languages. Countries whose academics are fluent in English are likely to benefit more. An obvious benefactor of this bias would be the United States where there is a large academic network of journals and academic researchers. Compounding this effect is that smaller countries will often concern themselves with research from outside their nation and publish in non-native journals to gain wider recognition for their work.

'Journals of smaller countries and peripheral regions might be faced with a vicious circle of visibility, citing and quality: lower visibility and lower perceived quality might reinforce a selective process whereby the best articles
written by scientists are submitted to more visible and prestigious journals.’ (Luukkonen, 1990).

2.3.3 Processing errors

Another problem when processing citations is the number of errors found in citations (Oppenhiem, 1996). These errors are caused by authors recording citations incorrectly and when transferring these in to the citation database. As much as 29% of citations have been found to contain major errors. These problems are random errors in the process, but could have a considerable effect on the citation rate of a journal because the actual number of citations to any one journal is usually low - less than 50 per year for some major journals (Pieters, Baumgartner, Vermunt and Bijmolt, 1999).

As the major source of citation data is generated by the Institute for Scientific Information (the organisation who produce the SCI and SSCI and other journal catalogues) the inclusion and categorisation of journals is subject to their influence, which can be another source of bias or error. Historically the organisation was created to serve an American audience. In recent years the collection has grown to include other journals which add to the catalogue. This has created a bias towards American journals and journals written in English, although journals with English abstracts are sometimes included. New journals are selected on the basis that they add to or compliment the current catalogue. This can result in some journals not being included in the citation analysis.

The final type of processing error that can occur is created when journals are being selected to represent the discipline. In Citation Analysis a number of journals are used to represent the discipline. These journals are then used to calculate the number of citations other journals receive. These are known as core journals and are often selected arbitrarily. This could bias the analysis by disadvantaging journals that operate within a different research network and be undercited in comparison to a similar journal in the same research network. To overcome this, researchers have used a centrality index to select articles that contribute more to research in the particular discipline. Doyle and Arthurs (1995) provide a detailed explanation of centrality index
and its use. This increases the number of core journals, but still requires an arbitrary cut off point.

2.3.4 Negative use of citations

A major criticism of citation measures is that bad research may receive high citations because scientists wish to refute the contribution by offering more valid findings. Although this is possible, it is unlikely that poor research will be cited often. For instance, many journals now use quality assurance through the use of a rigorous reviewing process, which ensures that articles are evaluated before publication. The intention of the review process is to screen out bad research. Thus publishing poor research must be an indictment on those reviewing the research, and it is likely that the highest quality journal will select reviewers that are capable of making more appropriate editorial decisions.

Criticising others’ work is not common practice and researchers will tend to ignore the work if it is poor. No research is without flaws, experienced researchers will not tend to downgrade other research but may find that research is not consistent with the excepted paradigm and seek to replicate the controversial findings. ‘If scientists tend to ignore inferior work that is of little importance, then the work that they do go to the trouble of formally criticising must be of some substance’ (Garfield, 1979). Although this has been purported as a problem of citation analysis no research has measured the extent of this problem. One must assume that this does effect the measurement of journals, but common sense would say that the effect is minimal.

2.3.5 Cross-discipline research

A major criticism of citation analysis is that a comparison of research disciplines is affected by the way citations are used and referenced. For example, in one discipline citations may be used vigorously to defend various points of view, where as other disciplines they could be used only sporadically. This is most notable when the ‘softer’ and ‘harder’ sciences are compared. This effect favours journals from the higher citing disciplines when considering the impact factor or citation rate.
Although it would be possible to distinguish between, for example, marketing and engineering journals and rank the journals separately, problems will arise when the distinctions between the disciplines are blurred. Consider journals that combine both disciplines into the editorial policy, journals such as R & D Management or IEEE Transactions. Using citation rates to rank journals will always disadvantage journals like these interdisciplinary journals. The legitimacy of discriminating against these is so far unsupported, Todorov and Glanzel (1988) state that 'variations in citation patterns and traditions affect citation rates and make comparisons across disciplines impossible'.

2.3.6 Support for using citation analysis

Although there are many factors that affect the citation rate of a journal, citation rates have been found to have high correlations with other measures of quality. For example, Citation analysis has been used to rate departments. Thomas (1987) conceded that although citations were flawed they were 'a useful indicator of the quality of faculty research'. Other research has supported this view.

Citation rates of academics have also been found to correlate with the RAE. The process is used to rate universities and the departments within the universities on their research excellence. Research is evaluated by determining the contribution of each staff member and other criteria. The contribution staff make is determined by the number of journal articles (and other research output) they have produced within the past four years. Oppenheim (1995) examined the citations of staff members for each UK library and Information science department against their respective RAE score. The rank correlation was 0.81 and were significant at 0.99.

Cole and Cole (1971) reported that they could successfully predict Nobel Prize laureates using citation analysis. They considered that the Nobel Prize was an independent measure of 'quality' and could hence successfully validate the use of citations. However, because the laureates were cited to such an extreme level compared to non-laureate scientists, more subtle situations may prove less conclusive.
Finally the ease of analysis in comparison to peer review, especially when conducting international analysis, has also led to the popularity of using citation analysis. 'Journal rankings based on citation measures prove to be more international and not easily obtainable by other methods' (Todorov and Glanzel, 1988). A summary of the factors affecting citations studies is provided in Table 2.1

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2 To complete a citation study, a number of journals are selected, from these journals the citations to other journals are counted.

1 A Centrality index is a mechanistic evaluation of journals to determine their position within the citation network. Centrality is calculated as the percentage of its citations that a journal receives from a pre-determined sample of journals.

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<table>
<thead>
<tr>
<th>Issue</th>
<th>Implications to citation scores</th>
<th>Selected References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citing journals are selected Arbitrarily.</td>
<td>Bias towards journals which are centrally located journals within the citation network of the citing journals.</td>
<td>Singleton, 1976 provides a review of bias within citation Analysis</td>
</tr>
<tr>
<td>Centrality index</td>
<td>Overcomes bias of a few citing journals, but works on the same premise that high citations are a function of quality.</td>
<td>Doyle and Arthurs, 1995</td>
</tr>
<tr>
<td>Not all journals are catalogued by the Institute for Scientific Information.</td>
<td>The ISI database is a commercial firm created for a US academic network. There is a bias towards US journals (this bias is in decline)</td>
<td>Exploratory research conducted by the author (1996)</td>
</tr>
<tr>
<td>Type of journal</td>
<td>Review journals and journals promoting techniques are cited more.</td>
<td>Woodward and Hensman, 1976</td>
</tr>
<tr>
<td>Type of article</td>
<td>Review journals (and articles) tend to be for current awareness and are cited less than empirical research. Methodological articles are cited more.</td>
<td>Garfield, 1979; Woodman and Hensman, 1976; Garfield, 1979</td>
</tr>
<tr>
<td>Cross disciplinary studies</td>
<td>Average number of citations per differ between subject disciplines. Biases journals from disciplines which have higher citation rates for journals (sum of article cited within these journals)</td>
<td>Garfield, 1979</td>
</tr>
<tr>
<td>Citing practice</td>
<td>There are many reasons for citing, quality of work is not always the reason for citing the articles within a journal.</td>
<td>Luukkonen, 1997</td>
</tr>
<tr>
<td>Blurred construct</td>
<td>Citation counts are used to measure a variety of construct without theoretical underpinning e.g. Quality; Importance; Research Potential; Impact; Something or other; Prestige; Utility; Scientific activity.</td>
<td>Weisheit and Regoli, 1984</td>
</tr>
<tr>
<td>Geographical location of journal/Academic Networking</td>
<td>Journals from countries with a high academic population perform better in citation studies. Bias against languages other than English Cited more within home network</td>
<td>Luukkonen, 1990; Woodman and Hensman, 1976; Peritz, 1994; Garfield 1979</td>
</tr>
<tr>
<td>Unit of measurement e.g. Impact factor; Immediacy index; Straight citation</td>
<td>Using different formulae and time periods to calculate the citation counts, alters the results of the study.</td>
<td>Hul, 1970</td>
</tr>
<tr>
<td>Citing errors result in journals not being counted. Impacting errors result in journals not being cited.</td>
<td>29% of articles have major citation flaws. Errors can be treated as random across journals. This could have a major effect on less cited journals when articles are on average cited only 1.7 times.</td>
<td>Oppenheim, 1996; Chapman, 1985</td>
</tr>
<tr>
<td>Citation have had high correlations with alternative measures.</td>
<td>Circulation and familiarity increase citation rates. Peer review (based on a US sample) is linked to citations.</td>
<td>Peritz, 1995; Gordon, 1982</td>
</tr>
</tbody>
</table>
2.3.7 Citation analysis as a method of evaluating research journals

On balance, citation rates are a positive indicator of research quality, and this can reflect the standing of a journal. Essentially citations are the product of a journal’s articles and in citation analysis the citations a journal receives indicates its usefulness in contributing to the scientific literature. What is also clear is that citations are an output variable and dependent on a variety of endogenous and exogenous variables.

This discussion has sought to inform the reader of the diverse issues that face citation analysis. The merits of each point still remain a cause for discussion by bibliometricians but it is clear that the use of citations to measure journals should be treated with caution as a guide in decision making. The author supports Garfield’s 1979 view that ‘citation analysis is not meant to replace judgement, but to make it more objective and astute.’

Proposition 1: High citation scores are considered by academics to be an important indicator of journal research standing.

2.4 Peer Review

The Peer review methodology has been used across a wide range of disciplines and their relevant journals. For example, Accounting⁴ (Weber and Stevenson, 1981; Hull and Wright, 1990); Business (Fry, Walters and Scheuermann, 1985); Social Sciences (Nelson, Buss and Katzko, 1983); International Business (Okoroafo and Brunner, 1992); and a range of other disciplines. A summary of the peer review literature that rates marketing journals is available in Table 2.2. As well as being used to rate journals it has also been used to rate University departments and measure faculty scholarship or research performance (Dembkowski et al., 1994; Gillett, 1989). Peer review has also been carried out at a department consensus level, for example Erasmus University classified a list of business journals. Also there are unpublished research projects, such as two conducted in the UK, called the Lancaster (University) List and the Nottingham (University) List. In other countries, such as the United

⁴A review of peer review studies in Accounting is provided in Brinn, Jones and Pendlebury, 1996
States, academic departments have also create their own lists. However, these were used internally and not intended for scientific evaluation.

2.4.1 Criticisms of peer review

Peer review has also been widely criticised. The debate concerning the use of peer review has concentrated on the validity and reliability of research findings. 'The main problems of using surveys are related to lack of theoretical framework, low response rate, inflation owing to desirability, etc.' (Todorov and Glanzel, 1988). Weinsheit and Regoli (1984) suggest that 'it is impossible to know if differences across studies are due to differences amongst samples, populations or the scales themselves'.

**Table 2.2 – Peer Review of Academic Marketing Journals Literature**

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristic</th>
<th>Range of Journals surveyed</th>
<th>Sampling method and size</th>
<th>Measurement technique - Construct investigated</th>
<th>Top 5 Marketing journals in each study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fry, Walters and Scheuermann, 1985</td>
<td>Academics and Practitioners AMA and AM</td>
<td>50 Business journals</td>
<td>Systematic 304</td>
<td>4 point single scale - Quality</td>
<td>JMR, JM, JCR, JAR</td>
</tr>
<tr>
<td>Browne and Becker, 1987 - A replication of other studies by the same authors</td>
<td>Chairmen of marketing departments</td>
<td>52 commonly cited in the Journal of Marketing</td>
<td>119 AACSB departments</td>
<td>4 point single scale - Quality</td>
<td>JM, JMR, JCR, JAR</td>
</tr>
<tr>
<td>Luke and Doke, 1987</td>
<td>Department heads, 2 of each faculty rank</td>
<td>Frequently cited in Marketing Lit. appeared in previous studies widespread popularity and readership in marketing</td>
<td>108 faculty (35 institutions) from 1985-86 AACSB list</td>
<td>Listed top 10 journals and to include other relevant journals not listed - Importance</td>
<td>JM, JMR, JCR, JR, JAR</td>
</tr>
<tr>
<td>Gordon and Heischmidt, 1992</td>
<td>Departmental Chairpersons at AACSB member school</td>
<td>40 Marketing journals</td>
<td>128 AACSB departments</td>
<td>JMR base index to score journals - perceived value-</td>
<td>JM, JM, JCR, MS, JR</td>
</tr>
<tr>
<td>Hult, Neese and Bashaw, 1997</td>
<td>AACSB/non-AACSB-accredited institutes</td>
<td>63 Journals plus respondent option</td>
<td>309 responses</td>
<td>Ranking index for Prestige and Popularity</td>
<td>JM, JMR, JCR, JR, JAMS</td>
</tr>
</tbody>
</table>

2.4.2 Response bias

Peer review has been criticised because it has inherent bias (Jobber and Simpson, 1988; Nagpaul, 1995). Jobber and Simpson (1988) suggest that academics are self-serving and exhibit favouritism towards certain journals. Another criticism of peer review is the validity of the sample chosen to rate the journals.

Not only may there be response bias, but it may also be evident that responses are dictated by experience. For example, Weber and Stephenson (1981) and Hull and Wright (1990) found that differences in opinion were also due to differences of opinion due to within discipline specialisation. Weber and Stephenson (1981) also found differences due to academic ranks. Hull and Wright (1990) suggest that differences between respondents with different levels academic qualification occur depending on the theoretical or empirical nature of the journal contents. They also noted differences between assistant professors and full professors.

Proposition 2: The evaluation of perceptions of a journal's research standing is affected by bias.

2.4.3 Familiarity

A methodological issue borne out of the literature is the familiarity which academics have of research journals. Often this has been evaluated using a five point scale from unfamiliar to familiar. Many studies have found that response rates per journal (item non-response) in a questionnaire is low (Nelson, Buss and Katzko, 1983). Poole and Regoli (1981) explain that:

'Perhaps the most damaging methodological criticism of this study involves the rater response rate per journal. For the 42 journals evaluated (we exclude Law and Society Review because it was not included in the original list of journals sent to the respondents), the rater response rate ranged from less than 10% (n=16) for the Prison Service Journal to nearly 80% (n=134) for Crime and Delinquency. We further observe that the mean response rate for the journals was 56. In other words, the average number of raters per journal
represented only 33% of all potential raters. Similarly, the median number of raters was 47. Thus, half of all journals were judged by only 28% of the potential raters.

There could be two reasons for a low familiarity in previous research. The first reason is that the survey is broad i.e. there are too many journals and respondents are unfamiliar with many journals because they are divorced from their own research interests. The second reason is that respondents are chosen from a wide variety of backgrounds and are unfamiliar with the journal. The most appropriate way to increase familiarity is by reducing the scope, choosing academics and journals from a particular discipline. It is also important not to use non academics in the sample as these will often be unfamiliar with journals.

2.4.4 Measurement constructs

In this section we will consider the small amount of research which has considered the underlying variables that may determine our attitudes towards journal research standing. In the past research has attempted to measure actual prestige and actual quality of a journal. It can be said that no formal definition of quality exists, and whether this is absolute or pragmatic is debatable. Day and Peters (1994) argue that quality is defined as the closeness of fit to the editorial policy. According to Kerin (1996) the Journal of Marketing has changed its editorial policy almost every decade. We must assume that it has not changed the quality of the work published and we cannot expect that other journals would adopt the same editorial policy. The articles published in a journal will depend on three elements. The quality of the research; the requirements of the journal (editorial policy); and errors or bias occurring within the submission process. Martin and Irvine (1983) report that 'quality is still relative rather than absolute, and it is not just intrinsic to the research, but is something judged by others who, with different research interests and social and political goals, may not place the same estimates on the quality of a given paper'.

Weber and Stephenson (1981) highlighted the ambiguity of the term quality, but were not able to provide a formal definition. However they did make reference to issues
relating to quality when they surveyed respondents. Their research asked ‘what is your personal evaluation of this publication’s academic standing, considering such things as conceptual, theoretical, public policy orientation etc. of its contents, and the quality of that content’. Jobber and Simpson (1988) suggested that ‘for those journals with international ambition a thorough review of their refereeing procedures in an attempt to establish the most rigorous of standards may be appropriate’. Kurtz and Boone (1988) referred to the review board and reputation of the reviewers as an indication of quality. Braxton and Bayer (1986) suggested that a prestigious journal was ‘characterised by the review manuscripts by experts in the field’ and the contribution to knowledge of articles. Peritz (1995) suggested that the quality of journal was characterised by the rigorous selection policy of its editorial board. Authors tend to send their best work to highest status journal and that status and visibility can be expected to be intertwined, ‘high circulation journals will tend to attract quality papers and this in turn will enhance the impact (of the journal)’. This short discussion highlights the complexity of the issue of what characterises journal research standing (and related terms such as quality). It also indicates that there are a variety of factors that may affect journal research standing.

Proposition 3: Journal research standing is affected by several key determinants.

So far these key determinants have not been detected because of the use of single item scales. Rating journals on a single item scale does not allow the investigator to understand how the research has been rated. The question of how researchers derive their attitudes about the quality of journal is unknown. It is also impossible to know whether respondents interpret the concept differently. There could be several reasons why a journal may exhibit quality, for example, and the result may be that we are comparing ‘apples and oranges’ rather than comparing journals on the same criteria.

One way of overcoming the problem of familiarity is to allow the respondents to select the journals they wish to rank. Hult et al (1997) offered respondents a choice of 64 journals in marketing of which the respondent could chose ten to rank. The results showed differences between popularity and importance. However an important consideration that was not investigated by this research was the way the journals were
selected. Allowing respondents to select 'their top ten' could be seen to positively encourage the respondent to become self serving (Jobber and Simpson, 1988) and list those in which they had published. It is not likely that all respondents chose journals in this manner and the weight of any one respondent on the evaluation would be minimal, but it could inflate the importance of less popular journals where these journals would have had fewer responses in the survey. Without knowing more detail about the rankings and the way each journal has been chosen the effects on research standing is unknown.

2.4.5 Departmental ratings

Departmental rating relies on the consensus of staff to determine the quality of research journals. The Erasmus list is a typical example. This classification system is based on the reviewing process and specific perceived characteristics of the journal. They placed business journals into five categories: international top scientific journal, international scientific journal, international Dutch journal, Dutch scientific journal and Dutch journal without referee system. This list places importance on blind refereeing and theoretical hypothesis-testing journals that have international standing. This is a useful approach for internal use but may not hold up to external validation. However the categories provide some indication and further insight about evaluating journals.

2.4.6 Peer review to evaluate journals

In conclusion, previous research using single item scale to measure perceptions has not been successful in understanding how academics rate journals. The research has not investigated sources of bias and examined the construct to discover key variables. Previous research has also suggested that key variables may exist which may be a factor in the research standing of journals.

'If respondents were specifically asked to evaluate marketing journals on several dimensional criteria, the data obtained could be evaluated with more sophistication when analysing faculty perceptions of these journals.' (Hult, Neese and Shaw, 1997)
The familiarity academics have with journals also poses an interesting question, do academics with different degrees of familiarity rate journals in the same way, or are they influenced by personal preference, hearsay or other external factors which will bias their judgement? Familiarity must also affect an academic’s knowledge of a journal and subsequent judgement of its research standing.

2.5 Conclusion

The literature survey carried out across a variety of disciplines has revealed that attention has been drawn away from investigating and understanding the constructs to debating the validity of two methods, citation analysis and peer review. Little evidence exists to support citation analysis and peer review as valid measures of the important task of reviewing performance via journal publications. Most studies have been critical of the lack of scope: citation analysis for the use of a single indicator and peer review for its use of a single item scale, which is seen as having poor psychometric properties. Compounding these problems is the lack of exploratory research that has been devoted to understanding the influential variables that academics may use to measure journals. The literature search revealed that although not properly investigated several characteristics did exist, such as the reviewing process and editorial board and also the ability a journal may have in attracting new and high quality manuscripts.

The literature search has also revealed that perceptual based instruments to evaluate journals have relied mainly on single item instruments. The literature suggested that journal quality is multi-dimensional. Therefore it is necessary to develop a measure that can accurately reflect the key determinants and hence provide a sensitive and consistent measure of journal research standing. That can also reflects the multi-dimensionality of research standing.

The literature has also pointed towards factors that could affect (or moderate) the opinions of academics in their evaluation of research journals. In particular, reference was made to the notion that academics over inflated the standing of journals when it
was beneficial to do so. Other research suggested that differences may occur due to the expertise of respondents and their discriminatory power.
Chapter 3 – Research Methodology

3.1 Introduction

This chapter details the research methodology employed to carry out the study in this thesis. It explains the scale development process and basic measurement issues, the major research tools used to analyse and refine the scale and how the scale is to be validated.

Compared to many areas of research, the study of research journals has been limited to basic measurement techniques. As stated in chapter 2, previous research used single item measurement instruments to produce rank order data, and where questionnaire data were collected few studies made international comparisons. As for exploring the issues surrounding the construct of Journal Research Standing no comprehensive study existed. This research adopts a variety of techniques used in contemporary marketing research and combines exploratory interviews with a mailed questionnaire survey of marketing and business research academics. In short, the methodology was designed around the following three main research objectives:

- To determine the factors (independent variables) which determine the research standing of marketing research journals.
- To determine which factors (moderating variables) affect the opinion of an individual academic about the research standing of marketing research journals
- To examine the use of alternative methods of investigating the standing of research journals.

3.2 Research Design

The core methodology described in this chapter follows the framework proposed by Churchill (1979) for developing better measures of marketing constructs. Churchill’s Paradigm recommends the use of both qualitative and quantitative techniques to produce valid and reliable measures (or scales or instruments as they are often referred to). The framework can also help to validate the exploratory research, investigate systematic differences and test certain hypothesis about the data. The chapter is split into three sections the exploratory stage, the measurement stage and the verification stage. The final section also includes a discussion on conjoint analysis and its use as an alternative validation tool for this research.
3.2.1 Scale development and measurement theory

Before we discuss the specific nature of scale development methodology it is necessary to introduce the reader to basic measurement theory. Underlying all scales is something called the Latent Variable (often known as the construct). It is this latent variable that the researcher is concerned with, and by producing a good measure the researcher can investigate the construct with accuracy and precision, i.e. the scale will have reliability and validity. However it is not possible to measure the latent variable directly. If it was there would be no need for scales. DeVellis (1991) comments that ‘We develop scales when we want to measure phenomena that we believe to exist because of our theoretical understanding of the world, but which we cannot assess directly’. When using scales we must be aware of the difference between an observed score and a true score. The true score (T) is ‘the theoretical value that each subject has on the variable of interest’ (Spector, 1992). The observed score (O) is that score which is obtained from the measurement process. Generally the observed score is not identical to the true score and so a third variable is needed to account for the difference between the true and observed score. This variable is known as error and is something that the research seeks to eliminate or at least minimise. The three variables can shown as:

\[
\text{Observed score (O)} = \text{True score (T)} + \text{error (E)}
\]

It is fair to say that all scales will report information that contains some error due to the complex task of research. Errors can occur due to the way we have sampled the population of interest, constructed the measurement instrument or even the way the respondent was feeling on the day. There are two main classifications to describe these types of errors, sampling error or instrument error, but we treat errors differently depending on whether they are random (RE) or systematic errors (SE). The distinction between the two ‘is critical because of the way validity of a measure is assessed’ (Churchill, 1995). Random errors effect all variables and statistical procedures can account for them in their estimations. Systematic error is often known as bias (B). Thus:
O = T + RE + SE (B)

Bias has a systematic influence on the observed score. If the researcher controls for this bias then the effects on the observed score can be understood. However it is unlikely that all forms of bias are known. Therefore, finally, the equation can be represented as follows.

\[ \text{Observed Score} = \text{True score} + \text{Hypothesised Bias} + \text{Random Error} + \text{Systematic Error} \]

The scale development process is a methodology that seeks to eliminate error, in particular to reduce random error and to understand the hypothesised bias. By incorporating reliability and validity checks into the research process through a rigorous scale development a measure can be devised to consistently capture the true score of the construct. In general, one way of improving reliability and validity is the construction of multiple item measures. Therefore in this research the aim is to develop a multi-item measure that can capture the construct, eliciting an observed score which mirrors the true score. It will seek to control random error and understand the hypothesised bias.

As found in the literature search, past research conducted to establish the research standing of journals used single item measures. However, 'Single item measures are notoriously unreliable and imprecise' (Spector, 1992). Using multiple item measures it is possible to represent constructs that are 'broad in scope and not easily assessed with a single question' (Spector, 1992). One methodological approach for multiple item measures is proposed by Churchill's (1979) paradigm. In Section 3.3 Churchill's (1979) scale development paradigm is reviewed and the key concepts and statistical techniques are discussed.

### 3.3 Churchill's Paradigm

A review of the literature regarding the development of multiple item scales found that a similar theme existed throughout the social sciences and humanities. In marketing a predominant methodology used is the methodology proposed by Churchill (1979). In recent years modifications have been suggested (Rentz, 1987; Gerbing and Anderson,
1988), but the underlying principles have remained the same. Churchill's (1979) iterative 7-stage process can be broken down into 3 distinct stages. Table 3.1 presents Churchill's (1995) simplified 5-stage version of the 1979 paradigm and this is adapted to illustrate the three stage process that includes the exploratory stage, the measurement stage and the verification stage. In this section the main procedures are discussed. To simplify the discussion specific analysis strategies are discussed later in this thesis.

Table 3.1 Suggested Procedure for Developing Measures

<table>
<thead>
<tr>
<th>Exploratory Stage</th>
<th>Specify Domain of the Construct</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Generate Sample of Items</td>
</tr>
<tr>
<td></td>
<td>Collect Data</td>
</tr>
<tr>
<td>Measurement Stage</td>
<td>Purify Measure</td>
</tr>
<tr>
<td></td>
<td>Assess Validity</td>
</tr>
</tbody>
</table>


The first step in scale development is the exploratory stage. This is the qualitative research element of the process and Churchill (1979) considers this to be the most crucial stage of the research. He referred to the term GIGO - garbage in garbage out - and suggested that scientists concentrate on this stage to ensure that the measurement instrument will capture the construct/idea being investigated. There are several ways to investigate the construct, but the scientist should consider the alternatives and decide on the most appropriate. Churchill (1979) suggests four alternatives to explore the construct: the literature search, the experience survey, focus groups and the analysis of selected cases.
Initially, in the exploratory stage, it is important to specify the domain of the construct. This provides the basic framework and guides the selection of items from a theoretical background. However ‘even if there is no available theory to guide the investigation, they must lay out their own conceptual formulations prior to trying to operationalise them.’ (DeVellis, 1992). This research relies on the exploratory investigation to perform both the formulation and the production of scale items.

Once the exploratory stage has been conducted, although this should be iterative if necessary, the data needs to be turned into an item pool that can be used in the second stage of scale development. There are several ways to produce the item pool but ‘the description of exactly what the scale is intended to do should guide this process’ (Devellis, 1991).

The second step in the scale development process is to examine the questionnaire and pre-test the scale using experts and/or a pilot sample of respondents. Once the scale (or instrument as we shall now call it) has been issued to the selected sample (if large enough) statistical procedures can be used to evaluate the consistency of items and also investigate the hypothesised structure.

Once the researcher has decided that the scale is free from most redundant items, has been correctly worded and that the scope of the scale represents the construct, the scale can then be said to have internal validity, although this is still not confirmed. The next stage is to evaluate the multi-item scale using statistical procedures with survey data that conforms to various statistical assumptions. The initial assumption is that the sampling procedure produced a ‘probability’ sample and is normally distributed.

External and internal validity are assessed in the third and final stage of scale development. To determine the internal consistency of the scale Cronbach’s coefficient alpha (Cronbach, 1951) is used. Cronbach alpha determines the inter-correlations between items. Items with a low correlation with the other items can be removed. By dropping these bad items coefficient alpha can be increased. Although internal consistency coefficients imply a degree of unidimensionality, it is not explicitly found using Cronbach’s coefficient alpha (Cortina, 1993). A common method of
investigating the dimensionality of a scale is to examine the correlations or covariance of the scale items. A statistical technique, which can perform this, is called factor analysis. 'Factor Analysis is used as a general term to describe a variety of techniques and examine the underlying patterns or relationships for a large number of variables and determine if the information can be condensed or summarised in a smaller set of factors or components' (Hair et al, 1995). Factor analysis can be grouped into three main techniques: The first two - common factor analysis and principle component analysis - are generally used for exploratory investigations of the data structure. These types of factor analysis are referred to as exploratory factor analysis.

'Exploratory factor analysis is a useful scale development technique for reducing a large number of indicators to a more manageable set. It is particularly useful as a preliminary analysis in the absence of sufficiently developed theory about the relations of the indicators to the underlying construct.' (Gerbing and Anderson, 1988)

The third technique is called confirmatory factor analysis (CFA) and explores hypothesised data structures. Gerbing and Anderson (1988) proposed confirmatory factor analysis as a way to investigate unidimensionality of scales, but it is more appropriate when research is in an advanced stage of theoretical development.

A number of alternatives have been suggested for the analysis of the full sample data within the marketing literature. Rentz (1987) suggested generalizability theory and Steenkamp et al (1991) suggested casual modelling. Unfortunately these modern techniques were not available to the researcher. This was not seen to be a problem as existing techniques and packages, that are widely available such as exploratory factor analysis and SPSS, would allow the researcher to evaluate the scale with confidence (Gerbing and Anderson, 1988). Gerbing and Anderson (1988) also advise using factor analysis in a confirmatory way by re-analysing the individual factors after they have been constructed.

Table 3.1 shows that the scale development process could be broken down into three basic stages, Sections 3.4-3.6 now discussed these in greater detail.
3.4 Exploratory Stage

'The general objective in exploratory research is to gain insights and ideas' (Churchill, 1995) and 'is appropriate to any problem about which little is known'. In this research the exploratory investigation was used as a way of creating a conceptual framework that would embrace the issues surrounding journal research standing. There are four basic types of exploratory study (Churchill, 1995): the literature search, the experience survey, focus groups and the analysis of selected cases. In this research the literature search and the experience survey were used.

In summary the objectives were to:

- Formulate the problem for more precise investigation
- Increase the researcher's familiarity with the problem
- Gather information about the construct and develop a set of items that could be used to test hypotheses using a representative sample

'One of the quickest and cheapest ways to discover hypotheses is in the work of others, through a literature search' (Churchill, 1995). It was anticipated that the bulk of literature relating to the actual measurement of journals would reside within bibliometrics and library and information studies journals. This was not the case, research had been published in an array of disciplines such as physics and management. Therefore the literature review for this research covered a variety of disciplines. After the initial search for references on journal evaluation literature it was necessary to investigate the ideas that had been commented on or suggested as important areas for further research. The literature search was also used to corroborate issues raised during the experience survey. A review of this research was detailed in chapter 2.

The literature search also found that very little research into the standing of journals had used modern techniques. Therefore the literature search was also used to develop ideas and understand the variety of psychometric measurement and marketing measurement techniques.
The second stage of the exploratory investigation stage used a combination of triadic elicitation (Fransella and Bannister, 1977) and semi-structured interviews in an experience survey of key informants. The experience survey uses key informants or experts who have experience of the entity that is to be measured or who have specific and detailed knowledge of the subject.

Semi-structured interviews and triadic elicitation were used together for the purpose of each other the exploratory interviews. As recommended by Mahoney, Thombs and Howe, (1995) 'the investigator intensively collects information from the key informant and is free to enlarge or shrink the sample size depending on when the answers reach the point of exhaustion.' The essential aim was to gain a comprehensive insight into the construct, so that items can be generated to represent the construct. This research focuses on academic opinions but also intended to gather ideas from sources that were otherwise involved in the assessment of journals. The sampling frame for the exploratory study included academics, journal publishers and librarians. Also included in the sample was a member of Institute for Scientific Information who evaluates journals for inclusion in their highly influential Social Science Citation Index.

As mentioned earlier, only two methods from the four possible alternatives for collecting data at the exploratory stage of scale development were used. The reasons for not using the other options were simply due to the difficulty of arranging focus groups of academics from an international sample and the need to use a diverse range of respondents rather than a few selected cases. It was felt that using a diverse range of respondents would improve the breadth and depth of items and hence increase the quality of the final instrument. By thoroughly investigating the phenomenon of journal research standing through the literature search and experience survey it was possible to generate a sound foundation for further empirical hypothesis testing.

### 3.5 Measurement Stage

The second stage of scale development is concerned with the statistical evaluation and quantification of opinions. This requires the use of statistical techniques such as factor analysis and Cronbach’s coefficient alpha. These techniques are used along with other
tests to purify the scale and produce a measure that both exhibits sound statistical properties, and to produce a scale that reflects the theories and ideas developed during the exploratory stage. The measurement stage also provides a forum for strict hypothesis testing and measuring the impact of factors that effect journal research standing. A mail-based questionnaire was chosen as the most appropriate way of addressing these issues. Specifically the main objectives of the measurement stage are to:

- Purify the multi-item scale developed from the exploratory stage, by removing unimportant or inappropriate items
- Investigate the dimensionality of the scale
- Investigate sources of bias and differences between respondents

3.5.1 Questionnaire survey sample

The relevant population for this research was defined as all research academics that were actively publishing within the marketing discipline. Two sampling frames were chosen to represent this population. Firstly an academic sales database was chosen as the UK sample frame. This database was considered to be the best representation and most up to date mailing list of UK marketing academics. It was also seen to be closer to the required population than other databases as the aim of the database is to collect prospects for future marketing texts. Alternative mailing lists such as the Academy of Marketing database, which collects names from conference attendance, were seen as less accurate a representation. This is because these databases are contaminated with non-marketing academics, such as academics from other business and management subjects.

The second sampling frame was a consolidated list of academics who had attended the European Marketing Academy conference during 1996 and 1997. Although the list had problems similar to the Academy of Marketing, this list had the benefit of having active European marketing academics who were also competent in English.

It was recognised that the two sampling frames, although not completely a true representation of the global population, would provide a basis to establish international differences. They also provide a basis to examine the differences described in the literature review that relate to research experience and journal knowledge. Therefore,
the generalisations made within this research extend to the UK population of marketing academics, and the EMAC sample provides a basis to confirm the findings from the UK. The EMAC sample also helps to substantiate the conclusions that are likely to extend to the global population. Details of the actual sample sizes and final responses to the mailed survey are given in chapter 6.

3.5.2 Selected journals

The second sampling problem was the choice of journals to include in the survey. This study focuses on marketing and this limits the generalisations of the scale to other academic research disciplines. A major criticism of previous research is that the scope has been too wide and has included journals that were not familiar to the respondents. In this research the focused approach of using one discipline allows for a greater quality of response.

Ten journals were chosen a priori to confirm the existence of dimensionality and investigate journal specific bias. The journals selected represented a diverse range of journals in marketing based on their style, content and existing perception of quality. Also the journals were believed to be well known and would be likely to gain a good quantity of responses. Non-English journals were not used as they would be unlikely to elicit a significant number of responses, especially from UK academics. Using ten English journals reduced the scope of journal studied, but as this research is not concerned with a comprehensive ranking of journals, it was not considered problematic.

3.5.3 Questionnaire design

The structured questionnaire removes the need for respondents to contact the researcher for clarification, but once the questionnaire has been distributed there are few ways of detecting misunderstanding.

Dillman (1991) suggested four types of error in mail surveys: sampling, non-coverage, measurement and non-response bias. A major problem with postal questionnaires is that they often have low response rates which consequently increase costs (due to
follow-up surveys and reminders) and can increase the possibility of bias (Malhotra, 1996; Churchill, 1995). These types of errors are addressed later in this chapter. However due to the nature of the intended sample a postal survey was seen as the only feasible method of data collection. By using techniques suggested in the literature, sources of error can be minimised.

According to Churchill (1995) questionnaire design still remains something of an 'art-form'. To the experienced researcher, questionnaire design tends to be an intuitive process. To a novice questionnaire design can be daunting. To assist the uninitiated researchers Churchill (1995) and Oppenhiem (1992) among others suggest frameworks to help ensure that a questionnaire is designed so that valid responses are elicited with as little inconvenience to the respondent as possible. The questionnaire designed for this research follows Churchill’s ideas. According the Churchill (1995) the first and most crucial stage in questionnaire design is to explicitly decide on the information being sought. The information sought for this research is presented below (table 3.2) using an abbreviated dummy table (Churchill, 1995; Oppenhiem, 1992). Dummy tables help the researcher to focus on the aims or goals of the research. However, like many areas of the research process, it is iterative and the researcher should consider the extent to which the dummy table summarises the information being sought and make changes until confident of the finished design.

<table>
<thead>
<tr>
<th>Table 3.2 Issues to be included in the measurement instrument (questionnaire)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
</tr>
<tr>
<td>Importance of Scale Items</td>
</tr>
<tr>
<td>Underlying variables</td>
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<tr>
<td>Attitude Items</td>
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<tr>
<td>Academic Experience</td>
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<tr>
<td>Journal Experience</td>
</tr>
<tr>
<td>Conjoint Analysis</td>
</tr>
</tbody>
</table>
3.5.4 Pre-testing the questionnaire

'Pre-testing is the stage in the development of a questionnaire that determines the potential effectiveness of the questionnaire.' (Reynolds et al., 1993). Green, Tull and Albaum (1988) suggest that colleagues not involved directly with the questionnaire design should review it before the pre-test. After the initial screen a convenience sample of eight academics from Loughborough University Business School, plus two overseas academics who do not use English as their first language were used in the pre-testing process. The sample, although small, mirrored the sample characteristics of the main survey, but was slightly biased towards 'experts'.

Pre-testing involves asking experts their opinions on the questionnaire. Pre-testing a questionnaire can involve two types of experts. The first type of expert is subject orientated. These experts can provide information regarding the contents of the questionnaire and the relevance of the questions. They also help to pinpoint problem questions or badly worded items that may confuse the respondent. The second type of expert is a research specialist, such as an academic researcher who has advanced knowledge of questionnaire design. This type of expert can spot problems such as double-barrelled questions or other issues that may affect the analysis of the questionnaire. Pre-testing is especially important for novel research projects, and areas where the subject matter is complicated or specialised (Peterson, 1988). Diamantopoulos et al (1994) found that 'pre-test respondents who have had exposure to questionnaire design principles are more likely to detect errors than those without such exposure; similarly, respondents with knowledge of the subject are more likely to detect errors in the questionnaire than those without such knowledge.' Since questionnaire design expertise and subject knowledge have separate effects on error detection, respondents with expertise and knowledge would be expected to detect the greatest number of errors. The respondents for the current research were chosen because of questionnaire design expertise and subject knowledge and also their willingness to co-operate. Due to the nature of the current research, respondents could act as both questionnaire design experts and as subject knowledge experts.
The value of expertise and knowledge has already been stated. The value of willingness to co-operate is that it helps to ensure that the questionnaire will be thoroughly reviewed. Once the first round of pre-testing was conducted, a second wave was initiated to ensure the appropriateness of these new changes. Reynolds, et al (1993) explain that 'when a pre-test has been made to a questionnaire concerned, it should be pre-tested again to ensure that the changes are in fact desirable, and that no new faults have been introduced.' The final stage before the questionnaire was administered to the sample was to have the questionnaire proof read by colleagues.

### 3.5.5 Increasing response rate

An important element of questionnaire design is to ensure the highest possible response rate. A low response rate can create unnecessary costs because a larger sample size is needed to gain the same number of responses. A low response rate also affects the quality of the results taken from the analysis. Literature about increasing response rate tends to offer confusing findings. Several reviews and meta-analyses in the field conflict in their opinion on best practice (Jobber and O'Reilly, 1998; Diamantopoulos et al, 1991; Yammarino et al, 1991; Fox et al, 1988; Yu and Cooper, 1983). However, they tend to agree on several practical ways to improve the number of responses for a survey. They suggested that return postage, incentives and follow-ups or pre-notification, all incrementally increase response rate but they can also increase the cost of the survey. Other ways suggested to increase response rates is to use non-monetary methods such as sponsorship, by reducing the number of pages in the survey, or by choosing an appropriate first question (Frey, 1991). However, these suggestions were made for a non academic setting. Therefore this research attempted to adapt the ideas for mail surveys in an academic setting. In Section 5.4 the strategy evoked for this study is described.

### 3.5.6 Non response and item non-response

Non-respondents to a mail questionnaire can undermine efforts to reduce sampling errors, and also can result in bias in the results of a survey. A review of the literature found that there are many reasons for non-response and only some will result in bias in
the results. Various checks for bias due to non-response are available (Armstrong and Overton, 1977).

One method of evaluating the reasons for not responding is to use telephone follow-ups (Baldauf and Reisinger, 1997). However, asking respondents to comment on their reasons for not responding seems an intrusive process and one which may elicit only socially desirable comments. In this research it was thought that responses to a telephone follow-up, non-respondents would produce excuses rather than the real reasons for not responding, and hence would not produce useful information. Telephone follow-up with regards to the EMAC sample would have also been costly. For these reasons a telephone follow-up was not used.

An alternative to the direct method of a telephone follow-up is the extrapolation method (Armstrong and Overton, 1977). The extrapolation method investigates the differences between the fast and slow respondents. Armstrong and Overton (1977) suggest that 'Persons who respond in later waves are assumed to have responded because of the increased stimulus and are expected to be similar to non-respondents'. If differences occur between fast and slow respondents then non-response bias exists. The extrapolation method can be performed by comparing responses from the first wave of questionnaire returns and the follow up questionnaires. This would ensure that maximum separation would be achieved and differences, if any, would be more apparent.

3.5.7 Statistical analysis instruments

In the scale development process two techniques are employed, namely Cronbach's coefficient alpha and Principle Component Analysis. The issues surrounding these techniques are now discussed in more detail.

3.5.8 Cronbach's coefficient alpha

Coefficient alpha measures multiple split-half comparisons of the items in a unidimensional scale. According to Nunnally (1967) alpha values should fall within the range 0.7-0.95. If alpha is too high then it suggests that the scale has too many
items and should be reduced to a smaller scale which will help reduce response fatigue. If the alpha value is too small then it suggests that not enough items are included in the measure. If alpha is too small it can also suggests that items are not adequately representing the construct and the scale is unreliable.

The value of coefficient alpha can be misleading in a number of ways. ‘A relatively high alpha is no guarantee that all the items reflect the influence of a single latent variable’ (Develis, 1991). Another reason is that the number of items contained in a scale can affect coefficient alpha. The principle of domain sampling assumes that all the items in a scale have an equal weight and reflect equally an element of the construct. If this holds then coefficient alpha is a function of the number of scale items. The greater the number of items used, the greater the value of coefficient alpha. If the assumption does not hold then the reliability coefficient can be misleading.

Cortina (1993) suggests that researchers should base their decision to accept the coefficient alpha value for a scale on the actual alpha value, the number of items in the scale and the importance of the decisions to be made. Paterson (1994) also found that coefficient alpha is affected by scale types and the number of intervals. Kingsley and Anderson (1999) suggest that the model is too simplistic for marketing needs. However, without alternative summary measures of reliability it is still a central method for establishing undimensionality. The caveat must be that Cronbach’s coefficient alpha should be used alongside other measures of association to ensure confidence in the scales constructed.

3.5.9 Principle component analysis

In this research Principle Component Analysis, a variant of exploratory factor analysis, is used to investigate the scale items. The intention is to discover whether the scale items are a homogenous set of variables related to journal research standing, or whether these variables can be sub-divided into a few dimensions that relate to underlying ideas which make up journal research standing.
Principal Component Analysis (PCA) can be described as a technique that transforms a set of interrelated variables into a set of unrelated linear combinations of these variables, or expressed another way, turns a set of correlated variables into a set of dimensions. The aim according to Dunteman (1994), is parsimony i.e. the avoidance of excessive numbers of variables.

PCA makes no assumption about the structure of the observed variables and focuses on explaining the total variation in the observed variables on the basis of the maximum variance properties of principle components. 'The variation accounted for by each component (dimension) also indicates when several independent dimensions or components are needed to adequately define the domain of the construct' (Lewis-Beck, 1994) In scale development Churchill (1995) suggests the use of PCA to investigate the dimensionality of scale items.

Sample sizes can have an impact on the stability of results and the literature suggests various opinions on the minimum sample size. A popular view in multivariate analysis is one shared by Tinsley and Tinsley (1987), who suggest a ratio of between five and ten responses per variable. Consistent with this view, Comrey (1988) suggests that 200 cases are adequate with no more than 40 items. Other research suggests different ratios, but the larger the sample size the more stable responses will be. Three tests are also available to measure the sampling adequacy. These are The Kaiser-Meyer-Olkin measure, the Anti-Image Correlation Matrix and the Bartlett test of sphericity.

The overriding problem with factor analysis is that it does not produce a single solution. Slight changes to variables and samples may have a major influence on the final solution. Notwithstanding differences in variables and samples, factor loadings may also be interpreted differently by different analysts. Churchill (1995), Hair et al (1995), Green, Tull and Albaum (1988), Lewis-Beck (1994) and many other texts on Factor Analysis suggest ways to evaluate variable loadings and choose the number of factors. Diligence, perseverance and care need to prevail at this stage of scale development.
PCA is used as an exploratory tool and factor (component) solutions should be selected and interpreted with care. In particular decisions need to be made about the number of factors and the interpretation of those components. Just because a strong component structure is produced, it may not always follow that these components hold any substantive meaning. Determining how many factors exist within the data relies mainly on researcher’s ability to interpret the results. There are several methods that assist the process but no practical test exists to determine exactly how many components exist. Often the factor structure can be ambiguous because ‘some portion of the covariation among items will not truly represent the latent variable of interest. It will be due to chance or to relatively minor sources of non-random covariation’ (Develis, 1991).

To interpret the factor structure more easily Varimax rotation is conducted. Varimax rotation maximises the variance of squared loadings, and thus produces a clearer structure. ‘The empirical evidence indicates that Varimax tends to produce loadings that are more interpretable except when there is a general factor present in the data, in which case Quartimax is the preferred orthogonal rotation scheme’ (Churchill, 1995). However practical use of PCA typically reveals similar solutions using different rotation methods. The number of components present within the data can be examined with the aid of the Scree plot and Eigenvalue rule suggested by Hair et al. (1994).

3.6 Verification Stage

The verification stage attempts to provide evidence that supports the findings of the measurement stage. In scale development the boundaries are blurred between the measurement stage and verification stage. The process tends to be iterative, continually refining the scale using factor analytic techniques and other measures of dimensionality. However the verification stage is explicitly concerned with evaluating the validity and reliability of the scale. To confirm the ideas generated at the exploratory stage a variety of analysis procedures are used to estimate the reliability and validity of the data collected. As part of the scale development process and the general research objectives conjoint analysis was chosen to compliment traditional scale development techniques as a validation tool.
There are many ways to investigate validity and reliability, but it is important to understand that different types of validity and reliability exist, and each type should be treated differently. Validity is the assessment of the construct through maximally different methods and reliability is the assessment of the construct through maximally similar methods (Churchill, 1995, p539). There are three types of validity (Churchill, 1995): Pragmatic validity, Content validity and Construct validity. Pragmatic validity assessment tries to establish whether the instrument will predict some other characteristics. Content validity assessment aims to determine if the instrument adequately captures the construct being investigated. Construct validity is concerned with the question of what the instrument is actually measuring. The research process deals with many choices and depending on these choices a variety of dilemmas will arise (Mcgrath, 1982). This often means that we cannot establish all types of validity and one form of validity is negated for another. The methodology in this research seeks to establish construct and content validity through the scale development process. By using alternative methods of evaluating journals (conjoint analysis and journal ranking) it will also be possible to confirm content and construct validity through the triangulation of these different approaches.

Reliability is concerned with consistency; consistency over time and, as we are using multivariate analysis, internal consistency of scale items. Reliability is often split into two types, stability or equivalence (Churchill, 1995). Stability can be measured using a method called test-retest reliability or alternate form reliability. Test-retest reliability is performed by measuring the construct on two separate occasions. Although there are criticisms (Nunnally, 1978) of test-retest reliability, it is the only way to determine if the respondent scores are similar over time. Another version of reliability is alternate form reliability, which seeks to measure a high correlation between two different ways of measuring the same problem. Often these are impractical so stability can also be measured by splitting the final sample in a survey. In this research the sample, where the sample size was large enough for the analysis technique, was split into two groups.

The second form of reliability is called equivalence. Equivalence measures focus on the internal consistency of the items contained in the instrument. There are several
methods to produce reliability estimates of equivalence (such as split half reliability) but the most popular approach is the use of Cronbach's coefficient alpha (Cronbach, 1955). 'Coefficient alpha provides a summary measure of all the inter-correlations that exist among a set of items' (Churchill, 1995). If we find that coefficient alpha is high then there are very strong correlations within the scale. This could mean one of two things, that respondents cannot distinguish between some items or that items tap the same element of the construct. An assumption is made when using coefficient alpha (garbage in garbage out) that the scale items have been chosen carefully and represent the construct in some way. Therefore if the assumption holds a high coefficient alpha means that the scale is internally consistent and a 'good' measure of the construct.

3.7 Investigating Bias

The central theme of this research revolves around the issues of why one person considers a journal to be better than another. What is also of importance is why one researcher may have a different opinion of the standing of a journal than another researcher. The scale development process tackles the first of those issues. The second issue, determining why one researcher thinks differently from another requires additional information to be collected. Research to date has found that differences do occur within the job hierarchy, but no detailed investigation was evident in the literature (chapter 2). These differences seem to be based on two main themes: bias that occurs at the individual level from personal experience of a particular journal and bias that is dependent on environmental factors and general research experience. Through the use of the mailed survey data can be collected in an attempt to investigate significant differences between respondents. In chapter 4 the specific variables that may create differences are discussed and the statistical techniques required are discussed in chapter 6 and 7. The statistical techniques include the analysis of variance (ANOVA), the paired sample t-test and other measures of association and correlation.

3.8 Conjoint Analysis of Selected Journals

As part of the verification stage, conjoint analysis was used as an alternative technique to measure the standing of research journals. The main purpose of using this technique
in this research is to provide a complimentary validity measure for the primary research objectives of assessing journal research standing.

Conjoint analysis is a technique used in marketing to investigate problems where we wish to measure the opinions consumers have of products or services (Vriens, 1994 in Hooley and Hussey). The technique was introduced to marketing in 1971 by Green and Rao and enables a set of product attributes to be ranked or rated by a survey respondent (or consumer) simultaneously. The value of each attribute to the ranking or rating decision can then be measured to find its 'part-worth' utility; in other words the importance of each attribute can be found. The results can then be used in a number of ways to find optimal combinations of the attributes. In marketing they are often used to design products or test market conditions.

The term conjoint analysis is used to describe a variety of similar techniques and is closely related to traditional experimentation. It is a multivariate technique, although it differs from other multivariate techniques as it asks respondents to provide an overall evaluation of a set of stimuli, rather than evaluating each individual stimulus separately. By presenting several sets of stimuli with different degrees/amounts of each stimuli the researcher can estimate from these sets, using various statistical procedures, how each stimuli contributes to the overall evaluation. Hair et al (1995) provides an illustrative example of how conjoint analysis is used.

3.8.1 Research Assessment Exercise and conjoint analysis

Conjoint Analysis is used in this thesis to compare choice sets of journals and from this infer (via the part-worths) the relative journal research standing of the journals. It is particularly appropriate because it mimics an evaluation process that takes place in the United Kingdom to measure the research excellence of academics. The task is known as the Research Assessment Exercise (the RAE).

The RAE run by HEFCE aims to measure the research performance of university departments. In the 1996 assessment, departments were measured by evaluating the published works of their academic staff from the previous four years. These published
works included books, chapters in edited books, conference papers and journal publications. The RAE is made up of many different assessment panels for example the Psychology Panel, the Biological Sciences Panel and the Business and Management Studies Panel. Within each panel there are key members to deal with specific subjects such as Marketing. Each key member assesses the work conducted within their particular subject and the results are then brought together from each member to give a composite result for the department.

Each department submits a portfolio of the research output for each academic. Each academic therefore supplies to the RAE, via their department, a summary of their research output during the previous four years. Specifically, each academic chooses or selects a set of their four best papers, that is, four papers which they believe will achieve the greatest contribution to their departmental research standing. Conjoint analysis is used to investigate those choices.

In reality the actual assessment also requires that articles are submitted to the panel. Academic could also selects books, but choices about these areas are not of interest in this research. In this research we concentrate on the choice of journal in which the articles were published. Each academics research output was described on a single pro-forma detailing the journals (and other research output) and the particular article in the journal. Articles were also submitted with the pro-forma.

The process of selecting four journal articles is a trade off situation, academics decide which output they should submit to the panel to achieve the best contribution towards their departments research rating. In other words, what would be the contribution of an academic researcher if they had four papers published in journals W,X,Y,Z. This vicariously asks, how ‘good’ are journals W,X,Y,Z and are these journals better than A,B,C,D or even A,B,Y,Z. The aim of conjoint analysis is to simulate these different combinations of four journals to determine their contribution towards the notion of research standing. Although the results obtained from conjoint analysis will be relative to the journals used in the experiment and the respondents surveyed, the results can be used to validate other measures used in the survey by triangulating the results with the other measures used in the survey.
3.8.2 Designing the stimuli

In regular conjoint analysis (CA) factors relate to a product attribute and levels relate to the degree of that attribute in each set of stimuli. The difference between standard CA and the current research is that the ‘factors’ are the different journals that we wish to evaluate and the ‘levels’ are whether the journal is included or excluded from the choice set. By designing an experiment that produces different combinations of four journals, the responses can be evaluated using statistical techniques to determine the individual contribution of each journal. Once the number of factors and the number of levels have been decided the researcher must construct a design to test out different alternatives. The number of sets of alternatives and the different ways of combining the alternatives is deduced by the use of a factorial design. A factorial design can produce a complete set of all the combinations of factor levels: known as a full factorial design. These combinations are then presented to respondents in various formats to establish how each factor has affected the overall evaluation.

However, when many factors and levels are used in the experiment many combinations (possibly thousands) are produced and this can lead to poor responses through respondent fatigue or refusal to participate. In most situations a reduced design needs to be used. This is best done in one of two ways, either by removing the unrealistic combinations or by choosing the combinations that only measure the direct (main) effect of each factor. This type of experiment is called a fractional factorial design. A design measuring only the main effects often consists of about ten or twenty combinations. Combinations that have been removed are known as interactions between the factors. Fractional factorials are subsets of the full design, which still maintain orthogonality. In conjoint analysis orthogonality ‘refers to the ability to measure the effect of changing each attribute level and to separate it from the effects of changing other attribute levels and from the experimental error’ (Hair et al, 1995: p559). Using a fractional factorial drastically reduces the number of combinations needed and thus allows the researcher to produce meaningful results from a simple survey.
Leaving out interactions from an experiment means that the data collected will be incomplete, as far as it does not provide the complete picture. Measuring only the main effects of the design allows us to draw meaningful results without the need for a vastly larger design. In conjoint analysis fractional factorials are called additive models. It is recognised that the interactions between factors are not measured, but this is not thought to be a problem. 'The additive model accounts for the majority (up to 80 or 90 percent) of variation in preference in almost all cases and suffices for most applications' (Hair et al, 1995). In this research these interactions were not thought to be critical.

The combination of constructed through the fractional factorial are presented to respondents and evaluated using some kind of scale or ranking procedure. For example, the scale could be a preference measure or a willingness to purchase measure. The evaluation variable is then used as a dependent measure to determine the importance of each factor and the contribution of each level of a factor to the overall evaluation.

In this research a small set of journals are used to produce different combinations of journals. The journals are treated as factors in the overall evaluation and the levels are simply whether the journal is included or excluded from the combination. A measure of research standing is used as the overall evaluation of combinations.

There are several ways to display the combinations to respondents. The full profile method was chosen for the study as this represents the pro-forma format used in the RAE. Using the full profile method also helps the administration of the experiment by producing fewer combinations than other administration methods. The journals were selected through a small-scale pilot study so that plausible combinations were derived from the experiment, and thus they were also realistic enough to mimic possible RAE returns.

The additive model was used as no inter-factor (inter-journal) interactions were thought to exist. Using the additive model meant that a fractional factorial could be used to examine the main effects of each journal. In this experiment it was felt crucial
to minimise respondent fatigue as the experiment was only a small part of the overall questionnaire design. Using a fractional factorial reduces the number of combinations significantly and therefore helps improve the reliability of the experiment by reducing respondent fatigue. However, to produce a design that replicated the ‘four at a time’ situation of the RAE a specific type of fractional factorial was needed.

Using the Taguchi L8 ‘orthogonal array’ (table 3.3) it is possible to have a design which maintains orthogonality whilst also maintaining the rule of ‘four at a time’. However it restricted the experiment to seven factors (i.e. seven journals). This means that only seven journals could be investigated at any one time. A bridging design was used in order to cover more journals. Therefore two experiments were conducted with some journals in common so that the results could be linked and more journals could be studied. The bridging design meant that there was duplication of journals between experiments. To make the combinations of journals within an experiment more realistic, two journals were repeated for each experiment. In particular, five different journals were used in each experiment and two journals were repeated.

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<tr>
<th>Table 3.4 Selected journals used in the conjoint experiments</th>
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As illustrated above, the overall experiment had fourteen journals where nine were different and three were repeated (Journal of Marketing Management, European Journal of Marketing and The Journal of the Market Research Society). This meant that five different journals appeared in each experiment (Table 3.4).

In full profile conjoint analysis there are four main options in evaluating the combinations: ranking, rating, scoring and choice based. There is little evidence to suggest that any of the alternative approaches provide better results (Elrod, Louviere and Davey, 1992). In general the choice depends on the objective of the study. The most appropriate method for this research was rating based because of the nature of the RAE scale. In addition to this, ranking based assessments were used as a validity check. The ranking exercise can also produce results that had greater discrimination between alternatives. Ranking forces respondents to use the full range of values. By using both ranking and rating methods it is possible to evaluate the responses to ensure that the task has been completed correctly and the preferences are comparable.

Respondents were asked to consider the choice sets as a set of publications from a four-year period. Along with the ranking exercise the preference measure used in this research reflected the style of the RAE and asked respondents to rate each choice set on a seven-point scale as follows:

<table>
<thead>
<tr>
<th>International Excellence</th>
<th>National Excellence</th>
<th>No Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>7</td>
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</tbody>
</table>

The aggregate research excellence for this set is... (circle a number below) - repeat for each set.

To avoid confusion the questionnaire was designed so that each experiment was placed on a separate page. The combinations were then displayed sequentially. Usually the order of alternatives is randomised between respondents so that any order effects are eliminated. However as there are only a few number of alternatives this was seen as minor cause of any systematic error in the experiment.

50
3.8.3 Estimating and interpreting the model

The fractional factorial can be regarded as providing a set of dummy variables (0 and 1) to estimate the coefficients for each journal, so that ordinary least square regression could be used to analyse both the ranking and rating data obtained from the two experiments. Usually regression is performed using metric dependent variables as a non-metric dependent variable violates one of the assumptions of regression. In conjoint analysis the violation of this assumption has no or little effect on the results (Churchill, 1995; Carmone, Green and Jain, 1978; Cattin and Bliemel, 1978).

As mentioned before two experiments were used to collect data and each experiment had two sets of dependant measures (rank-order and rating scale). Therefore a total of four models were created for each respondent. By aggregating individual responses (models) a single model for all respondents is produced. However an aggregate model, obtained by simply averaging all individual models can often mask differences between groups of respondents. Moore (1980) comments that estimating part-worths at the individual level has more predictive power than alternative approaches, but becomes more difficult as the number of factors increases and is difficult for managers to use and understand. An alternative to the individual or aggregate level models is the segmentation approach, which aggregates individual models using cluster analysis. This was chosen as the most appropriate way to investigate difference between respondents, as it highlights any bias towards different journals.

3.8.4 Ranking journals

In addition to the conjoint study and the scale development procedure a simple ranking exercise was conducted. The ranking data, which is similar to existing measures, helps to draw comparisons with existing literature. By using this in conjunction with the other two methods of evaluating journals a triangulation of results may be produced. These comparisons help determine whether the methods used produced consistent results.
3.9 Summary

The methodology chosen in this research advances the methodological considerations of previous research that has attempted to measure the standing of research journals. Three techniques have been used, conjoint analysis, ranking and the scale development process. The scale development methodology will also improve our understanding of the key variables that affect journal research standing. The incorporation of moderating variables that could cause bias into the measurement instrument will also help in the understanding of the differences between respondents. Overall the methodology described in this chapter should ensure that content and construct validity can be established in the scales produced. In chapter 5 the specific details about the research instrument employed to carry out the measurement stage of the study are discussed.
Chapter 4 – Qualitative Research and Hypothesis Development

4.1 Developing a Conceptual Framework

The literature review showed that no properly designed and evaluated scales were available to investigate the research standing of journals. In order to identify the issues that embrace journal research standing and develop scale items for a questionnaire survey, qualitative exploratory research was undertaken. This chapter discusses the findings of the exploratory research. The chapter uncovers many issues not previously reported in the research literature. In particular the research discovered issues that not only relate to the characteristics of a journal, but discovered that some perceptions may be affected by journal specific experiences and the general experience of academics. From the exploratory research a conceptual framework is constructed from which hypotheses can be developed. In this chapter the interview process and the interviews that formed the exploratory phase of the research are described and analysed. Eight key themes were uncovered and these are discussed in their respective sections. The chapter then moves on to develop testable hypotheses that will form the basis of the qualitative mail based survey.

4.2 Instrument Design

As already mentioned, the literature review found little conceptual development of the underlying construct and reported ad hoc alternative measures and ideas. For example, Weller (1987) suggested three factors that affect journal quality; the editorial staff, the contributors and the reviewing process. By conducting exploratory research it is possible to develop new ideas and to develop a coherent picture which could then be used in future research or for more rigorous hypothesis testing. The aim of this exploratory study was therefore to understand the construct and uncover significant variables that could be used to measure the construct Journal Research Standing.
4.2.1 Interviews

An experience survey (or key informants survey; Churchill, 1995) was selected as the appropriate method to tap the experience and knowledge of experts and those familiar with research journals. For this research, the experience survey consisted of nineteen interviews with academics from a range of backgrounds (Table 4.1). The interviewees were selected using a judgement/convenience sample, which is a non-probability sample. This meant that the results would provide little generalisability for the population of marketing academics. However it was expected that the experience survey would provide insights and stimulate the conceptualisation process. Singleton et al (1993) argue that 'generalising to a specified population and estimating sample precision are usually unimportant' in exploratory studies. The variety of academics interviewed provided a range of views held by marketing academics.

Using the judgement sample may create bias, as the respondents were not selected randomly from the population. Churchill (1995:p583) comments that ‘as long as the researcher is at the early stages of research when ideas are being sought or when the researcher realises its limitations the judgement sample can be used productively’. Churchill (1995) advocates that ‘it is not appropriate to interview people who do not have relevant experience or the ability to articulate this knowledge’. However using techniques suggested by Miles and Huberman (1994) the interviews can make sense beyond the individual case.

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Number</th>
<th>Geographical Location</th>
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<tbody>
<tr>
<td>Marketing Professor</td>
<td>13</td>
<td>UK(8) EU(3) US(2)</td>
</tr>
<tr>
<td>International Marketing Prof.</td>
<td>2</td>
<td>EU(2)</td>
</tr>
<tr>
<td>International Business Prof.</td>
<td>1</td>
<td>UK</td>
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<tr>
<td>Management Science Prof.</td>
<td>1</td>
<td>US</td>
</tr>
<tr>
<td>Marketing Lecturer</td>
<td>2</td>
<td>UK(2)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19</td>
<td><strong>UK(11) EU(5) US(3)</strong></td>
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Note: EU = non-UK European
The experience survey used a selection of academics from a global forum and from the UK. The global forum was the 1996 European Marketing Academy Conference where it was possible to interview academics from Europe and the rest of the world at minimal cost. The eminent academics interviewed there had considerable experience of publishing research, which was both high quality and wide ranging. Due to the transient nature of the conference, some of the interviews were short in comparison to the more in-depth interviews that were conducted in the UK. However, this was the only opportunity to meet face to face with these interviewees and their interviews still contributed significantly to the research. The conference also overcame problems with gaining access, which can be time consuming and problematic in qualitative studies (Malhortra, 1996). The conference was also used for informal, brief discussions and generating research issues and ideas.

UK academics were approached in more traditional ways. After identifying each academic through word of mouth and personal knowledge, plus contacts at the business school, the academics were contacted by telephone. The project was outlined and meetings arranged. All of the interviewees were enthusiastic and eager to cooperate. To protect the anonymity of the interviewees it was not possible to directly identify each interviewee. However, a summary of general demographic information is provided in Table 4.1. It should be noted that as well as being considered senior research academics, each interviewee was also active or had participated in editing journals, reviewing and assessing research or had been a panel member for the Research Assessment Exercise and other funding bodies.

4.2.2 Interview content

The interviews were designed to obtain information and insights into the characteristics of the individual academics and their experiences in research and research rating as well as exploring the nature of Journal Research Standing. In the interviews two data collection techniques were used: the semi-structured interview (see appendices) and triadic elicitation.
The objective of the study was never hidden from the interviewees and an undisguised approach to the interview was chosen. All interviewees agreed to have the discussion taped which meant that excessive note taking was avoided. However notes were taken when it was felt necessary, for example recording non-verbal data such as expressions or diagrams (Easterby-Smith et al, 1991). Notes were also taken when the triadic elicitation technique was used, as this included non-verbal data, for example the way journals were separated out by the interviewee.

Each interview lasted approximately one hour. It was felt that if the interviews were any shorter then it would not be possible to cover the issues in detail. Given that this was an exploratory study complex knowledge about different relationships was not needed and seeking to prolong the interviews to gain such knowledge may have hindered gaining appointments. By using the semi-structured interview the likelihood of gathering relevant information was maximised and there was less likelihood of irrelevant or superfluous data. However given the exploratory nature of the study the interviews were treated as a continuous learning process, with knowledge from one interview being used to improve the focus of the study for subsequent interviews (Miles and Huberman, 1994).

At the beginning of the interview the construct journal research standing was explained to the interviewee. This term, journal research standing, specifically deals with the research status and position within a hierarchy of a set of journals. The term was associated with journal prestige, which was considered to be slightly more ambiguous, but relayed to the interviewee the nature of the construct. During the interview the construct research standing was opened up to embrace other issues that might impinge on their own research standing. By increasing the scope it was possible to elicit a greater depth of insight into a journal’s research standing. Each interviewee found the construct to be meaningful and was comfortable expressing opinions on the construct.

The first data collection technique was the semi-structured pro-forma. This was used to ensure that the interviewer could follow a similar structure for each interviewee, although only as a rough guide. Semi-structured interviews offer the benefit of
flexibility, to adapt to the unique situation of each interview. In allowing comparisons the reliability and validity of the exploratory research is enhanced.

The second data collection technique is called triadic elicitation and allows the interviewee to directly compare and contrast journals to find underlying differences. Triadic elicitation forces the interviewee to differentiate between journals and explain why each journal is different from the other journals. It also encourages the interviewee to thinking more deeply about the issues.

There are essentially six different ways of conducting triadic elicitation (Fransella and Bannister, 1977). In this research the minimal context card form was used. Prior to the interview a set of cards were produced that represented the range of marketing journals. Each card simply had the name of a marketing journal written on one side and a total of twenty cards were produced. Three cards (known as a triad) were selected at random and presented to the interviewee. If the interviewee did not recognise the name of a journal on a card, it was removed from the experiment and another card was selected.

Once the cards had been presented to the interviewee, the interviewee was then asked to specify some important way in which two of the journals were alike and how these were different from the third journal. After recording the response the interviewee was then asked how the third journal was different from the other two. This created two opposing poles that can differentiate journals. The process was repeated with different randomly selected triads until the interviewer was confident that all of the ideas had been elicited from the interviewee.

4.3 Analysis of Semi-Structured Interviews

Miles and Huberman (1994) suggest a two-stage process to analyse qualitative data. Initially the data should be analysed within case and then a cross case analysis should be performed to integrate the findings into a systematic data display. In the context of this research a case is an interviewee/interview. The within-case analysis was used to reduce the data into a format that would help improve the researcher ability to cross-
examine responses. Once within-case analysis had been completed, cross-case analysis was performed. Cross-case analysis summates the views of all the individual cases (interviewees). Ragin (1987) identified two approaches to cross-case analysis: the variable-orientated and the case-orientated approach. The variable-orientated approach was seen as the most appropriate for this study, since the approach focuses on the analysis of variables across all cases, and investigates commonalties across cases. What emerged from this study was eight key themes of journal research standing. Although not an important consideration at this stage, cross case analysis would also help improve the generalisability of the finding.

4.3.1 Validity and reliability of qualitative data

Qualitative research is notoriously difficult to control for the bias that affects the collection and analysis of data. This is mainly due to the researcher being an integral part of the data collection and analysis process. The results are dependent on the researcher's interpretation of the comments made by interviewees. There are several ways to reduce this problem and Miles and Huberman (1994) separate this issue into internal and external validity.

External validity is assessed by comparing the results with prior theory and across cases. Internal validity is assessed by ascertaining whether the interview has been uncontrolled and unmodified by the researcher. Replication and the use of multiple interviewers are suggested ways of tackling this problem. Miles and Huberman (1994) suggest that triangulation is carried out by different measurement instruments. The current research applies this idea by using quantitative methods to validate the exploratory findings.

Reliability of qualitative data is concerned with replication either by other researchers at different times and/or by using different interviewees from the population of interest. In this research, reliability is based on interviewing a number of different academics in marketing and business studies who have a wide range of research experience and ability. Reliability is likely to be enhanced by using complimentary approaches in the interviews, and in this research semi-structured interviews and
triadic elicitation were used. Fielding (1986) goes further and advocates the use of both quantitative and qualitative research methods to investigate reliability, which is the essence of the scale development methodology discussed in chapter 3.

4.3.2 Within-case analysis

The within-case analysis was performed by producing ‘data displays’. A data display is a ‘visual format that presents information systematically, so the user can draw valid conclusions’ (Miles and Huberman, 1994). By reading through the interview transcripts certain themes began to emerge which were then coded. In this research matrices with text rather than numbers in each cell were used. Coding took place when all the interviews had been completed and the interview tapes transcribed, otherwise it was possible that ‘new data collected to verify the pattern are being sort out selectively’ (Miles and Huberman, 1994). Rather than using an entirely inductive coding technique a provisional list of codes were generated prior to the interviews and sub-codes added after each interview to enhance basic understanding. By using predetermined codes comparisons would be simpler especially during the cross-case analysis. When new insights were uncovered new codes were generated and these were used to derive additional data collection from the transcripts.

The new insights were used to design the matrix displays. Having analysed each case independently and produced data displays for each interview, cross-case analysis was used to provide more meaningful conclusions.

4.3.3 Cross-case analysis

The methodological literature suggests two approaches to cross-case analysis; the variable orientated approach and the case orientated approach. The case orientated approach focuses on one case in depth, and then successive cases are examined to see whether the pattern found in each new case matches the information found in the initial case. The variable orientated approach focuses on one variable across all cases. This research uses the variable orientated approach to seek a generalisation of ideas and opinions from the interviewees. Miles and Huberman (1994) suggest that in order to
draw valid conclusions these ‘patterns need to be subjected to scepticism - your own and that of others - and to conceptual and empirical testing’ (Miles and Huberman, 1994:p246). The following sections of this chapter present the results of the cross case analysis.

4.4 Themes that Determine Journal Research Standing

The aim of this qualitative research was to investigate the concept of Journal Research Standing. It did not intend to provide substantive conclusions but to provide a foundation for further research by providing useful insight into the concept. The literature review found that little conceptual development had been conducted in this area. This means that we have little to draw on and thus, for the purposes of this research we draw on the qualitative interviews to provide a sound understanding of the conceptual themes.

The interviewees identified many issues that determine the standing of marketing journals. These were partitioned into eight key themes, which were: the editorial team, the reviewing process; the authors; the readership; journal output, the contents; cultural infrastructure and individual context (Figure 4.2). These key themes are discussed below and where they conform to empirical evidence and previous research this is highlighted. Each determinant is taken individually but in this discussion no importance is placed on their sequence.
4.5 Editorial Team

The first of the eight determinants to be discussed from the model presented in figure 4.2 is the editorial team. The editorial team often consists of the editor, assistant editors, the editorial board and the reviewers, but the roles and the organisational structure can vary considerably between journals. The editorial teamwork for the journal to provide the quality assurance/control and to determine the type of research papers that are published (Anderson and Goldstien, 1981). In essence there are three components of the Editorial Team and these are 1) the editor 2) the editorial positioning / policy 3) the reviewers and composition of the editorial board.

4.5.1 The editor

The editor is the gatekeeper. The editor’s role is to ensure that the editorial policy is not compromised and this includes ensuring that the standard of any submission is high enough to warrant its distribution to reviewers. The editor controls the dissemination of submissions to reviewers and provides an initial screening of articles to determine their compliance with the editorial policy.
It is also important for the editor to select the correct reviewer. The reviewer or reviewers should possess the expertise to understand the methodology used in the submission and the subject under investigation in the submission.

Selecting the appropriate reviewer can be difficult and the ability to select the appropriate reviewer will depend on the editor's skill and knowledge. One interviewee commented that:

'The editor needs to have good judgement about who are good/top academics. The editor needs to be sufficiently eclectic and broad minded, to make sure that the reviewers comments are objective and the reviewers are picked objectively' (Interviewee 6).

Although not suggested by other interviewees, a comment by Interviewee 4 suggested that an important component of JRS is having a competitive editor's post. This means that the incoming editor needs to present a strategy for their editorship and compete against other candidates for the post. The purpose of this process is to scrutinise the beliefs and capabilities of the editor, to ensure that there is a clear editorial strategy and that the editor has the necessary skill and knowledge to maintain the standards of the journal.
4.5.2 Editorial positioning/policy

The editorial policy or positioning strategy was considered by many interviewees to be a crucial part of journal research standing, specifically Interviewees (1,2,3,6,11,12). In this discussion the terms editorial policy and editorial positioning are used interchangeably as, for the purpose of this discussion they are regarded as meaning the same thing. This is because the editorial policy sets out the guidelines and reinforces the positioning of the journal. There are several dimensions to consider when positioning a journal. The most obvious dimensions are target audience, academic/practitioner and expected methodology.

The editorial board works towards establishing the editorial policy so that a set of principles will guide the selection of articles to publish. The editorial policy governs the standards and subject details. Weller (1987) suggests that 'the more prestigious a journal the more elaborate the instructions' to submitting authors will be.

The editorial policy could be considered as a mission statement or a set of objectives that determine the content of the journal and subsequently affect a journal’s standing. A review of the ten journals included in the quantitative survey element of this research, using data published on their respective internet home pages, revealed six elements of the editorial policy: audience, topic, communication method, emphasis, reviewing mechanism and submission details.

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<thead>
<tr>
<th>Component</th>
<th>Content</th>
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<tbody>
<tr>
<td>Audience</td>
<td>Geographical and occupational positioning</td>
</tr>
<tr>
<td>Topic</td>
<td>Subject or methodological orientation</td>
</tr>
<tr>
<td>Communication method</td>
<td>Review, case study, empirical or theoretical</td>
</tr>
<tr>
<td>Emphasis</td>
<td>Debate, leading edge research or practical application</td>
</tr>
<tr>
<td>Reviewing mechanism</td>
<td>Blind \ double blind reviewing etc.</td>
</tr>
<tr>
<td>Submission details</td>
<td>Explains how to submit a research document, which includes style of writing, layout, referencing etc.</td>
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</table>
The content analysis was expected to reveal major differences between editorial policies with explicit details of consideration criteria. However each editorial policy tended to be comparable and indicated one or two main interests. For example, the Journal of Strategic Marketing indicated that articles were published on topics which related to 'long range or strategic activities', however the journal did not distinguish between any other component and left those areas very broad in scope. The Journal of Marketing did not specify any component, although it was indicated that they would only published the 'finest research' in marketing.

Coe and Weinstock (1967) suggested that 'authors would do well to become familiar with current subject emphasis, standards, style preferences, and editorial procedures of applicable journals so they may make highly rational submissions choices'. The study of the editorial policies here revealed that it was very difficult to determine exactly what the journal would consider for publication. This supported Interviewee 3 who commented that 'the market for journals is less differentiated than the editors of journals like to think'. Alternatively Interviewee 6 suggests that 'there is a flavour about a journal - too subtle to communicate - you learn - from a kind of osmosis, from knowing the characteristics of a journal.' This suggests that although editorial policies exist and journals attempt to position their journal within the research environment, the journal is reliant on the editorial board for its interpretation. In particular it suggests that it is not possible to reliably distinguish the standing between journals based on their written/published editorial policy.

4.5.3 Supply of reviewers

Compounding the problem of selecting appropriate reviewers is the fact that reviewers are under no obligation to review and therefore journals compete for the appropriate reviewers. Many interviewees suggested that a supply of good reviewers is important to JRS (Interviewees 2,8,13,15,16).

Interviewee 2 commented -'The hallmark of a good international journal - they can pull in the top people to do the review'. A possible reason for this is that reviewing submissions for a journal can be an honour for the reviewer as they perceive that they
have been specially selected to maintain the exacting standards of the journal. As a result journals with high JRS will have a better supply of reviewers.

Although a good supply of highly qualified researchers to review journal submissions was seen by many interviewees to be very important for a journal to maintain or improve its standing, Interviewee 6 commented that ‘its very difficult to get good quality people to do the job’. Interviewee 2 commented that in journals with high JRS ‘the reviewers tend to be renowned and experts’. Many interviewees (2,6,8,10,12,13,18) suggested that a journal with high JRS would have recognised leading academics as editorial team members and hence available to act as reviewers.

4.6 Reviewing Process

The contribution of the editorial board has been elaborated on in section 4.6. A second element to reviewing is the process by which articles are selected and screened. The reviewing process was seen as a critical and separate element of JRS. It is also the point at which researcher interact with the journal. Interviewee 6 commented on the difficulty of reviewing submissions.

‘When something is really well documented, when something is really well researched, the methodology is fantastic, that’s another thing, but nothing ever is, nothing is perfect, so it relies on judgement and on the collective judgement of reviewers and the editor and whoever else is involved, and then comes this view of an article.’

The reviewing process is the quality control mechanism that accepts or rejects papers submitted to the journal. Apart from reading the journal, reviewing papers and submitting papers is the main interaction academics have with the journal. This interaction is more intimate than reading the journal. It enables academics to form opinions and attitudes towards the journal that would not be possible through reading the journal. Those academics that have been actively involved with the journal are likely to have a greater understanding of the editorial policy and standard of paper
published. In other words these activities are likely to effect academics perception of a journal standing.

The reviewing process is a system that allows other researchers to validate research before it is published as an academic paper in a research journal. This process also helps researchers improve the clarity of their writing and adopt a style that suits the editorial policy for the journal. It could be argued that the system of scientific evaluation/or close up of reviewing research papers submitted to a journal is an objective process in which research is evaluated on its merits. Objectivity assumes that the reviewing process is perfect in that reviewers have current knowledge of the topic area, knowledge of research methodologies and reviewers have unlimited time available to carefully consider the research. Unfortunately, this state of affairs is often difficult to achieve. Reviewers offer their time in virtually all cases free of charge and demand little credit for their efforts. They are constrained by time and their own knowledge, but the skill with which reviewers perform their duties impacts on the standing of a journal. Structured guidelines, the impact of feedback comments, the reviewing mechanism and acceptance rate were perceived to have an affect on the opinions of the reviewing process and hence journal research standing.

4.6.1 Structured guidelines

Interviewee 1 suggested that 'journals with research standing have more explicit reviewing instructions.' Reviewing research papers demands the objectivity of scientific research of something that is inherently subjective. It is very difficult to devise a reviewing process that can cope with the intricacies of research objectively and so reviewers tend to use a personal rationale to distinguish between good and bad research. The literature has suggested various mechanisms to improve the reviewing process (e.g. Armstrong, 1996; Dalton, 1995), such as blind reviewing and the use of structured guidelines (Interviewees 1,10). Structured guidelines can help to ensure issues relevant to the paper have been attended to and that the reviewer does not focus on one particular issue.
4.6.2 Impact of feedback comments

The feedback authors receive from a journal (editors and reviewers comments) influence the authors’ attitude to the journal and particularly their perception of the journal’s research standing. Interviewee 6 noted that he ‘could be put off a journal by having a very bad set of reviewers comments’ but also that ‘some reviewers have saved me [him] from myself’. Therefore the detail and consistency and detail of reviewers feedback (Interviewees 2,6,7,8,) indicates the JRS of a journal. ‘The impression that you get is that the reviewers know their stuff more than for the lesser rated journals’ (Interviewee 2). What was also important was the notion of a two way process and that reviewers and authors could anonymously enter into a dialogue with the reviewers (Interviewees 1,5,6).

4.6.3 Reviewing mechanism

A method that is predominant within marketing as a way to review papers is the blind review. Blind reviewing is a way to divorce the research from the authors and reviewers and was seen by some Interviewees (1,9) as an important element of a journal’s research standing. The blind reviewing process was adopted to eliminate bias caused by the reviewer knowing the author’s name. Also adopted by many journals is a double blind or even triple blind reviewing process. Double or triple blind reviewing refers to the use of two or three reviewers when the author does not know who is reviewing their work and when the reviewer does not know whose paper they are reviewing. Laband and Peitt (1992) found that double blind reviewed journals attracted more citations than single blind journals. One of the main problems with using multiple reviewers in the reviewing process is that they often disagree. This causes problems for editors in the overall recommendation for the paper. It may also mean that more reviewers are needed and this in turn may reduce the likely availability of reviewers who are suitable for the research paper under review. Blind reviewing with multiple reviewers was seen as a rigorous method of assessing submissions and an important feature of high JRS (Interviewees 1,5,6,8,9,13).

However it should be noted that there are special cases where papers do not follow the blind reviewing model. Sometimes respected authors are requested to contribute to the
journal because of their proven track record in the field. One such journal that operates in this way is the Harvard Business Review (HBR) which is generally considered to be a prestigious journal by business research academics.

Armstrong (1996) suggested five ways of improving the current reviewing process: the use of structured rating sheets; early acceptance of articles; authors nominating the appropriate reviewer; open peer review so that the reviewer is recognised for their contribution and the quality of feedback to the researcher; and the research should be result-blind reviewed i.e. the results are removed from the paper so that the results do not influence its acceptance. Armstrong’s (1996) suggestions take the emphasis off quality control of academic research and place a greater emphasis on quality assurance. ‘Upholders of the value of reviewing often point to this ability to improve the quality of published articles as being more important than its role in proposing acceptance or rejection of articles.’ (Meadows, 1998)

The key purpose of reviewing submissions is to ensure that scientific facts are being presented free from personal bias, that the results are not misleading or untrue, and that the results as far as possible are free from errors encountered during the measurement process. This is known as academic rigor and Interviewees (2,4,7,18) emphasised this as an important element of JRS. Dalton (1995) makes an interesting comment about rejection, ‘a letter of rejection is not a divine decree; it is neither an immutable nor an eternal judgement, but the decision of one or two fallible men, subject to reversal by other men equally fallible’ (Dalton, 1995).

Overall, the literature on the reviewing process provides no real agreement on the most appropriate reviewing process. However, there is support for greater improvement in the actual reviewing either by training academics in reviewing or by improving the mechanisms which can aid reviewers such as reviewer evaluation forms (Hirst, Saunders and Stagg, 1997). Dalton (1995) suggests that a greater use of information technology will mean that ‘there is a good chance that reviewing will no longer play the major role that it has had in academic publishing.’ Without doubt the reviewing process has an extremely important role in the selection of journal submissions and this can influence the standing of a journal.
4.6.4 Acceptance rates

A journal’s ability to select papers from a pool of submitted papers seems to have an affect on the research standing of journals. Many interviewees thought that the proportion of research papers accepted or rejected is also important to JRS (Interviewees 2,4,5,6,12,15,18). Acceptance rates differ between journals and between disciplines. In general the ‘softer’ a discipline the higher the risk of rejection. For example, hard science journals such as physics journals will rejected fewer articles than, say, philosophy journals (Meadows, 1998). The reasons for this are probably due to the way in which research is performed and the degree of uncertainty in the interpretation of the results.

Rejection and acceptance of articles will primarily depend on the paper meeting the editorial criteria for the journal. However, in some circumstances the principles of supply and demand will have an important role to play. For instance when a journal needs to meet its publication deadline it requires an appropriate number of papers to publish. If the journal does not have enough papers that are completely suitable then it may be inclined to include other papers to ensure the journal is published on time. This problem tends to be more important for journals which serve a small number of academics (niche journals) and for journals which are not fully established in the market place. In particular new journals can have a supply problem as authors can be reluctant to submit to the journal, because they see little value in publishing in a journal that is not (yet) widely read or respected. An inadequate supply of articles may result in a greater variability in the quality of articles being published, which negatively affects the overall standing of the journal as consistency is important to overall perceptions. Interviewee 6 referred to this as journals producing ‘fewer dud articles’. Interviewee 7 also commented on consistency, saying ‘If you look at some journals you wonder how a paper has gone through any sort of reviewin process, the next paper, it is quite clear it has done because it has attention to various sorts of detail.’

The lower the acceptance rate or the higher the rejection rate the greater the likelihood that a high standard of research is published. Dalton (1995) supported this view of
interviewees, and argued that 'a high rejection rate is often equated with high quality of a journal, and the prestige of a journal is undoubtedly a factor but not the only one'. If the probability of getting published in a journal is low then researcher will need to work harder to achieve publication and so will therefore be more discerning towards their own research. This could mean producing research that is considered higher quality than in alternative submissions, by closely targeting the editorial requirements, and in paying particular attention to the significance of the research to the field, in terms of subject and/or methodological considerations. The ability of a journal to select from a large pool of submissions, which necessitates a low acceptance rate, is a key factor in ensuring consistently high quality papers, and this is an important element of journal research standing.

4.7 Authors

Publishing a piece of research is costly to the researcher. King, McDonald and Roderer (1981) estimated that the cost of producing a manuscript was around 1/4 of an academics' annual salary (1/4 of a year in man hours) and so it is imperative for the author that this time is not lost by submitting research to an inferior or inappropriate journal.

'If you wish to proceed and progress in academic life then you have to understand the role and significance of publication' (Interviewee 13).

The authors of published papers are another important determinant of JRS. Interviewee 2 suggested that in order to increase the standing of the journal it was important to 'encourage the best people to publish and that will increase the readership because they know that the top names are in there, and this will then start to raise the standards of the other papers that are sent in.' Thus the type and reputation of author is important to JRS (Interviewees 8,9,10,13,14,18).

Several Interviewees (1,2,6,8,18) suggested that a high demand from authors to publish in a journal was an important determinant of a high JRS. This also corroborates with a high rejection rate / low acceptance rate, as discussed in section
4.7. It is not only important to have a large supply of articles but that the demand to publish is also there from academics.

The desire to publish in a journal can be due to the personal gain and recognition of publishing in the journal. Many of the interviewees (8,9,10,13,14,18) recognised that the reputation of those who had published in a journal would positively influence their perception of the research standing of that journal. Interviewee 8 commented that ‘the reaction of others when we publish in a journal is important to our own belief of the standing of the journal’. Interviewee 8 also points out that we ‘judge authors because they publish in a journal and rate the journal because of the authors’. Interviewee 2 comments that it is the ‘type’ of authors that counts (such as prominent academics rather than practitioners etc.) and these influence our perceptions of a journal’s research standing.

4.8 Readership

The type of reader and the reasons for reading a journal are important in determining its JRS (Interviewees 2,3). The following example succinctly describes this issue.

‘The underlying principle is that it is the readership that matters. So I would ask people in my field what journals they would actually take seriously; what articles they would read consistently; what journals they would read when it comes through the post; and which ones they would consult in the library.’ (Interviewee 3).

An indication of the JRS is also the distribution of readers. (Interviewees 1,2,6,13,14,16) indicated that an international readership was evidence of a journal’s acceptance within the knowledge marketplace. Far-reaching circulation size within the academic community and the types of readers will therefore have a bearing on research standing. Circulation indicates that the research is interesting to a wide audience and this will increase the potential visibility and impact of the published output. This is probably the reason why citation rates are correlated with circulation size (Chapter 2).
However it is important to note that it is not only the quantity of readers, but also the type of reader that can influence JRS.

4.9 Journal Output

Any research journal can be considered to have three types of output that affect journal research standing. They are the contribution to knowledge i.e. the use of research findings to develop and enhance our understanding in future research output; the use of research in other publications such as text books; and the third output which is to enhance the careers of authors and editorial board.

The contribution to knowledge (Interviewees 1,2,4,6,7,14,16,18) was seen as the primary output for academic research journals. These views are consistent with current evidence that suggests that citation rates as a surrogate measure correlate to standing and other quality hierarchies (e.g. Gordon, 1982). The primary aim of research journal is to formally develop our understanding of the world. The use of the research in other publications or as teaching material and other secondary sources of knowledge were also considered important by interviewees (1,2,5,8,12,14,16). This output is however difficult to quantify, but seems from the interviews to play an important role in our perception of journal research standing.

The third element of journal output the interviewees took (interviewees 2,3,4,7,16,18), was that journals with high journal research standing would also aid the career development of the published author. This is consistent with Luukkonen (1992) who suggested that academics need to ‘publish or perish’. Interviewee 2 suggested that his initial reasons for publishing were for ‘career development rather than a burning desire to contribute to knowledge’. Also the impact on the editorial board members was also seen as an important element of journal output.

4.10 Contents

The contents (i.e. the articles and notes that are published) of a journal were also considered to be an important indicator of Journal Research Standing. Specifically the interviewees referred to the style of communication, the methodological considerations, the emphasis of validity and the conceptual themes.
The communication style (Interviewees 1,2,7,12) for journals can be different, and diversity is seen as something that journals try to achieve (Tellis, Chandy and Ackerman, 1999). Generally because it is necessary to write in a style that is acceptable to the reader (or the editorial policy). For example Interviewee 2 remarked that:

‘If you were writing for the JMM then you would have a more discursive style, less quantitative in the analysis, if you are writing in the IJRM it would tend to be more quantitative and more modelling based.’

Some research suggests that an obtuse writing style indicates the standing or prestige of a journal (Armstrong, 1981), but Hartley, Trueman and Meadows (1988) found little evidence to suggest that readability was related to prestige. Rightly or wrongly the interviewees suggested that journals in marketing with research standing tended to be quantitative (Interviewees 1,7,12,14) rather than qualitative.

Interviewees (1,7,12,14) also commented on the strong methodological background of the research, and were concerned with the emphasis placed on establishing validity (Interviewees 1,10). Journals that possess greater JRS would consider the validity of the research to be a primary concern of research papers.

Several Interviewees (1,2,3,6,7) placed importance on the conceptual issues raised by the journal, both in terms of whether the research is current and in line with the literature, and whether the research may be considered to be ‘hot’. In other words if the research is at the forefront of the literature it may therefore affect the direction of research in marketing i.e. a market leader that governs and influences the progress of research topics.

4.11 Cultural Infrastructure

So far the core indicators of JRS have been discussed. These six themes are the ingredients, and to some degree can be regarded as the core attributes that affects academics’ opinion of research journals. However these perceptions can be influenced by two other key themes. The discussion in this section (and 4.13) investigates why
academics may have different views (or be 'biased') towards some journals. A view held by almost all the interviewees was that due to vagaries of assessing research journals and the incompleteness of their own knowledge, many decisions academics make about the standing of journals can depend largely on the culture in which they are immersed. Section 4.12 focuses on the second influential theme that can affect journal research standing: the individual context.

Referral by peers and senior academics (word of mouth) was seen as an important part of the development of a perception of the research standing of a journal (Interviewees 1, 8, 9, 12, 13, 14, 16, 18). One interviewee suggests that 'journals are top journals because they are considered to be top journals' (Interviewee 13). As part of this referral process, journals are often considered in the research evaluations that impact on career and tenure prospects. A journal that is used in the recognition and reward system instantly becomes more important to individuals (Interviewees 2, 3, 7, 8, 12, 18). Some journals are so important in this process that one interviewee suggests that an article in one of these journals could 'make a career' (Interviewee 4). Collin, Johansson, Svensson and Ulvenblad (1996) supported the view of the interviewees that there was a split in research cultures and traditions between European and American academics. This suggests that where one journal could have high JRS in one culture it may be considered to have little JRS in another. Therefore cultural differences are thought to influence the research standing of journals.

The most consistent and important view among the interviewees was that a journal must become integrated into the research network (Interviewees 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 15, 18), in terms of recognition by peers, use in rewards systems and use in current research. Interviewee 12 also pointed out that an affiliation to an academic society improves journal integration into this research network. The Interviewees often referred to the age of a journal as being critical to its JRS. Carpenter and Nakamoto (1989) recognised that pioneering advantage for commercial products can benefit long term success/market share. If we consider journals as products then pioneering advantage could equally be important to JRS. This is probably due to the journal being able to attract the best reviewers and authors and submissions. Older
journals are more likely to have greater research standing than younger less established journals because of this integration.

4.12 Individual Context

The eighth and final theme, and an extremely important element of an evaluation process is the individual context in which decision are made. This section can be split into two and firstly we will look at journal specific experience and then look at general research experience.

As consumers develop their skills in discriminating between products, so academics learn and develop their ability to discriminate between research journals. At an individual level academics make judgements using their personal experiences (Habermas, 1972; Myrdal, 1958).

Learning the characteristics of a journal takes place on two levels. Firstly academics develop first hand experience of the journal (Interviewees 2,3,5,6,14). This experience can be gained from the reviewing process, being on the editorial board or reading the journal. At the journal specific level academics rely on many of the characteristics that have been mentioned in previous factors in this chapter, whilst adding their own specific experience. For example, one marketing professor (Interviewee 7) described his experience of publishing in some journals:

'The comments that you get back show that the people who are making the comments know what they are talking about. Where if you send it to certain other journals you get comments back which makes you think what on earth is this...’

Interviewee (18) also suggested that ‘we must not overlook the obvious, that people have vested interests’. Pre-dispositions towards a journal such as being on the editorial board, have also been suggested as a source of bias towards different journals (Jobber and Simpson, 1986, Toderov and Glazel, 1988; Nagpaul, 1995). Cognitive dissonance could also play apart in an individuals assessment of a journal. Due to the high investment of time and research costs in producing a paper for publication only to have
the work rejected could result in dissonance reducing behaviour such as down grading the journal or playing down the importance of publishing in the journal.

General research experience suggested by several Interviewees (2,6,8,14,16,18) was considered to play an important role in our ability to compare and discriminate between journals. Johnson and Russo, (1984) found that the ability to discriminate between brands relied on familiarity and expertise, therefore having the ability to discriminate between journals should be considered to play an important role in the measurement of journal research standing.

4.12.1 Key findings

The findings suggest that the phenomenon of Journal Research Standing is complex and has multiple dimensions. The display chart in Figure 4.4 summarises the determinants of the research standing of academic journals, and indicates the contributions of the individual interviewees.

Figure 4.4 The determinants of Journal Research Standing

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<thead>
<tr>
<th>DETERMINANTS OF JOURNAL RESEARCH STANDING</th>
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<tbody>
<tr>
<td><strong>EDITORIAL TEAM</strong></td>
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<tr>
<td>Editorial positioning (1,2,3,6,11,12)</td>
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<tr>
<td>Recognised leading academics (2,6,8,10,12,13,18)</td>
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<tr>
<td>Supply of reviewers (2,8,13,15,16)</td>
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<td>Editor position competitive (4)</td>
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<tr>
<td><strong>READERSHIP</strong></td>
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<tr>
<td>Type of reader (2,3)</td>
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<tr>
<td>Reason for reading (2,3)</td>
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<tr>
<td>Distribution of readers (1,2,6,13,14,16)</td>
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<tr>
<td><strong>JOURNAL OUTPUT</strong></td>
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<tr>
<td>Contribution to Knowledge (1,2,4,6,7,14,16,18)</td>
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<tr>
<td>Use in other sources (1,2,5,8,12,14,16)</td>
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<tr>
<td>Career development (2,3,4,7,16,18)</td>
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<tr>
<td><strong>REVIEWING PROCESS</strong></td>
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<td>Explicit reviewing instructions (1)</td>
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<tr>
<td>Multiple reviewers (1,5,6,8,13)</td>
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<td>Blind reviews (1,9)</td>
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<td>Two-way feedback (1,5,6)</td>
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<td>Rigorous (2,4,7,18)</td>
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<td>Difficulty of acceptance (2,4,5,6,12,15,18)</td>
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<td>Detailed reviews (2,8)</td>
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<td>Consistent reviews (2,6,7)</td>
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<td><strong>AUTHORS</strong></td>
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<td>Demand to publish in the journal (1,2,6,8,18)</td>
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<td>Type of author (2)</td>
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<td>Reputations of Authors (8,9,10,13,14,18)</td>
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<td><strong>CULTURAL INFRASTRUCTURE</strong></td>
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<td>Integration into the research network (2,3,4,5,6,7,8,10,12,14,15,16,18)</td>
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<td>Referral by peers (1,8,9,12,13,14,16,18)</td>
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<td>Affiliations to academic societies (12)</td>
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<td><strong>INDIVIDUAL CONTEXT</strong></td>
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<td>Experience of the reviewing process (2,3,5,6,14)</td>
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<td>General experience and knowledge (2,6,8,14,16,18)</td>
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<td>Bias towards published outlets (7)</td>
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<tr>
<td><strong>CONTENT</strong></td>
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<td>Communication Style (1,2,7,12)</td>
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<td>Methodological considerations (1,7,12,14)</td>
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4.13 Hypotheses

The hypotheses set out in this section bring together the concepts uncovered through the literature review and the exploratory research. The hypotheses are constructed in anticipation of the questionnaire survey, which is discussed in chapter 5. In contrast to previous studies about journal research standing, this study investigated the nature of research standing to identify the criteria that could be used to evaluate different journals. The exploratory research identified eight key characteristics that affect the research standing of journals. Of greatest importance in the quantitative part of the research, is an understanding of why academics have different attitudes towards journals. The measurement of journals is still in its infancy and therefore it may not be possible to provide a complete picture, but this research aims to construct a framework which allows important differences between individuals to be investigated. It is also anticipated that the framework will provide a basis for future research in this area.

Figure 4.5 shows the extended conceptual framework, it graphically presents the hypotheses and issues that will be investigated in this study. The exploratory study discovered that not only do journals possess certain characteristics but that the perception of these characteristics can be affected by bias or differences in academics' experiences. The illustration has been adapted from figure 4.2 so that it clearly shows the differences between the moderating variables and the independent variables. The large arrow in the centre of the framework indicates the direct link of Journal Attributes. These are considered to be the independent variables in this research. The three dark arrows show the moderators, which can affect academic perceptions of journals' research standing. The moderators are the Cultural Infrastructure and the individual context. However within the individual context two moderating variables exist and these are shown in figure 4.5 as Publishing Expertise and Journal Specific Experiences. Within each of these moderators there are several key variables. These variables are the testable variables that are considered to measure each moderator. The hypotheses that follow aim to discover the effect of these moderating factors, but firstly the hypotheses relating to the independent variables are discussed.
4.13.1 Journal attributes

Firstly, it is important to determine if the constructed measurement instrument adequately represents the construct journal research standing. The journal attributes are the ideas and concepts that will be constructed into scale items generated in the exploratory stage of the scale development process. Without clarification, it would be difficult to determine if what is being measured is indeed the construct of interest. Therefore, the initial hypothesis was as follows:
Hypothesis 1a: The journal attributes are important elements of Journal Research Standing.

The second hypothesis explores a multi-item scale to determine if these six dimensions exist and explores the ingredients that make up a journal's research standing. Although this research is particularly interested in why academics have different attitudes about the research standing of a journal, the research is also concerned with the dimensionality of the construct (Hult, Neese and Shaw, 1997; Day and Peters, 1994; Martin and Irvine, 1983). The exploratory research discovered many factors that could affect the research standing of a journal. Six dimensions that made conceptual sense during the exploratory stage were considered attributes of a journal's research standing. It thus implied that the construct has multiple dimensions, hence hypothesis 1b.

Hypothesis 1b: The construct of Journal Research Standing is multi-dimensional.

If different dimensions exist, then these dimensions will be evident in an evaluation of journals. This means that each dimension could produce a different response for a different journal. In hypothesis 1b perceived dimensions are examined. In the following hypothesis we examine the reality of those dimensions.

Hypothesis 1c: The dimensions of Journal Research Standing are manifest in academics evaluations of journals.

4.13.2 Publishing expertise

In chapter four general research experience was considered a key aspect of journal research standing in terms of academics ability to measure differences between journals. In the survey we examine general research experience more specifically in the context of publishing expertise. In general, attitudes towards objects develop over time. As experience increases, attitudes develop and become more discriminating and subtle. An academic's ability to discriminate between journals will depend not only on the amount of their experience with the particular journal, but also the amount of experience with other journals. In brand evaluation, this is known as expertise
(Johnson and Russo, 1984). One possible measure of experience is job title, but other more direct measures are possible.

Previous research has shown that ranking of journals can differ based on job title (Weber and Stephenson, 1981). Job title, although useful as a surrogate measure of research experience, actually provides little information that refers directly to an academic's research experience. Job title could also be misleading especially when making international comparisons of academics. Different nations can have different academic promotion structures. Further more, academics can be appointed to, say professorships, for a wide number of reasons. Productivity levels and publishing records may also be very different for academics with the same job title. Without theoretical underpinning generated from previous research it is not possible to determine if any one measure, such as job title, will provide an accurate reflection of publishing expertise. Therefore, in this research, a set of measures were developed to investigate publishing expertise, and the following hypotheses were generated:

Hypothesis 2a: Job title affects attitudes towards the research standing of journals

Hypothesis 2b: Years spent researching marketing affects attitudes towards the research standing of journals

Hypothesis 2c: The percentage of time spent researching marketing affects attitudes towards the research standing of journals.

Hypothesis 2d: The percentage of time spent researching affects attitudes towards the research standing of journals.

Hypothesis 2e: The productivity of an academic affects attitudes towards the research standing of journals. 
4.13.3 Cultural infrastructure

One aspect of research experience that has previously not been investigated is cultural differences between academics (Collin, Johansson, Svensson and Ulvenblad, 1996). Confounding geographical differences are largely the result of differences in language. Due to the dominance of American journals, English is considered the international language of marketing research in Europe. For example, the European Marketing Academy uses English as the common language for presentations made at conferences and in publishing the conference proceedings. There may also be geographical differences based on the research culture or dominant methodological trends, which may affect the research standing of journals. For example, European traditions range from the Scandinavian qualitative tradition, to the British managerial tradition and econometric tradition of the Benelux nations.

In non-English speaking nations there are many journals that do not surface in the English dominant international domain. Some journals may have little or no readership beyond their country of origin. This could greatly affect perceptions of the standing of those journals outside their country. An interesting question raised by this is whether some journals are viewed differently due to the international significance of the journal. In particular, do some journals bridge international barriers and others not, and how does this affect attitudes towards the journal's research standing? The dominant culture that academics reside may affect journal research standing. Hence, the following hypothesis is investigated:

Hypothesis 3a: The country where an academic has a permanent academic appointment affects their attitude towards the research standing of journals.

When learning about journals attitude formation starts early on in an academics career through the advice from PhD supervisors and peers. Once integrated into a research culture, through early research training experience, academics perception of research journals will be further affected. From an international perspective, the level of English language skills may also have some influence. Hence, the following hypothesis is investigated:
Hypothesis 3b: The country where an academic's research training is gained affects their attitudes towards the research standing of journals.

Another aspect of culture infrastructure that may affect attitudes towards the research standing of journals is the local culture (i.e. University Department/Business School). The attitudes towards publishing at one university may be completely different from those at another. For example, a department that is heavily teaching orientated may view publishing as useful but not essential, whereas a different department may view research as essential. The result of these differences could be that, in the promotion and tenure process, the importance of different journal changes. Other differences in local cultural attitudes may be linked to the research experience within departments that have different levels of research output. Hence, the following hypothesis was investigated:

Hypothesis 3c: The research standing of a department affect attitudes towards the research standing of journals.

4.13.4 Journal specific experience

As reported in the literature review, differences in academic perceptions of a journal's research standing can occur due to journal specific experiences. Differences are also thought to exist through bias. This concept of self-serving bias is discussed in chapter 2 and 4 (Jobber and Simpson 1988; Todorov and Glanzel, 1988 and Nagpaul, 1995). When investigating brands, which can be considered similar to evaluating journals, Habernas (1972) and Myrdal (1958) suggested that personal experiences are important aspects of attitude development. Journal specific experiences can occur in a number of ways such as reading the journal and citing the journal in their research. However, bias is thought to exist when submitting articles to the journal, which will result in publication or rejection; editorial board membership; or being selected as a reviewer. These factors may bias attitudes towards a journal because they could have an impact on the academics own research standing. Hence, the following hypotheses are investigated:
Hypothesis 4a: Publishing in a journal affects attitudes towards the research standing of journals.

Hypothesis 4b: Rejection from a journal affects attitudes towards the research standing of journals.

Hypothesis 4c: Editorial Board membership affects attitudes towards the research standing of journals.

Hypothesis 4d: Reviewing articles for a journal affects attitudes towards the research standing of journals.

Attitudes to a journal may also depend on research fit. Specifically, the closer an academic's own research matches a journal's research interests, the greater the chance that academics may over estimate the standing of a journal. Weber and Stephenson (1981) found that responses differed between academics in different sub-categories to within subject (discipline) differences. Perceived ability to publish in the journal was also considered to influence a journal's research standing. Thus:

Hypothesis 4e: Research fit affects attitudes towards the research standing of journals

Hypothesis 4f: Perceived ability to publish in the journal affect attitudes towards the research standing of journals.

The final hypothesis investigated in this research is the impact of familiarity on attitudes. It can be said that the variables investigated in hypotheses 4a-e are measures of familiarity Nelson, Buss and Katzko (1983) reported that a serious problem encountered when measuring attitudes towards research journals is the low familiarity academics have with many journals which can make cross comparisons difficult. Johnson and Russo (1984) also report that familiarity is an important issue when evaluating products. Hence:
Hypothesis 4g: Familiarity of a journal affects attitudes towards the research standing of journals.

4.14 Summary

This chapter has sought to highlight the key issues which can affect the research standing of an academic journal, and also the factors which can affect the measurement of Journal Research Standing. In the following chapters these qualitative findings will be considered using a larger sample of academics so that the hypotheses constructed in this chapter can be examined.
Chapter Five – Survey Instrument Design and Survey Response Analysis

5.1 Introduction

The literature review and the qualitative research are necessary foundations for developing hypotheses and hence designing a questionnaire survey to test those hypotheses. In particular a questionnaire survey is concerned with the qualification and statistical evaluation of the ideas generated by the exploratory research. Exploratory research and questionnaire surveys can be stand alone research procedures. However combining them, as in this research, creates a synergy that can elicit more substantive results. This chapter contains a description of the survey instrument used to conduct an international survey, and includes sections on designing the questionnaire, pre-testing and piloting the questionnaire, response rate issues and an analysis of the responses.

5.2 Survey Instrument Design

The purpose of the questionnaire was to collect data from an international sample survey in order to be able to test the hypotheses stated in chapter 4. A telephone survey was regarded as too costly and time consuming, so a postal questionnaire was used to collect responses. Using a structured questionnaire, the researcher should be able to gather data for a relatively low cost with regards to collection and processing. This method may also avoid the interviewer bias (Oppenhiem, 1992) that can occur in qualitative research. Postal questionnaires also allow the respondent to take as much time as needed to answer the questions (Churchill, 1995).

The structured questionnaire in this survey consisted of five sections. These were

1) the importance rating of scale items section
2) the journal evaluation section
3) the ranking section
4) the conjoint experiment section
5) and the demographic section
A sample questionnaire can be found in the appendices. Each of these sections are now discussed in turn. Following these discussions the five sections are drawn together to explain how the questionnaire will measure the concept. Firstly, however, we discuss the generation of items that were created to measure the construct journal research standing.

5.2.1 Generating an item pool

In chapter 3 we discussed the methodology for this research. The use of scale development procedures to produce a multiple items measure of the construct was proposed. The initial qualitative stage of the scale development process is to generate scale items or statements that cover a specific issue that relates to the construct. This is known as an item pool.

The objective of generating an item pool is to derive a collection of items which 'capture the domain' of the construct and the subtle nuances of meaning and issues that describe or illustrate the construct (Devellis, 1992; Churchill, 1979). From the exploratory stage an initial pool of 63 items were generated. The pool was then refined, firstly by an initial scrutiny by the researcher to remove or split double-barrelled statements and other 'bad' items. Secondly, the item pool was then administered to a range of academics including non-native English speaking academics. Their task was to review the scale items for ambiguities and typographical errors. They were asked to review the scale items and evaluate their appropriateness to the construct. They were also asked to add new items if they thought they were necessary. After these refinements the multiple item scale contained forty items. Ten of these items represented quantifiable measures of a journal’s research standing, such as circulation size and the presence of blind reviewing, and thirty items represented subjective opinions about journal research standing. These were then administered through a pilot survey to sixty randomly selected members of the sampling frame. This revealed two more minor typographical errors. These errors were subsequently removed and the final items were ready to be administered in the questionnaire.
5.2.2 Section 1 – Measuring the importance of scale items

Section 1 of the questionnaire investigates the importance of the forty scale items. Given that the interviewees readily found the construct to be meaningful, it was felt that a detailed explanation of the construct was unnecessary. From the experience gained through the exploratory study and other discussions, the nature of the construct also seemed to communicate to the respondents at an intuitive level. To examine the antecedents of journal research standing the construct was implied through the use of a single statement. This statement at the start of the questionnaire said ‘Please evaluate the importance of the following characteristics for a journal that can contribute to your personal academic research standing’. This statement was used instead of the phrase journal research standing to focus the respondents attention towards journals within the scope of academic research. This statement also focused the respondents attention away from popular journals such as Marketing or Marketing Week.

The Likert scaling approach was chosen as a suitable method of eliciting responses from respondents for each of the forty items. The Likert scaling method is especially useful when the primary concern of the scale is dimensionality. According to Oppenhiem (1992), ‘Likert scales tend to perform very well when it comes to reliability and the rough ordering of people with regards to a particular attitude’. The aim of section 1 of the questionnaire was to evaluate the importance of scale items to determine whether respondents thought that the chosen items reflected elements of journal research standing. Rather than agreement categories, a seven-point importance scale was used with end points of ‘very important’ and ‘not very important’. The seven-point scale was used as an alternative to the five point interval scale as it would provide a greater spread of responses.

5.2.3 Section 2 - Evaluation of ten selected journals

Section 2 of the questionnaire was designed to test the items that related to subjective opinions, measured in section 1 of the questionnaire, against a selection of marketing journals. As already mentioned, ten journals were selected for the survey.
However during the pilot study respondents commented on the amount of time taken to complete section 2. They suggested that the questionnaire was too long and should be reduced in size. A solution to this problem, which allowed the same number of journals to be used in the survey, was to use a bridging design. Three questionnaires were produced using one journal (the Journal of Marketing) to 'bridge' the three questionnaires, i.e. the Journal of Marketing was included in each questionnaire. The bridging approach allows for comparisons across all ten journals to be made and also allows the detection of any response bias. The journals were randomly assigned to each questionnaire and the questionnaires were issued randomly to potential respondents. This reduces the chance of response bias and enables the results to be combined during the analysis stage.

A seven point Likert scale was also used in this section, although in this case, the end points were 'strongly agree' and 'strongly disagree'. The need to reduce the number of pages in the questionnaire was also significant in reducing postage costs and gaining more responses through a perceived shorter questionnaire. Respondents were instructed to express their agreement of each scale item, by writing a number that corresponded with their strength of attitude towards the items into a blank box. Responses for each journal were collected in parallel columns. The benefit of this method was that each respondent would only have to read the statement once and then give an agreement value to each of the four journals. This speeded up the completion time for the questionnaire and made the questionnaire less demanding.

The second part of section 2 of the questionnaire was to gain data that could investigate journal specific differences (bias). These measures were intended to gain an insight into the knowledge and understanding that each respondent had of the journal. From the literature review and exploratory research it was expected that respondents who had a vested interest in the journal would rate that journal higher than those journals which were not important to their career advancement. Therefore, in this section, data was gained on respondents experience of the journal such as reviewing contributions and papers published in the journal.
5.2.4 Section 3 - Conjoint analysis of selected journals

The conjoint experiment, as described in Chapter 3, formed section 4 of the questionnaire. This meant that the responses to the conjoint experiment could be directly related to an individual's response to other sections of the questionnaire and therefore could be used at the individual level to investigate the possibility of bias and clustering among respondents in relation to sections 1 and 2 of the questionnaire.

It was recognised that administering the conjoint study in the main survey made it difficult to ensure that each respondent fully understood the instructions provided. It was assumed that due to the educational level of respondents it would not be necessary to use alternative data collection methods, such as in-person interviews and telephone surveys, where the researcher could offer direct advice when required. In chapter 3 is a detailed account of the conjoint analysis process and methods of administration.

5.2.5 Section 4 - Ranking of ten selected journals

Section 3 of the questionnaire investigates, at the general attitude level, the rank order of the ten selected journals. Respondents were asked to rank order the ten according to their journal research standing. This would allow for comparisons across the complete set of respondents and investigate general attitudes towards the ten journals in comparison with the scaling technique used in section 2 of the questionnaire.

The journals were listed randomly and each respondent was asked to complete a simple table by writing the rank in the space provided, so that each journal had a corresponding number between 1 and 10. Respondents were asked to rank all the journals with the result that all ten numbers were used. Similar research (found in the literature review) found that the ranking approach asked respondents to rank only the journals that they were familiar with. In this research the journals were pre-specified. It was considered appropriate to require all ten journals to be ranked, as the pilot surveys showed that all ten journals selected would be familiar to respondents.
5.2.6 Section 5 - Demographic information

The final section of the questionnaire focused on respondents research experience and their general demographic information. At the general level there were questions about an individual's job title and country of origin. Other measures were included to examine specific aspects of general research experience. These included measures that estimated the respondents research output in marketing and investigated the respondents PhD (research) training and the school where their research had been conducted.

5.3 Administering the Questionnaires

To ensure a good response and a response that meets the need of the survey pre-testing is essential. In this section, pre-testing and piloting the questionnaire are considered. Pre-testing and piloting differ in that pre-testing involves asking experts their opinions on the questionnaire, whereas piloting involves asking a sample, randomly selected from the intended population. Both are used to evaluate the questionnaire and the usefulness of incentives. This section examines the use of pre-testing and piloting techniques and describes the apparatus used to facilitate responses.

5.3.1 Pre-testing the questionnaire

The pre-testing was performed using the sample of experts described in chapter 3. The pre-test uncovered six main issues as discussed by the respondents. These comments are illustrated in table 5.1, although some design issues were also covered in 5.2.3/4. Most comments in the questionnaire pre-test focused on the length and difficulty of completing the survey. The original questionnaire had a single page portrait layout for each of the ten journals. Apart from the obvious number of excessive pages, respondents needed to read each statement in section two, ten times. By using the bridging design and changing the orientation to landscape. It was possible to reduce the original 15 page questionnaire into a more manageable and easier to complete questionnaire.
Table 5.1 Issues and recommendations raised from the questionnaire and cover letter pre-test

<table>
<thead>
<tr>
<th>Issue</th>
<th>Suggestion</th>
<th>Action taken / reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Improve layout</td>
<td>Landscape booklet reduced the number of pages and provided a more suitable layout for the questions.</td>
</tr>
<tr>
<td></td>
<td>Place demographic information at the end</td>
<td>Improve overall response rate</td>
</tr>
<tr>
<td>Length</td>
<td>Reduce the number of journals 15 pages far too long-- very time consuming and 'monotonous'</td>
<td>Randomised design- split sample into three randomly assigned sub-samples, offer less journals to each sub-sample</td>
</tr>
<tr>
<td>Simplify</td>
<td>Design questionnaire so that</td>
<td>Landscape format allowed journals to be evaluated together so that each statement only has to be read once</td>
</tr>
<tr>
<td></td>
<td>respondents only have to read the statement once</td>
<td></td>
</tr>
<tr>
<td>Question wording and</td>
<td>Improve clarity and improve</td>
<td>Changes made and instructions rewritten, additional pre-testing undertaken to ensure understanding</td>
</tr>
<tr>
<td>instructions</td>
<td>instructions for conjoint experiment</td>
<td></td>
</tr>
<tr>
<td>Typing errors</td>
<td>Remove all typing errors</td>
<td>Typing errors removed and additional proof reading carried out</td>
</tr>
<tr>
<td>Covering letter</td>
<td>Make more appealing</td>
<td>Simplified and modified to increase appeal</td>
</tr>
</tbody>
</table>

5.3.2 Pilot testing the questionnaire

Pilot testing is performed by administering the questionnaire in a way that closely resembles the full study. The pilot test enables the researcher to estimate response rates and inspect the responses for evidence of errors in the interpretation of questions.

For piloting, Green Tull and Albaum (1988) suggest that 'the sample should remain small but that it should cover all subgroups of the target population.' Questionnaires were sent out randomly to forty sample frame members, as they would have received it in the full study. Twenty questionnaires were sent to each of the target populations (UK and EMAC), as the populations were considered to have different characteristics and would have unique responses to the questionnaire based on their geographical differences. After the initial wave, a follow-up was sent out to those who didn’t respond. Table 5.2 displays the number of responses from the pilot survey and pilot
The responses for each group were roughly the same (Table 5.2). The pilot survey revealed that the questionnaire had a good response rate (57.5%). The follow-up pilot survey also increased responses by almost 20%. The questionnaires were completed well and had few missing values. There were no additional comments made by respondents on the survey to indicate that items had been missed or that they had difficulty in completing the survey. Respondents were also happy to provide personal demographic details. From the pilot we could assume that the full survey would elicit high quality responses.

<table>
<thead>
<tr>
<th>Pilot Test</th>
<th>UK</th>
<th>EMAC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires sent</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Returned</td>
<td>9</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>Follow up</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>11 (55%)</td>
<td>12(60%)</td>
<td>23(57.5%)</td>
</tr>
</tbody>
</table>

When only a portion of the possible respondents return the survey it means that more potential respondents are need to gain a suitable number of responses. The pilot survey suggested that the response rate would be roughly 50%. The full survey was adjusted to include double the amount of the required response total. If an adequate number of responses is not received difficulties may arise in satisfying some of the requirements of the intended statistical tests. Also, when only a portion of the questionnaires are returned the investment made in sampling the correct respondents and in distributing the questionnaires is wasted. It could also result in missing out key types of respondent. The techniques used in this research to ensure a good response
are now explained.

5.3.3 Increasing response rate

The research on increasing response rates suggests that different samples and different types of surveys may require different approaches. The current research took a pragmatic view to response rate literature. The appropriate methods thought to gain the respondent’s co-operation in this research are detailed below. These methods included an emotive appeal, a monetary incentive and a non-monetary incentive.

The covering letter (Appendix 2) is an important method of ensuring a good response rate. The covering letter and the envelope can be considered as the packaging of the questionnaire and they act as the initial enticement to view and consider the questionnaire. A white envelope was used with pre-printed address labels.

The covering letter was brief but set out the objectives of the study and the incentives. In this research, the covering letter was personalised and included important points such as the importance of the research and the importance of the response. These were used as an emotive appeal. The covering letter also included assurances of confidentiality.

Two incentives were used. The first was the monetary incentive: a £1 (1.5 ECU) donation to the International Red Cross. This was seen as an appropriate charity, because the questionnaire was international, and would be recognised as such by respondents. The donation to charity was preferred over sending a small payment with each questionnaire, due to costs associated with a large sample size and the doubtful value of a monetary incentive (Diamantopoulos and Schlegelmilch, 1996). The donation would also act as an emotive appeal.

As the results of the study may have an impact on the respondent’s academic career, the non-monetary incentive was to send a copy of the findings to each respondent. To receive a copy of the findings, respondents were asked to complete and return a pre-printed postcard. The fact that the postcard could be returned separately also helped to
establish a sense of commitment to their confidentiality.

Unfortunately anonymity was not completely possible, since the demographic information in section 5 would have made it possible, with some tenacity, for each respondent to be identified. However, confidentiality was offered, but it was not expected that respondents would feel particularly sensitive about the information in their questionnaire. The follow-up survey was sent out to each respondent who did not return the postcard as it was not possible to identify those who had returned the questionnaire. In the follow-up covering letter an apology was made to those who had already responded. It was hoped that this would reinforce the offer of confidentiality for their response.

A prepaid return envelope was also sent with the questionnaire to make it as easy as possible for respondents to return the questionnaire, and research shows that this is likely to increase the response rate.

By using the collection of techniques outlined above, and given the salience of the topic to academics, it was hoped that a good response for the questionnaire would be achieved. The pilot survey for the UK and EMAC samples elicited a combined response rate of 58%, which is above average for postal surveys, and it was hoped that a similar response rate would be achieved in the main survey.

5.3.4 Main survey

The survey was sent out simultaneously to the UK and EMAC samples. 309 questionnaires were sent to the UK sample and 339 were sent to the EMAC sample. Each sample received one version of the questionnaire and covering letter, plus the 'summary findings' postcard as described in the previous section.

The EMAC postage cost was more expensive than the UK sample postage and so it was important to try and reduce costs in following up the EMAC sample. Therefore a trial postage card follow up reminder was used in the UK three weeks after the initial wave, to assess its usefulness before a reminder was sent to the EMAC sample.
Unfortunately the postcard reminder had almost no effect on response rates. Only six additional responses were received after the reminders were sent. As a result the postcard reminder was not used to follow-up the EMAC sample.

For both samples a full follow-up package was sent out after six weeks. The follow-up package was sent to all respondents except those who had returned the 'summary findings' postcard. These respondents were assumed to have already returned a completed questionnaire and were not contacted again. Respondents who had declared themselves as ineligible for the survey were also removed at this stage. The follow-up package consisted of a questionnaire, a covering letter and a 'summary findings’ postcard. The covering letter re-emphasised the importance of the research and the confidentiality of responses and repeated the details of the incentives.

5.4 Survey Returns

The profile of returned questionnaires for both the UK and EMAC sample is shown in Figure 5.3. It illustrates the responses received at each stage of the questionnaire administration process. The full survey consisted of 648 academics, and from this sample 186 questionnaires were returned, 10 academics were ineligible and 452 did not respond.
Table 5.4 breaks down the responses into their respective samples and shows the number of responses for each subgroup of academic job title. Overall 69 full professors responded to the survey and these made up almost one third of the total responses. The next two grades were represented equally with a quarter of all respondents for each level. The remaining grade (other) had 14 responses. The 'other' category contained academics who were for example readers. Seven respondents did not provide any information about their job title.
Table 5.4 Breakdown of responses based on Job Title and Sample

<table>
<thead>
<tr>
<th>Title</th>
<th>UK Respondents</th>
<th>EMAC Respondents</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Professor</td>
<td>24</td>
<td>45</td>
<td>69</td>
</tr>
<tr>
<td>Senior Lecturer / Associate Professor</td>
<td>14</td>
<td>32</td>
<td>46</td>
</tr>
<tr>
<td>Lecturer / Assistant Professor</td>
<td>18</td>
<td>28</td>
<td>46</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Information not provided</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total Responses</strong></td>
<td><strong>67</strong></td>
<td><strong>119</strong></td>
<td><strong>186</strong></td>
</tr>
</tbody>
</table>

5.4.1 Non response bias

To test for non-response bias the extrapolation method as described in chapter 3 was used. The extrapolation method investigates the differences between the first batch and the last batch of questionnaires returned. The t-test and the Pearson Chi-square statistic were used to compare the demographic variables between the two batches.

Table 5.5 - Tests for non-response bias

<table>
<thead>
<tr>
<th>Pearson Chi-Square for nominal data</th>
<th>( \chi^2 ) Value</th>
<th>DF</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>7.07</td>
<td>4</td>
<td>.132</td>
</tr>
<tr>
<td>Origin</td>
<td>3.01</td>
<td>2</td>
<td>.222</td>
</tr>
<tr>
<td>School spent most time</td>
<td>6.32</td>
<td>12</td>
<td>.898</td>
</tr>
<tr>
<td>School work in now</td>
<td>12.05</td>
<td>10</td>
<td>.281</td>
</tr>
<tr>
<td>Country gained PhD</td>
<td>50.04</td>
<td>40</td>
<td>.133</td>
</tr>
<tr>
<td>Country where employed</td>
<td>53.02</td>
<td>44</td>
<td>.165</td>
</tr>
</tbody>
</table>

**Independent Sample t-test for metric data**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Means</th>
<th>Significance (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First</td>
<td>Last</td>
</tr>
<tr>
<td>Years spent researching</td>
<td>13.39</td>
<td>9.55</td>
</tr>
<tr>
<td>Publications in last 3 years</td>
<td>5.94</td>
<td>4.65</td>
</tr>
<tr>
<td>% time spent researching</td>
<td>38.90</td>
<td>41.55</td>
</tr>
<tr>
<td>% time researching marketing (5yrs)</td>
<td>88.75</td>
<td>16.75</td>
</tr>
</tbody>
</table>

The demographic variables are shown in Table 5.5 and from this we can see that no significant difference at the 5% level was identified across nine of the ten demographic variables. However there was significant evidence of a difference in the
variable 'years spent researching'. This is consistent with the suggestion that colleagues of one of the authors named on cover letter responded early out of respect. As no other variable was affected it was assumed that non-response bias would have no major effect on the results of the survey. Therefore the responses to the survey were treated similarly.

5.4.2 Calculating the response rate

Often response rates are reported without any information that explains how the response rate was calculated. Sampling frames can include mistakes such as ineligible contacts, incorrect or out of date addresses, and the treatment of these can affect the reported response rate. CASRO (Council of American Survey Research Organisation) developed a standard definition of response rate (Wiseman and Billigton, 1984) presented in the following formula.

\[
\text{Response rate} = \frac{\text{Number of completed interviews with responding units}}{\text{Number of eligible responding units in the sample}}
\]

The response rate was calculated using this definition for both the UK and EMAC samples. Taking account of the ten ineligible respondents found in the UK sample a response rate of 21.7% was achieved. The EMAC sample performed better and the survey achieved a 35.5% response. The overall response rate was therefore 28.7%. This was disappointing considering that the pilot study had an overall response rate of 57.5% and was administered in the same way.

One possible explanation for the lower than expected response rate is the timing of the survey. The pilot test was conducted during the winter and the full survey over Easter. It is possible that academics were busier during the Easter period with other commitments reducing their available time to complete the survey. An alternative reason is that the pilot sample that was selected was not representative of the final survey sample. It is possible that by chance, the respondents were more pre-disposed to complete the questionnaire. This was disappointing as the pilot that was carried out in almost an identical way to the main survey and suggested a far larger analysis
sample. This lower than expected response would therefore effect the some of the analyses.

5.5 Characteristics of Respondents

The response rate may also have produced a biased or skewed sample. A major effect of response bias is that it can reduce the generalizability of results. Due to the lower than expected response rate in this survey it was important to investigate the characteristics of the respondents to determine if any response bias existed. In this section the general characteristics of the respondents are examined, starting with an investigation of academic job title.

5.5.1 Job title

The distribution of respondents across the different job titles is shown in Figure 5.6. It shows that full professors were over represented amongst the respondents (35%) and the other two main academic groups represented 22% of respondents equally. Other levels, such as readers and doctoral students made up 9% of responses and 12% of respondents did not supply this information.

Figure 5.6 Academic Title of Respondents
The expected profile of respondent's job title anticipated from the sample frame would have shown more respondents at the lower levels of the academic hierarchy, than at the top. The observed distribution of the academic job titles was not anticipated. It was thought that a pyramidal structure would be evident with full professors less represented in the responses. For example Diamantopoulos et al (1992) found from a UK survey of marketing researchers, that lecturers made up almost 50% of all responses and full professors under 20%. The current survey did not demonstrate this pattern in the UK or in the EMAC sample, which means that the results are skewed up towards more senior researchers. However, the proportions for each of the three main categories were relatively even, allowing for comparisons to be made more easily between the three groups. The analysis of job title suggests that the responses for this survey have above average experience in research.

5.5.2 Research experience in marketing

Figure 5.7 illustrates that the respondents also had considerable experience in researching issues in marketing. The experience ranged from only a few years to over 25 years. Over 75% of respondents had more than five years experience of researching issues in marketing. The largest proportion of respondents had between five and ten years experience. This was not surprising given the large number of professor/senior academics in the sample. Therefore the measure of research experience in marketing

![Figure 5.7 Number of Years Spent Researching Marketing Issues](image-url)
also shows that most respondents had experience specifically in marketing research.

5.5.3 Papers published per year

Figure 5.8 illustrates the number of papers published by respondents each year. The measure is based on papers published during the preceding three years. Thus it is a ratio of papers per year. Rather than using total number of papers published by each respondent, this measure provides an indication of current publishing rate. Which may suggest familiarity with current marketing/research literature.

Figure 5.8 Papers Published per Year (Based on Previous 3 Years)

The results in Figure 5.8 show that the majority of respondents who disclosed the number of papers published over the last three years, published between 1 and 2 papers each year. This is consistent with publication rates of academics in the US (Amason, 1987). It was also expected that publication rate would be related to experience. The sample was skewed so a Kruskal-Wallis 1-Way ANOVA was used to compare job title and papers published. The analysis found that there was a significant difference at different academic levels ($\chi^2=16.53$, DF=2, p= 0.0003). The mean number of papers published increased with job title. From this analysis it can be therefore suggested that the number of papers published is also above average for the population.
5.5.4 Time spent researching marketing

Figure 5.9 illustrates the percentage of time respondents devoted to research. In the current research respondents typically spent longer than in previous studies researching, with almost 75% of respondents reporting that they spent over 25% of their time researching. Diamantopoulos et al (1992) found that UK academics spent on average about 20% of their time researching. Respondents in this survey were more research active than this.

Figure 5.9 Percentage of Time Spent Researching

5.5.5 Research relating to marketing

Figure 5.10 illustrates the percentage of time respondents researched marketing related issues. Almost all respondents spent 75% and over of their time researching issues in marketing. This measure confirms the research activity of respondents was related to marketing and that the time allocated to research activity was above the expected average for the population and that this research was also in marketing.
5.5.6 Research department rating

The distribution of departmental research ratings were also investigated, but for the UK sample only, as no European wide measure exists to compare those departments. In the UK the Research Assessment Exercise scores departments on a seven-point scale and this scale was used to categorise the responses. In a representative sample respondents were more likely to come from lower rated research department, as there are more of these. However, this was not the case here, the majority of cases coming from researchers in departments with a grade 3 and above. A disproportionately larger

Figure 5.11 Research Rating of Respondents Academic Department
number came from the 5 and 5* research departments, with a very low response from the less research active departments. Therefore the responses from the UK were skewed up towards the higher research active departments. Figure 5.11 illustrates the skewness of research departments. It illustrates where respondents have spent most of their research career and where they are currently working. Therefore the UK responses were not only more experienced researchers but the respondents were also from departments with a higher research calibre.

5.5.7 Country of origin

Table 5.12 shows the geographic location (country of origin) of all respondents. The table shows that responses came from a diverse range of nations. 22 nations were covered by the survey with a large percentage coming from The Netherlands, Belgium, and Spain. This reflects the international nature of the research in these nations and that English is used as the core language in publishing marketing research. It is also interesting to point out that twenty seven respondents had gained their PhD/research training in the United States. In this research the investigation of responses at a national level (except the UK) is unfeasible due to the low number of responses from each nation. Due to the low number of responses for many of the nations included in the survey, it was necessary for this research to consider
the responses outside the UK as a single sub-sample. This limits the identification of country specific differences but because the group is so diverse, it can be used as an aid in generalising the findings of the study.

5.5.8 Quality of responses

The analysis of the responses has shown that the sample was skewed upwards. The sample contains a high proportion of experienced researchers. Overall there was a higher proportion of senior academics and the majority of the sample had over 10 years research experience. Respondent’s research was also marketing orientated. In the UK, most responses came from research institutions that had been rated highly by the HEFCE. The respondents were also spending more time researching than those analysed by Diamantopoulos et al (1992). EMAC is also a prestigious society and will attract higher calibre researchers.

In conclusion, the respondents can be considered more experienced than the overall population of marketing academics. The sample also provides a range of responses that can be investigated to determine any unique differences between groups (such as Job Title or geographical location). Therefore the sample will provide a basis for high quality responses.
Chapter 6 – Results: Quantitative Analysis of Scale Items

6.1 Introduction to Quantitative Results

Chapter 6 and chapter 7 present the results of the mail based questionnaire survey. Chapter 6 focuses on investigating the scale items developed from the exploratory research. In particular the chapter examines hypotheses 1a-1c. These refer to the journal attributes, shown above. Chapter 7 focuses on investigating the moderating factors that could also impact on Journal Research Standing. The conceptual framework above, which was discussed in chapter 4, shows the hypotheses of interest in this study. Chapter 7 also includes the results of the conjoint experiment. This chapter analyses the important attributes that characterise the construct Journal Research Standing. The scale development procedures discussed in chapter 3 are implemented to investigate underlying dimensions of the thirty perceptual items.

6.2 Introduction

From the exploratory research, forty items were identified as important to the construct journal research standing. These items were administered to the sample to confirm that they are in fact important elements of the construct journal research
standing. The forty items related to two types of measures: ten items refer to readily quantifiable elements of a journal, including measures such as circulation size and citation rates; the remaining thirty items related to perceptions about the importance of various attitudes towards journals. This chapter seeks evidence to support content validity of all forty items. In particular the chapter focuses on investigating the perceptual measures used to uncover perceived dimensions of journal research standing and establish reliability and discriminant validity of these dimensions.

This chapter focuses on the following hypotheses:

- Hypothesis 1a: The journal attributes are important elements of Journal Research Standing.
- Hypothesis 1b: The construct Journal Research Standing is multi-dimensional.
- Hypothesis 1c: The dimensions of Journal Research Standing are manifest in academics evaluations of journals.

6.2.1 Correlations among items

In multi-item scale development procedures, the main concern is that the items exhibit similar covariance (or correlations). This is also referred to as inter-dependence. If items covary exactly then using several items to describe the phenomena is meaningless as no additional information is collected. If the items do not covary at all then it is probably because the scale items are not measuring the same construct. Therefore in scale development the intention is to produce a set of items that covary but they also capture nuances of the phenomenon. To evaluate these properties the correlations/covariance among the items are investigated.

6.3 Quantifiable Measures of Journal Research Standing

To investigate the importance of the ten quantifiable items of the construct journal research standing, four techniques were chosen. Firstly the mean importance of the items were calculated; then the correlation matrix and Cronbach’s coefficient alpha were used to provide an overall estimation of internal consistency, and finally corrected item-total correlations were examined to confirm if the items was inter-related.
Overall the respondents considered nine of the ten items to be important. Table 6.1 shows the relative importance of these items. The scale had seven points, 4 was the mid point. Numbers below 4 meant that the item were important. Numbers higher than four meant that to some degree the item was not important. In other words, an item with a score of one is considered to be very important. The most important item

Table 6.1 Total Sample Mean Importance Scores for Quantifiable Measures

<table>
<thead>
<tr>
<th>Item (full item wording contained in Appendix 6)</th>
<th>Mean Importance</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Double Blind Reviewing</td>
<td>1.63</td>
<td>1.2</td>
</tr>
<tr>
<td>Q7 Citation rate</td>
<td>2.05</td>
<td>1.24</td>
</tr>
<tr>
<td>Q10 Circulation</td>
<td>2.17</td>
<td>1.29</td>
</tr>
<tr>
<td>Q2 Citations from international sources</td>
<td>2.45</td>
<td>1.5</td>
</tr>
<tr>
<td>Q6 Journal included on an international referencing service</td>
<td>2.68</td>
<td>1.63</td>
</tr>
<tr>
<td>Q5 Editors appointed by an academic society</td>
<td>3.46</td>
<td>1.75</td>
</tr>
<tr>
<td>Q9 Subscription by individual academics</td>
<td>3.66</td>
<td>1.61</td>
</tr>
<tr>
<td>Q4 Editors appointed for a fixed term</td>
<td>3.72</td>
<td>1.85</td>
</tr>
<tr>
<td>Q3 Affiliation to an academic society</td>
<td>3.74</td>
<td>1.65</td>
</tr>
<tr>
<td>Q8 The Journal produces special issues</td>
<td>4.08</td>
<td>1.67</td>
</tr>
</tbody>
</table>

was that a journal has a double blind reviewing process. The following two most important items were the circulation size and citation rates. The three most important items also had the smallest variation amongst the respondents (shown by the standard

Table 6.2 Correlation Matrix of Quantifiable Items

<table>
<thead>
<tr>
<th>Quantitative Items</th>
<th>QT1</th>
<th>QT2</th>
<th>QT3</th>
<th>QT4</th>
<th>QT5</th>
<th>QT6</th>
<th>QT7</th>
<th>QT8</th>
<th>QT9</th>
<th>Q10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double blind reviewing</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citations from international sources</td>
<td>.318</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliation to an academic society</td>
<td>.183</td>
<td>.362</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Editors appointed for a fixed term</td>
<td>.225</td>
<td>.258</td>
<td>.473</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Editors appointed by an academic society</td>
<td>.133</td>
<td>.325</td>
<td>.582</td>
<td>.452</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journal included on an international referencing service</td>
<td>.210</td>
<td>.435</td>
<td>.296</td>
<td>.417</td>
<td>.337</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citation rate</td>
<td>.226</td>
<td>.433</td>
<td>.215</td>
<td>.258</td>
<td>.317</td>
<td>.476</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The journal produces special issues</td>
<td>-.04</td>
<td>.259</td>
<td>.037</td>
<td>.178</td>
<td>.186</td>
<td>.252</td>
<td>.259</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subscription by individual academics</td>
<td>.034</td>
<td>.213</td>
<td>.302</td>
<td>.252</td>
<td>.305</td>
<td>.334</td>
<td>.273</td>
<td>.256</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Circulation</td>
<td>.275</td>
<td>.268</td>
<td>.164</td>
<td>.253</td>
<td>.284</td>
<td>.248</td>
<td>.479</td>
<td>.173</td>
<td>.349</td>
<td>1</td>
</tr>
</tbody>
</table>
deviation). The final item ‘The journal produces special issues’ was considered to be slightly unimportant.

The second stage of the investigation of the quantifiable items, considered the correlations between the ten items and examined the relationships between the individual items. Table 6.2 shows the matrix of the ten items and the larger correlations are highlighted in grey. The matrix shows how each item is correlated to the other items. It shows that not one item dominates, each item represents a particular nuance of the construct journal research standing, and none of the correlations are nearly one. The matrix also shows that there are a range of correlation coefficients, suggesting that there could be underlying dimensions for the ten items. One item, Quant 8 (The journal produces special issues), had a consistently small correlation with the other nine items.

The final technique used to investigate the importance of the ten quantifiable measures is to examine the corrected-item total correlation and the reliability coefficient (Cronbach’s Coefficient Alpha). An examination of the reliability of the items as a unidimensional construct revealed a Coefficient Alpha of 0.8 (Table 6.2) suggesting that the ten items are reasonably internally consistent. However two variables, ‘The journal has a double blind reviewing process’ and ‘The journal

Table 6.3 Reliability Analysis

<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>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double blind reviewing</td>
<td>27.9611</td>
<td>77.4566</td>
<td>.2747</td>
<td>.7965</td>
</tr>
<tr>
<td>Citations from international sources</td>
<td>27.1278</td>
<td>69.1959</td>
<td>.5356</td>
<td>.7699</td>
</tr>
<tr>
<td>Affiliation to an academic society</td>
<td>26.1389</td>
<td>67.0700</td>
<td>.5103</td>
<td>.7725</td>
</tr>
<tr>
<td>Editors appointed for a fixed term</td>
<td>25.8833</td>
<td>65.5450</td>
<td>.5310</td>
<td>.7699</td>
</tr>
<tr>
<td>Editors appointed by an academic society</td>
<td>25.8611</td>
<td>66.6678</td>
<td>.5724</td>
<td>.7644</td>
</tr>
<tr>
<td>Journal included on an international referencing service</td>
<td>26.9278</td>
<td>67.0953</td>
<td>.5734</td>
<td>.7645</td>
</tr>
<tr>
<td>Citation rate</td>
<td>27.5444</td>
<td>71.7131</td>
<td>.5418</td>
<td>.7719</td>
</tr>
<tr>
<td>The Journal produces special issues</td>
<td>25.5389</td>
<td>73.9929</td>
<td>.2788</td>
<td>.8012</td>
</tr>
<tr>
<td>Subscription by individual academics</td>
<td>25.9444</td>
<td>70.4438</td>
<td>.4321</td>
<td>.7821</td>
</tr>
<tr>
<td>Circulation</td>
<td>27.4222</td>
<td>73.0386</td>
<td>.4547</td>
<td>.7799</td>
</tr>
<tr>
<td>Reliability Coefficient</td>
<td></td>
<td></td>
<td>.7955</td>
<td></td>
</tr>
</tbody>
</table>
produces special issues', had low corrected-item total correlations, 0.27 and 0.28 respectively. This suggests that these two items may not be relevant to the construct. However, the two items also appeared at extreme ends of the rank order of importance of all ten items (Table 6.1) ‘Double blind reviewing' was considered to be very important, which means that the item may well be a separate dimension amongst these ten items. The item ‘The journal produces special issues' was considered to be unimportant which again suggests that this item is not related to the construct. To explore dimensionality, as suggested by the reliability estimates, Principle Component Analysis is used. However as the quantifiable measures was not a focal point of this research, thus data for each of the ten selected journals was not collected. This meant that any confirmatory examination of the factors generated by PCA would not be possible. Hence no further action was taken to examine the possibility of a multi-dimensional structure with the quantifiable items. In Section 6.4 PCA is used as data was collected for each of the ten journals selected

The combination of the four measures (mean scores, correlations, coefficient alpha and the corrected item-total correlations) used to analyse the ten quantifiable measures suggests that nine items are important elements of Journal Research Standing. These nine items are internally consistent and represent a range of ideas that relate to the construct. There is also evidence from the correlation matrix and the corrected item-total correlation to suggest that ‘...double blind reviewing' was a separate uni-variate dimension. The tenth item ‘The journal produces special issues' created cause for concern. The low corrected item total correlation, low correlations with the other items and a low overall mean suggest that this item does not represent an important element of the construct and thus should not be used in further research.

6.4 Perceptual Measures of Journal Research Standing

In this section thirty perceptual measures are investigated to determine their appropriateness to the underlying construct of Journal Research Standing. Essentially this section follows the principles described by Churchill (1979) in his paradigm for developing better measures of marketing constructs. In the methodology chapter the overall research strategy was presented, in this section the tactics and use of specific analysis tools are detailed. The section starts off with an analysis of means to
determine the uni-variate importance of each of the 30 perceptual measures. This is followed by an investigation of underlying dimensions of the 30 items. The final element of this chapter is to determine the reliability of these dimensions and assess whether the scales produced offer greater insight into, and can discriminate between, journals.

Table 6.4 Total sample mean rank of perceptual measures

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean Importance</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pecpt 4 Articles are influential to future research</td>
<td>1.72</td>
<td>1.08</td>
</tr>
<tr>
<td>Pecpt 7 Consistently high quality articles</td>
<td>1.77</td>
<td>.96</td>
</tr>
<tr>
<td>Pecpt 13 Rigorous reviewing process</td>
<td>1.93</td>
<td>1.11</td>
</tr>
<tr>
<td>Pecpt 5 Important to theory</td>
<td>1.98</td>
<td>1.16</td>
</tr>
<tr>
<td>Pecpt 23 Referees help improve research papers</td>
<td>2.02</td>
<td>1.16</td>
</tr>
<tr>
<td>Pecpt 17 Detailed reviewers comments</td>
<td>2.13</td>
<td>1.23</td>
</tr>
<tr>
<td>Pecpt 29 Editor capable of selecting the appropriate referees</td>
<td>2.13</td>
<td>1.3</td>
</tr>
<tr>
<td>Pecpt 16 Highly visibly in the academic research community</td>
<td>2.15</td>
<td>1.21</td>
</tr>
<tr>
<td>Pecpt 9 Great achievement to publish</td>
<td>2.16</td>
<td>1.3</td>
</tr>
<tr>
<td>Pecpt 10 Attracts the best authors</td>
<td>2.22</td>
<td>1.34</td>
</tr>
<tr>
<td>Pecpt 11 Internationally respected researchers</td>
<td>2.23</td>
<td>1.24</td>
</tr>
<tr>
<td>Pecpt 22 Academics constantly consult the journal</td>
<td>2.31</td>
<td>1.09</td>
</tr>
<tr>
<td>Pecpt 25 Articles demonstrate methodological rigor</td>
<td>2.32</td>
<td>1.14</td>
</tr>
<tr>
<td>Pecpt 27 Ed. Board are the best for the subject matter</td>
<td>2.34</td>
<td>1.14</td>
</tr>
<tr>
<td>Pecpt 18 Ed. Board respected internationally</td>
<td>2.35</td>
<td>1.27</td>
</tr>
<tr>
<td>Pecpt 26 Central to the marketing [discipline] research literature</td>
<td>2.54</td>
<td>1.44</td>
</tr>
<tr>
<td>Pecpt 24 Referees comprehensively address the issues</td>
<td>2.56</td>
<td>1.25</td>
</tr>
<tr>
<td>Pecpt 15 Improves promotion and tenure prospects</td>
<td>2.59</td>
<td>1.51</td>
</tr>
<tr>
<td>Pecpt 20 The editor is respected internationally</td>
<td>2.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Pecpt 1 Authors are admired after publishing</td>
<td>2.62</td>
<td>1.56</td>
</tr>
<tr>
<td>Pecpt 3 Ed. Board members consider it an honour</td>
<td>2.65</td>
<td>1.47</td>
</tr>
<tr>
<td>Pecpt 28 Editor capable of making independent decisions</td>
<td>2.67</td>
<td>1.45</td>
</tr>
<tr>
<td>Pecpt 8 Important to Methodological knowledge</td>
<td>2.73</td>
<td>1.33</td>
</tr>
<tr>
<td>Pecpt 19R Easy [hard] to publish in the journal</td>
<td>2.77</td>
<td>1.55</td>
</tr>
<tr>
<td>Pecpt 30 Targets academics</td>
<td>2.77</td>
<td>1.29</td>
</tr>
<tr>
<td>Pecpt 6 Reviewing papers are a valuable info. source</td>
<td>2.78</td>
<td>1.34</td>
</tr>
<tr>
<td>Pecpt 14 Referenced articles add credibility to new research</td>
<td>2.88</td>
<td>1.26</td>
</tr>
<tr>
<td>Pecpt 2 Academics find it desirable to subscribe</td>
<td>2.92</td>
<td>1.51</td>
</tr>
<tr>
<td>Pecpt 21 Articles need reworking</td>
<td>3.57</td>
<td>1.39</td>
</tr>
<tr>
<td>Pecpt 12 Articles useful as teaching material</td>
<td>4.04</td>
<td>1.54</td>
</tr>
</tbody>
</table>
6.4.1 Scale item analysis

Thirty items were evaluated to determine their importance to the construct journal research standing. Table 7.4 shows the overall means for the thirty items. Four items were considered to be very important while twenty four were considered to be moderately important. One variable was thought by respondents to have little importance and ‘Articles are useful as teaching material’, was thought to be the least important item. One variable ‘It is easy to publish in the journal’ was negatively worded and it was anticipated that this would correlate with other items once the polarity of response was reversed. The analysis revealed that this item performed badly, after it was reversed scored and was not positively correlated with the other items. Thus the item was removed from the analysis (Devellis, 1991). Therefore twenty nine items were used in the following analysis.

6.4.2 Investigating dimensionality

The twenty-nine items selected from the importance analysis were then investigated to determine if these items represented underlying dimensions. In chapter 4 the concept of journal research standing was considered as a multidimensional construct made up of eight key determinants. In this section these ideas are taken one step forward in an attempt to design a measure that represents the key determinants of journal research standing. One way to investigate the pattern of relationships between items is through factor analysis or principal component analysis.

The first step in any principal component analysis should be to determine whether it is appropriate for the data set of interest. For any data set there are two key issues, sampling size and sampling adequacy, and these will be considered in turn with regards to the questionnaire responses. For the journal research standing questionnaire there were 186 responses for 29 items, hence the sample size is adequate, and this conforms with the advice of Tinsley and Tinsley (1987) and Comrey (1988). In addition to their rules of thumb about sample size, three statistical tests were used to examine sampling adequacy.

The Kaiser-Meyer-Olkin measure of sampling adequacy statistic, provides an indication of adequacy of the sample. For this research a KMO of 0.901 was
produced. This suggests that the sample size is appropriate for the analysis. Stewart (1987) would describe a KMO of 0.901 as “marvellous”.

The Anti-Image Correlation Matrix provides a measure of sampling adequacy for each item along the diagonal. All items performed well by having low partial correlations as 'larger partial or anti-image correlations are indicative of a data matrix unsuitable for factor analysis' (Hair et al, 1995)

The Bartlett test of sphericity tests for the presence of inter-correlations. For the current data set the test showed that inter-correlations existed at a significance level of 0.0001.

Finally the correlation matrix was studied and showed a good range of correlations. If all the items had very low correlations with each other then the data would be heterogeneous and not appropriate for the analysis. The correlation matrix revealed a mixture of high, medium and low correlations, which is appropriate for principal component analysis. Therefore the sample size and tests of sampling adequacy indicate that the data set is suitable for principle component analysis.

6.4.3 Underlying components of perceptual items

The first stage in principal component analysis is to produce the initial solution. However, in SPSS the second stage rotating the initial solution can be performed in the same operation. The 29 variables initial solution was therefore rotated using the varimax rotation method. Rotating the initial solution provides a clearer picture of the covariance structure. The next stage is to determine the number of factors. A starting point can be to use the Kaiser’s Eigenvalue rule (latent root) and Scree plot (Hair et al. 1994). In this research these two methods suggested different numbers of components. The Eigenvalue rule predicted a six component solution where as the elbow on the Scree plot suggested two or possibly three components. The two methods were used as the initial guides, and from this other solutions were produced and examined holistically. The solutions were investigated to determine which scale items appeared in each component. Experience gained through the qualitative research was used to drive our understanding of each component and develop substantive meaning. The process continued until components emerged that had
substantive meaning and made sense statistically. Table 6.5 provides summary statistics for the final solution.

A solution with four underlying components was chosen that explains 57.8% of variance in the data. The four components represented 19.7, 16, 14.69 and 7.4% of the total variance explained and had Eigenvalues of 11.1, 2.4, 1.6, 1.5 respectively. The variance not explained is lost at this stage of measurement, but in return the data has been reduced to a small number of ideas or latent variables suitable for further analysis. Over half of the variance is explained by four latent variables and this

Table 6.5 Principal Component General Statistics

<table>
<thead>
<tr>
<th>Component</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
<th>Cum. % of variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation</td>
<td>11.1</td>
<td>19.7</td>
<td>19.7</td>
</tr>
<tr>
<td>Reviewing Standards</td>
<td>2.4</td>
<td>15.98</td>
<td>35.71</td>
</tr>
<tr>
<td>Content Quality</td>
<td>1.6</td>
<td>14.69</td>
<td>50.41</td>
</tr>
<tr>
<td>Component 4</td>
<td>1.5</td>
<td>7.4</td>
<td>57.8</td>
</tr>
</tbody>
</table>

amount of explained variance is reasonably good for exploratory purposes.
6.4.4 Interpretation of loadings

After examining the rotated component matrix for various factor solutions, a four component solution was chosen. Table 6.6 shows the final solution that best represents the substantive meaning within the data. The loadings on each component are shown when they are above 0.4, as Churchill (1995) advises that component

Table 6.6 Final Principle Component Analysis Solution (cross loading marked in gray)

<table>
<thead>
<tr>
<th>Items</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Authors are admired after publishing</td>
<td>.801</td>
</tr>
<tr>
<td>3 Ed. Board members consider it an honour</td>
<td>.734</td>
</tr>
<tr>
<td>9 Great achievement to publish</td>
<td>.732</td>
</tr>
<tr>
<td>10 Attracts the best authors</td>
<td>.691 .486</td>
</tr>
<tr>
<td>15 Improves promotion and tenure prospects</td>
<td>.670</td>
</tr>
<tr>
<td>11 Internationally respected researchers</td>
<td>.656 .518</td>
</tr>
<tr>
<td>16 Highly visibly in the academic research community</td>
<td>.609</td>
</tr>
<tr>
<td>20 The editor is respected internationally</td>
<td>.578</td>
</tr>
<tr>
<td>2 Academics find it desirable to subscribe</td>
<td>.523 .484</td>
</tr>
<tr>
<td>4 Articles are influential to future research</td>
<td>.515 .499</td>
</tr>
<tr>
<td>14 Referenced articles add credibility to new research</td>
<td>.436 .424</td>
</tr>
<tr>
<td>22 Academics constantly consult the journal</td>
<td>.414</td>
</tr>
<tr>
<td>30 Targets academics</td>
<td>.404</td>
</tr>
<tr>
<td>29 Editor capable of selecting the appropriate referees</td>
<td>.774</td>
</tr>
<tr>
<td>23 Referees help improve research papers</td>
<td>.767</td>
</tr>
<tr>
<td>24 Referees comprehensively address the issues</td>
<td>.700</td>
</tr>
<tr>
<td>28 Editor capable of making independent decisions</td>
<td>.698</td>
</tr>
<tr>
<td>17 Detailed reviewers comments</td>
<td>.686</td>
</tr>
<tr>
<td>27 Ed. Board are the best for the subject matter</td>
<td>.660</td>
</tr>
<tr>
<td>18 Ed. Board respected internationally</td>
<td>.499</td>
</tr>
<tr>
<td>21 Articles need reworking</td>
<td></td>
</tr>
<tr>
<td>7 Consistently high quality articles</td>
<td>.783</td>
</tr>
<tr>
<td>8 Important to Methodological knowledge</td>
<td>.734</td>
</tr>
<tr>
<td>25 Articles demonstrate methodological rigor</td>
<td>.662</td>
</tr>
<tr>
<td>13 Rigorous reviewing process</td>
<td>.508</td>
</tr>
<tr>
<td>5 Important to theory</td>
<td>.466</td>
</tr>
<tr>
<td>26 Central to the marketing [discipline] research literature</td>
<td>.464</td>
</tr>
<tr>
<td>12 Articles useful as teaching material</td>
<td>.499</td>
</tr>
<tr>
<td>6 Reviewing papers are a valuable info. source</td>
<td>.711</td>
</tr>
</tbody>
</table>

115
loadings are significant above 0.4 for the sample size used in this research (n=167). Items were assigned to the component where they exhibited the greatest loading and ordered according to the size of loading on the component. Two variables did not load significantly on any component. The were 'Articles need reworking before they are accepted' and 'Articles are useful as teaching material.' As these two variables had relatively low importance compared to the other 27 variables (see table 6.4) they were eliminated from further analysis. The Varimax rotation produced four factors: the first component had twelve items, the second component had seven items, the third component also had seven items, and the fourth component was univariate.

As the fourth component was a single item measure, the wording for this item was re-evaluated. It was felt that the item 'Reviewing submitted papers to the journal is a valuable source of new information' could have been misinterpreted by some respondents and hence producing its own component by not correlating with the other items. The intended meaning related to refereeing papers and the belief that reviewers would be able to learn new thoughts and ideas. However, in doing so this could have also been confused with ideas relating to reading the journal as a source for new information. As a result this component was eliminated from future analysis and the final solution had three components.

6.5 Components of Journal Research Standing

One of the aims of investigating the structure of the thirty perceptual items was to reduce the data into underlying dimensions (components) and thus reduce the items into more manageable 'chunks'.

The second aim was to produce measurement scales to investigate the research standing of academic journals. The first step in enhancing measures based on the components derived through principle component analysis (see table 6.6), is to purify the components by removing poor items, and items that had significant cross-loading on other components. A problem with these Cross-loading items is that they increase the colinearity with other components. It reduces the discriminant power of the components, which makes differences between the components harder to recognise. Removing the poor items (those that have a small inter-item correlation) also reduces the power of the component. The items within each component are now considered.
6.5.1 Component one

Component one had four significant cross-loadings with component three. The cross loading items were removed and coefficient alpha recalculated. Two other variables had low corrected item-total correlations (below 0.5) and these were also removed.

Table 6.7 Components of Journal Research Standing

<table>
<thead>
<tr>
<th>COMPONENT ONE</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item-total Statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Authors are admired after publishing</td>
<td>27.0000</td>
<td>104.4023</td>
<td>.6179</td>
<td>.8963</td>
</tr>
<tr>
<td>2 Academics find it desirable to subscribe</td>
<td>26.6857</td>
<td>109.2512</td>
<td>.4766</td>
<td>.9037</td>
</tr>
<tr>
<td>3 Ed. Board members consider it an honour</td>
<td>26.9600</td>
<td>102.5674</td>
<td>.7288</td>
<td>.8899</td>
</tr>
<tr>
<td>4 Articles are influential to future research</td>
<td>27.8857</td>
<td>110.6535</td>
<td>.6356</td>
<td>.8956</td>
</tr>
<tr>
<td>9 Great achievement to publish</td>
<td>27.4629</td>
<td>103.5489</td>
<td>.7969</td>
<td>.8871</td>
</tr>
<tr>
<td>10 Attracts the best authors</td>
<td>27.4171</td>
<td>104.6238</td>
<td>.7452</td>
<td>.8896</td>
</tr>
<tr>
<td>11 Internationally respected researchers</td>
<td>27.4057</td>
<td>106.6103</td>
<td>.7058</td>
<td>.8918</td>
</tr>
<tr>
<td>14 Referenced articles add credibility to new research</td>
<td>26.7429</td>
<td>100.6634</td>
<td>.5456</td>
<td>.8991</td>
</tr>
<tr>
<td>15 Improves promotion and tenure prospects</td>
<td>27.0114</td>
<td>106.0344</td>
<td>.5793</td>
<td>.8983</td>
</tr>
<tr>
<td>16 Highly visibly in the academic research community</td>
<td>27.4629</td>
<td>107.7213</td>
<td>.6837</td>
<td>.8930</td>
</tr>
<tr>
<td>20 The editor is respected internationally</td>
<td>26.9886</td>
<td>108.3677</td>
<td>.6007</td>
<td>.8966</td>
</tr>
<tr>
<td>30 Targets academics</td>
<td>26.8286</td>
<td>111.9704</td>
<td>.4731</td>
<td>.9025</td>
</tr>
<tr>
<td>Reliability Coefficients</td>
<td>.9033</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENT TWO</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item-total Statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Detailed reviewers comments</td>
<td>11.7640</td>
<td>25.3564</td>
<td>.6861</td>
<td>.8386</td>
</tr>
<tr>
<td>18 Ed. Board respected internationally</td>
<td>11.5506</td>
<td>26.5991</td>
<td>.5657</td>
<td>.8592</td>
</tr>
<tr>
<td>23 Referees help improve research papers</td>
<td>11.8708</td>
<td>25.0982</td>
<td>.7788</td>
<td>.8243</td>
</tr>
<tr>
<td>24 Referees comprehensively address the issues</td>
<td>11.3371</td>
<td>26.0778</td>
<td>.6165</td>
<td>.8506</td>
</tr>
<tr>
<td>28 Editor capable of making independent decisions</td>
<td>11.2360</td>
<td>24.8706</td>
<td>.5880</td>
<td>.8589</td>
</tr>
<tr>
<td>29 Editor capable of selecting the appropriate referees</td>
<td>11.7640</td>
<td>24.0344</td>
<td>.7621</td>
<td>.8242</td>
</tr>
<tr>
<td>Reliability Coefficients</td>
<td>.8656</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENT THREE</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item-total Statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Important to theory</td>
<td>13.6480</td>
<td>26.0721</td>
<td>.5234</td>
<td>.8062</td>
</tr>
<tr>
<td>7 Consistently high quality articles</td>
<td>13.8547</td>
<td>26.0237</td>
<td>.6817</td>
<td>.7857</td>
</tr>
<tr>
<td>8 Important to Methodological knowledge</td>
<td>12.8827</td>
<td>24.0817</td>
<td>.5939</td>
<td>.7950</td>
</tr>
<tr>
<td>13 Rigorous reviewing process</td>
<td>13.6760</td>
<td>26.0068</td>
<td>.5652</td>
<td>.7997</td>
</tr>
<tr>
<td>22 Academics constantly consult the journal</td>
<td>13.3128</td>
<td>25.8342</td>
<td>.5974</td>
<td>.7949</td>
</tr>
<tr>
<td>25 Articles demonstrate methodological rigor</td>
<td>13.2961</td>
<td>25.3220</td>
<td>.6133</td>
<td>.7918</td>
</tr>
<tr>
<td>26 Central to the marketing [discipline] research literature</td>
<td>13.0838</td>
<td>24.8862</td>
<td>.4611</td>
<td>.8234</td>
</tr>
<tr>
<td>Reliability Coefficients</td>
<td>.8231</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The final component had six items. The coefficient alpha value after purification was $\alpha = 0.81$, which is within the acceptable range for alpha values. Therefore the substantive contents of the first component of journal research standing are thus:

- Authors are admired after publishing in the journal
- Editorial board members consider it an honor to be on the board
- The editor is respected internationally by [marketing] research academics
- Articles published in the journal can improve promotion/tenure prospects
- The journal is highly visible in the academic research community
- Referencing articles from the journal adds credibility to new research papers

This component was named REPUTATION. The component represented the extrinsic benefits of the journal and the impact the journal had on the people who were involved with it. These benefits included the impact on authors who publish in the journal; the impact on editorial board members and the impact on the readership or visibility.

### 6.5.2 Component two

Component two contained six items and there were no significant cross loadings with the other components. The item-total correlations for each item in the component were all above 0.5 and the coefficient alpha value was also reasonably high ($\alpha = 0.86$), confirming the internal-consistency of the items in the component. Thus the substantive contents of the second component of journal research standing are as follows:

- The referees for the journal provide detailed comments for submitting authors
- Referees' comments give information that the submitting author is able to use to improve their research paper
- Referees comprehensively address all the issues
- Editorial board members are respected internationally by [marketing] researchers
- The editor is capable of making independent editorial decisions
- The editor is capable of selecting appropriate referees

This dimension was named REVIEWING STANDARDS and is represented by key issues relating to the editorial decisions making unit. This dimension incorporates issues concerned with the selection of referees, the reviewing process, the editor and the editorial board membership.
6.5.3 Component three

Component three had one significant cross-loading with component one. The cross loading item was removed and coefficient alpha recalculated. One item had a low item-total correlation and was removed. The final scale contained six items with a coefficient alpha $\alpha = 0.79$. This value was marginally lower than the other components but this was not considered problematic and was also within the acceptable range of coefficient alpha (Nunnally and Berenstien, 1995). The substantive content for the third dimension of journal research standing was as thus:

- The journal is important to the dissemination of theoretical knowledge
- Articles published in the journal are consistently high quality
- The journal is important in the dissemination of methodological knowledge
- The reviewing process is rigorous
- The journal is central to the marketing [discipline] research literature
- Articles demonstrate methodological rigor

The component was named CONTENT QUALITY and included items that concerned the standard of content within the journal and the way in which the research was conducted. In particular the components related to the contribution to methodological and theoretical considerations of articles published in the journal.

![Figure 6.8 Key Components of Journal Research Standing](image)

The three components were produced through principle component analysis and an examination of the internal consistency of the items. The original thirty items have now been reduced to eighteen core items that are important to the construct journal...
research standing. These items have also been split into the three components; reputation, reviewing standards and content quality and make both conceptual and statistical sense. Figure 6.8 illustrates the relationship between the components of journal research standing. By reducing the items into a set of key components, rather than a large number of items, it is possible to investigate differences between respondents perceptions of journals. The following section uses these key components to produce summated attitude scales to compare ten selected journals.

The proposed three component solution was confirmed by carrying out a separate principal component analysis on the items that form each component (Churchill, 1995; Cortina, 1993; Gerbing and Anderson, 1988). If the solution is valid then this would indicate that each component is unidimensional. In essence, principal component analysis was used in a confirmatory fashion. This procedure was carried out on each of the three components. The analysis showed that each factor was indeed unidimensional.

6.5.4 Summated rating scales

The iterative process of scale development developed so far has shown evidence to support a three dimensional construct. These dimensions are Reputation, Reviewing Standards and Content Quality. The three sub-scales (components) are robust in terms of internal consistency and have face validity. However the scale development process also helped to reduce the number of variables to a more manageable number. Each dimension had six items, thus reducing the overall total of scale items to 18, from the original set of 30. Reducing the number of scale items has two obvious benefits. Firstly the measure has been purified and items that were less relevant to the construct or had confused meanings have been removed. This makes the measure more reliable and stable. The cross loadings have also been removed, which makes the components (underlying dimensions) more distinctive and less inter-correlated. The second benefit of reducing the number of items is that administering future questionnaires using the measure will be made easier, since response fatigue and other problems associated with long questionnaires has been reduced.
6.6 Application of the Components of Journal Research Standing on Ten Selected Journals

The first part of the questionnaire concerned the importance of a wide variety of aspects that related to journal research standing. The next part of the questionnaire was concerned with the performance of specific journals on these aspects. In the previous section three components were discovered. The performance of these aspects were measured using Likert scales and were identical to their corresponding importance scale items. In this section the components are converted into summated scales by using the scores generated by the Likert attitude scales. To summate the sub-scales the items contained within each component are simply added together and divided by the number of items (Hair et al 1995). Notwithstanding this, the assumptions of univariate/bivariate analysis should be also assessed prior to any analysis. By performing this averaging a single variable for each component is produced for each component. The following section examines the application of the three summated scales using ten selected journals. The aim of investigating the ten journals using the dimensions is to investigate their performance at discriminating between the journals.

The results that follow examine how respondents evaluated each journal on each of the three components. In particular the analysis investigates the differences between the dimensions for each journal to show that underlying dimensions (components) exist. It also examines whether respondents can discriminate between journals in reality, based on these psychometric dimensions of the construct journal research standing.

6.6.1 Bridging the three questionnaires

In chapter 5 the need to shorten the questionnaire was discussed. The decision was made to conduct the study using three questionnaires. This meant that the ten journals were split between the three questionnaires. To test whether the responses were comparable, the three questionnaires had the Journal of Marketing in each version. Thus the journal was used to ‘bridge’ the three questionnaires.
Table 6.9 Test for questionnaire comparability

<table>
<thead>
<tr>
<th>Components</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>REPUTATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.557</td>
<td>2</td>
<td>.279</td>
<td>.297</td>
<td>.743</td>
</tr>
<tr>
<td>Within Groups</td>
<td>167.922</td>
<td>179</td>
<td>.938</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REVIEWING STANDARDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>3.905</td>
<td>2</td>
<td>1.952</td>
<td>1.494</td>
<td>.227</td>
</tr>
<tr>
<td>Within Groups</td>
<td>227.338</td>
<td>174</td>
<td>1.307</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTENT QUALITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.192</td>
<td>2</td>
<td>9.596E-02</td>
<td>.074</td>
<td>.928</td>
</tr>
<tr>
<td>Within Groups</td>
<td>229.359</td>
<td>178</td>
<td>1.289</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To test whether the three journals were comparable One-Way Anova was conducted using the three dimensions of journal research standing. Table 6.9 shows that there are no significant differences between the three versions of the questionnaire (i.e. the three versions of the Journal of Marketing). The components Reputation and Content Quality were insignificant (with a significance of 0.743 and 0.928), the component Reviewing Standards had a slightly higher chance of a real difference in the means with a significance value of 0.227. This indicated that the questionnaires were not subjected to chance bias when the questionnaires were distributed and the ten journals can be compared with confidence.

6.6.2 Differences between dimensions

Before differences between journals were investigated it was important to investigate differences at the individual journal level. If differences existed between the dimensions of journal research standing it meant that the dimensions discovered through the importance items existed in the perceptions respondents had of the journals. In other words the constructed dimensions existed in reality.

To investigate the difference between the three dimensions (components) of each journal the related t-test ($t$-test for all pairs) was used. Unlike the standard t-test this statistical test is appropriate when an investigation of independent measures is required across the same sample (Diamantopoulos and Schlegelmilch, 1997). The analysis looked at each journal in turn and evaluated the differences between the three dimensions by comparing two dimensions at a time. Firstly Content Quality was
compared with Reviewing Standards (CQ v RS), then Content Quality was compared with Reputation (CQ v R) and finally Reviewing Standards was compared with Reputation (RS v R).

Table 6.10 Differences between dimensions

<table>
<thead>
<tr>
<th>Journal</th>
<th>Differences between Dimensions</th>
<th>Paired Sample t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CQ v RS</td>
<td>CQ v R</td>
</tr>
<tr>
<td>JM</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>IMM</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>MS</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>EJM</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>IJRM</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>JSM</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>JMR</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>JMRS</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>JCR</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>JMM</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

Table 6.10 shows that out of 30 paired sample t-tests, 18 were found to be significant at the 10% level. If these differences were to have happened by chance then we would have expected three of the thirty comparisons to indicate a significant difference between the components. Therefore we can be confident that there are real differences between the three components. The idea of three distinct components is not purely theoretical, derived from the previous analysis, but exists in the attitudes of respondents.

It is also interesting that that the patterns of differences are not consistent. Some journals differ across all three dimensions (JM, JCR) whereas the JMM is consistent across all three dimensions. The remaining seven journals are only different on one or two of the dimensions. These results provide further evidence that the construct journal research standing is multi-dimensional. It is also encouraging that the results also show that respondents see differences between the three components.

6.6.3 Differences between journals

The journals were investigated to determine if each dimension could differentiate between the ten selected journals. To perform the analysis each dimension was taken in turn and a one way analysis of variance (one – way ANOVA) was performed. Before the results could be interpreted with confidence, the variables were evaluated
to ensure that the two basic statistical assumptions held for each summated score for each journal. Firstly, histograms were constructed for each summated score for each journal to ensure that the scores were normally distributed. Secondly, the Levene test for equal variance was performed during the analysis. Both tests found only slight deviations from the required assumptions, but as the sample sizes were similar and the normality assumption was only just violated, we could get 'reasonably good results' (Diamantopoulos and Schlegelmilch, 1997).

Table 6.11 ANOVA statistics of differences between dimensions

<table>
<thead>
<tr>
<th>Components</th>
<th>F-Ratio</th>
<th>Significant at the 0.01 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation</td>
<td>24.885</td>
<td>✓</td>
</tr>
<tr>
<td>Content Quality</td>
<td>29.166</td>
<td>✓</td>
</tr>
<tr>
<td>Reviewing Standards</td>
<td>5.221</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 6.11 shows that all three dimensions showed a significant difference between journals. As ten journals were used in the test this overall significant result does not provide a clear picture. The significant result only indicates that at least one of the journals is significantly different from the other. Therefore multiple comparison tests using the Scheffe test were conducted to pinpoint where the differences occurred and where there were similar journals for the three components.

Table 6.12 Multiple Comparisons using Scheffe test

<table>
<thead>
<tr>
<th>Journal</th>
<th>JMR</th>
<th>JM</th>
<th>MS</th>
<th>JCR</th>
<th>IJRM</th>
<th>JMRS</th>
<th>EJM</th>
<th>IMM</th>
<th>JMM</th>
<th>JSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JM</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JCR</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IJRM</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JMRS</td>
<td>crs</td>
<td>rs</td>
<td>crs</td>
<td>crs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EJM</td>
<td>crs</td>
<td>rs</td>
<td>crs</td>
<td>crs</td>
<td>crs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMM</td>
<td>rs</td>
<td>crs</td>
<td>rs</td>
<td>crs</td>
<td>rs</td>
<td>crs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JMM</td>
<td>crs</td>
<td>rs</td>
<td>crs</td>
<td>crs</td>
<td>crs</td>
<td>crs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JSM</td>
<td>crs</td>
<td>rs</td>
<td>crs</td>
<td>crs</td>
<td>crs</td>
<td>crs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant differences between journals shown for each factor using the following key:
rs - Reviewing Standards
c - Content Quality
r - Reputation
s - Overall Standing
Table 6.12 shows where there are significant differences for each of the three components and also for an overall measure based on the summated score of all three components. Table 6.12 shows that there are two distinct sets of journals among the ten journals used.


The differences between the groups tended to occur for all of the dimensions. Although the Overall Standing (s) was consistently different for the groups of journals. The distinction between the groups is less clear when only considering reviewing standards. The distinction between the groups is stronger when considering reputation, content quality or the overall journal research standing.

Figure 6.13 provides a diagrammatic view of the journals mean scores of each component for each journal, and the overall journal research standing. The means for each journal are reverse scored, which will indicate a lower mean score for a journal when the journal has a higher journal research standing. The chart shows that content quality, reputation and the overall standing scores follow similar a pattern. The chart also shows how reviewing standards, as described earlier, were less discriminative between journals and the two groups. This is clearly shown in Figure 6.13 where the differences are not consistent with differences for the other two components and the overall standing score. Indeed the dimension reviewing standards shows that the reviewing standards were considered almost identical for the highest and lowest rated journals.
6.7 Summary

This chapter examined hypotheses 1a-1c. The first hypotheses investigated the important elements of the construct journal research standing. Nine of the quantifiable items and 29 of the perceptual items were considered on average by respondents to be important elements of journal research standing. The unimportant items were removed, which left 38 items. As a result, considering only these 38 items, we can support hypothesis 1a.

Accept Hypothesis 1a: The journal attributes are important to journal research standing.

The second hypothesis investigated the dimensionality of the construct. Through the scale development process thirty perceptual items were reduced to eighteen, and these
created three unidimensional components; reputation, content quality and reviewing standards. As a result, hypothesis 1b is supported.

Accept Hypothesis 1b: Journal research standing is a multidimensional construct.

The third hypothesis investigated in this chapter concerned academic evaluations of the three components to determine if the dimensions constructed through importance scale manifested in the evaluations of journals. Attitude scales that corresponded with the eighteen items used to construct the three components, were used to examine a set of ten journals. The three components were converted into summated rating scales and through ANOVA and Paired Sample T-tests differences between journals, and differences between components were explored. Differences between components were found to be statistically significant. Differences were also found between journals except that these differences tended to split journals into two groups. In the next chapter factors that may affect these dimensions are examined. As a result, hypothesis 1c is also supported.

Accept Hypothesis 1c: The dimensions of Journal Research Standing are manifest in academics evaluations of journals.
Chapter 7 – Results: Analysis of Moderating Variables and Conjoint Analysis Experiments

In chapter 6 journal attributes were investigated to determine if underlying dimensions of journal research standing existed. In this chapter the investigation turns to measuring hypothesised differences based on these dimensions using the key moderating variables described in chapter 4. The moderating variables of specific interest in this study are publishing expertise, cultural infrastructure and journal specific experience. ANOVA and Pearson’s correlation coefficient were adopted to investigate these moderating variables. By using these relatively simple yet effective techniques it is possible to present a clear picture. By using univariate techniques it is also possible to investigate the concepts with a smaller number of cases and to overcome some of the problems of multivariate assumptions. The chapter is split into four main sections. Sections 7.1-7.3 focus on the moderating variables hypothesised in chapter 4, section 7.4 focuses on interpreting the results of the conjoint experiments.

7.1 Publishing Expertise

Five hypotheses were developed to investigate differences in the ratings of the dimensions of journal research standing, based on publishing expertise. Of particular interest were the variables job title, years spent researching marketing, percentage of published research relating to marketing issues, percentage time researching, and research publishing productivity.

Hypothesis 2a states that job title affects attitudes towards the research standing of journals. Analysis of Variance was used to investigate the differences between different job titles. Category four (‘others’ – referring to the questionnaire in appendix 5) was omitted from this analysis due to the low number of responses. This left three categories full professor, senior lecturer and lecturer. The three dimensions of journal research standing for the ten journals were compared separately with the three job title groups. Aside from the Journal of Marketing, which had a higher number of responses the analysis was conducted using a small number of cases. This meant that the
generalisations made from the data would be susceptible to sampling error. Therefore the analysis was also performed using an amalgamation of the two groups of journals shown to be significantly different in section 6.6.3. This increases the sample sizes for the three job title groups and hence increases the sensitivity and generalisability of the results.

The ANOVA of the three dimensions for all ten journals revealed that two journals had significant differences across two job title categories. Firstly the Journal of Marketing (JM) had a significant difference between the attitudes of the reviewing standards between senior lecturers and lecturers ($F = 3.895$, sig. 0.022). The senior lecturers scored the reviewing standards higher than the lecturers. Secondly, the IMM (Industrial Marketing Management) journal was rated significantly higher by professors than senior lecturers and lecturers ($F=3.782$ sig. 0.035). No other differences were found to be significant across the journals and the dimensions. The two groups of journals also revealed no significant differences for any of the dimensions. The multiple comparison problem (Norusis, 1997) means that the probability of achieving a significant result increases as more comparisons are made. In the light of this, the results obtained for the JM and IMM were probably chance events, and not evidence of any true differences in the population. As a result the hypothesis is not supported.

Reject Hypothesis 2a that job title affects attitudes towards the research standing of journals. In other words attitudes towards a journal’s research standing are not moderated by job title.

Hypothesis 2b states that the years spent researching marketing affect attitudes towards the research standing of journals. To test this hypothesis the three dimensions of journal research standing were correlated with the years respondents had been researching marketing issues. The univariate histogram and bi-variate scatter-plots for the two variables were investigated for each journal. The histograms and scatter-plots indicated that there were no outlying values, so the results would not be distorted by outliers and could be interpreted with confidence. In this analysis, each journal was examined separately. The analysis also investigated the correlations using the two distinct groups of journals rather than each journal individually. The two statistically significant groups of
journals shown to be significantly different in section 6.6.3. Using the two groups it was possible to increase the overall sample size for the analysis. Table 7.1 shows the significant correlations between the years spent researching and each dimension of journals research standing. In Table 7.1 the sign of the correlation has been changed so that a positive correlation shows journal research standing increases with years spent researching marketing, as the scales for journal research standing were developed with 1 as the maximum value and 7 as the minimum value. The signs of the correlations have been similarly changed in tables 7.2-7.4.

Table 7.1 shows only one correlation with a significance at the 10% level. It was anticipated that due to random variation there would be three correlations significant at the 10% level. Therefore no correlation was seen to exist between the number of years spent researching and attitudes towards the journal research standing of the ten marketing journals. As a result the hypothesis is not supported.

Reject Hypothesis 2b that the years spent researching marketing affect attitudes towards the research standing of journals. In other words, attitudes towards a journal's research standing are not dependent on the years spent researching marketing.

Table 7.1 Correlation between years spent researching and JRS

<table>
<thead>
<tr>
<th>Journal</th>
<th>Pearson's R Correlation (significance)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reputation</td>
</tr>
<tr>
<td>JM</td>
<td>-</td>
</tr>
<tr>
<td>IMM</td>
<td>-</td>
</tr>
<tr>
<td>MS</td>
<td>-</td>
</tr>
<tr>
<td>EJM</td>
<td>-</td>
</tr>
<tr>
<td>IJRM</td>
<td>-</td>
</tr>
<tr>
<td>JSM</td>
<td>-</td>
</tr>
<tr>
<td>JMR</td>
<td>-</td>
</tr>
<tr>
<td>JMRS</td>
<td>-</td>
</tr>
<tr>
<td>JCR</td>
<td>-</td>
</tr>
<tr>
<td>JMM</td>
<td>-</td>
</tr>
<tr>
<td>Group 1</td>
<td>-</td>
</tr>
<tr>
<td>Group 2</td>
<td>-</td>
</tr>
</tbody>
</table>
Hypothesis 2c states that the percentage of research in marketing can affect attitudes towards the research standing of journals. To test this hypothesis each journal was again

Table 7.2 Correlation between % of research in marketing and JRS

<table>
<thead>
<tr>
<th>Journal</th>
<th>Reputation</th>
<th>Reviewing Std.</th>
<th>Content Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>JM</td>
<td>.205 (.006)</td>
<td>-</td>
<td>.153 (.042)</td>
</tr>
<tr>
<td>IMM</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EJM</td>
<td>-</td>
<td>-</td>
<td>.261 (.059)</td>
</tr>
<tr>
<td>IJRM</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JSM</td>
<td>.227 (.095)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JMR</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JMR S</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JCR</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JMM</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group 1</td>
<td>.103 (.035)</td>
<td>.093 (.062)</td>
<td>.087 (.074)</td>
</tr>
<tr>
<td>Group 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

examined. The analysis measured the correlation between the three dimensions and the variable 'percentage research published that related to marketing issues' with the ten journals and the two significant groups of journals (as described in section 6.6.3). The univariate histogram and bi-variate scatter-plots for the two variables were investigated for each journal. The histograms and scatter-plots indicated that there were no outlying values, so the results would not be distorted by outliers and could be interpreted with confidence. In this analysis, each journal was examined separately. The analysis also investigated the correlations using the two distinct groups of journals rather than each journal individually. The two statistically significant groups of journals shown significantly different in section 6.6.3. Using the two groups it was possible to increase the overall sample size for the analysis. Table 7.2 shows the significant correlation between the percentage of research in marketing and each dimension of journal research standing.

Table 7.2 shows that four correlations were significant at the 10% level. All three correlations that correspond with all the dimensions for the amalgamated journals in
group I were also significant at the 10% level. It was anticipated that due to random variation there would be three correlations significant at the 10% level. Hence, it is not surprising that four correlations at the 10% level occurred. What is interesting is that all three dimensions of journal research standing were significantly correlated with the variable percentage of research in marketing for group I journals. Reputation had the highest correlation, but this correlation was only 0.103. If the Pearson R correlation is converted into the percentage of variance explained (i.e. $R^2$), then the variable 'percentage time researching marketing issues' explains just 1% of the total variation in journal research standing. As a result the hypothesis is not supported.

Reject Hypothesis 2c that the percentage of research in marketing affects attitudes towards the research standing of journals. In other words attitudes towards a journal’s research standing are not dependent on the percentage of research in marketing.

Hypothesis 2d states that the percentage of time spent researching affects attitudes towards the research standing of journals. To test this hypothesis the percentage of time respondents spent researching was correlated with the three dimensions of journal research standing. The univariate histogram and bi-variate scatter-plots for the two

<table>
<thead>
<tr>
<th>Journal</th>
<th>Pearson’s R Correlation (significance)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reputation</td>
</tr>
<tr>
<td>JM</td>
<td>.212 (.004)</td>
</tr>
<tr>
<td>IMM</td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td></td>
</tr>
<tr>
<td>EJM</td>
<td></td>
</tr>
<tr>
<td>IJRM</td>
<td></td>
</tr>
<tr>
<td>JSM</td>
<td></td>
</tr>
<tr>
<td>JMR</td>
<td></td>
</tr>
<tr>
<td>JMRS</td>
<td></td>
</tr>
<tr>
<td>JCR</td>
<td></td>
</tr>
<tr>
<td>JMM</td>
<td></td>
</tr>
<tr>
<td>Group 1</td>
<td>.116 (.017)</td>
</tr>
<tr>
<td>Group 2</td>
<td>.133 (.066)</td>
</tr>
</tbody>
</table>

Table 7.3 Correlation between time spent researching and JRS
variables were investigated for each journal. The histograms and scatter-plots indicated that there were no outlying values, so the results would not be distorted by outliers and could be interpreted with confidence. In this analysis, each journal was examined separately. The analysis also investigated the correlations using the two distinct groups of journals rather than each journal individually. The two statistically significant groups of journals are shown to be significantly different in section 6.6.3. Using the two groups it was possible to increase the overall sample size for the analysis.

Table 7.3 shows the significant correlations between the two variables. Excluding the two amalgamations of journals (Group 1 and Group 2), seven different correlations were significant. The correlations for the Journal of Marketing (JM) were significant on all three dimensions and at the 1% level. The remaining four correlations were significant at the 10 % level. The correlations for all three dimensions of journal research standing with time spent researching were significant for both amalgamations of journals (group 1 and group 2). The dimensions were also all positively correlated with time spent researching. However, the correlations were again low with the highest amount of variation explained was only 7%. Considering that time spent researching is only significant for a few journals and that the affect is minimal, the evidence does not suggest an important moderating affect of time spent researching on journal research standing. As a result, the hypothesis is not supported.

Reject Hypothesis 2d states that the percentage of time spent researching affects attitudes towards the research standing of journals. In other words, attitudes towards a journal’s research standing are not dependent on the percentage of time spent researching.

Hypothesis 2e states that the productivity of an academic affect attitudes towards the research standing of journals. To test this hypothesis a productivity index was calculated by dividing the total number of articles produced over the previous three years by three. This provided a metric indicator of research output, which measured respondents current productivity.
The univariate histogram and bi-variate scatter-plots for the two variables were investigated for each journal. The histograms and scatter-plots indicated that there were no outlying values, so the results would not be distorted by outliers and could be interpreted with confidence. In this analysis, each journal was examined separately. The analysis also investigated the correlations using the two distinct groups of journals rather than each journal individually. The two statistically significant groups of journals are shown to be significantly different in section 6.6.3. Using the two groups it was possible to increase the overall sample size for the analysis.

The results of the Pearson’s R correlation are presented in Table 7.4. The analysis revealed that only two correlations were significant. It was anticipated that due to random variation there would be three correlations significant at the 10% level. Hence, it is not surprising that two correlations at the 10% level occurred. Therefore, no correlation was seen to exist between productivity and the dimensions of journal research standing. As a result, the hypothesis is not supported.

Reject Hypothesis 2e that the productivity of an academic affects attitudes towards the research standing of journals. In other words, attitudes towards a journal’s research standing are not dependent on productivity.

Table 7.4 Correlation between productivity and journal research standing

<table>
<thead>
<tr>
<th>Journal</th>
<th>Reputation</th>
<th>Reviewing Std.</th>
<th>Content Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>JM</td>
<td>-</td>
<td>.245 (.004)</td>
<td>.21 (.013)</td>
</tr>
<tr>
<td>IMM</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EJM</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IJR</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JSM</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JMR</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JMRS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JCR</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JMM</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group 1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

134
In conclusion, there was no real evidence found to support the five hypotheses. When significant differences did occur these differences were small. Further, the number of significant differences was limited to the number expected to occur by chance.

7.2 Cultural Infrastructure

Another interesting area discussed in the literature, but not tested, was the difference in the rating of journals based on cultural differences and research traditions. Many of the reasons cited for these differences were based on language barriers and on the performance measures used by different nations. At a local level, differences may be based on the different criteria that suited the individual institution. This section of the results investigates differences between respondents from different cultural settings. In particular the section examines the effects of Local Culture (i.e. Department), Dominant Culture (Country) and Research Training.

Hypothesis 3a states that the country where an academic has a permanent academic appointment affects their attitude towards the research standing of journals. To test this hypothesis differences were firstly investigated at the regional level while averaging across all journals. Secondly, the hypothesis was tested by investigating differences at the journal level across two main groups of respondents, respondents from the UK and respondents from mainland Western Europe.

The first test to investigate differences assumed that all journals would be equally affected. Thus the journal research standing scores for each dimension for the ten journals were averaged. In a sense they were considered as one journal. A comparison was made between UK respondents and Western European respondents. This produced non-significant differences between the two groups and did not support the hypothesis that differences existed. One possible reason was that the journals were 'averaged'. Therefore at a general level, specific differences between journals were not seen to exist.
The second part of the analysis was to investigate differences specific to each journal. In Chapter 6 we found that two distinct groups exist in the set of ten journals, so these distinct groups were investigated for differences between the UK and Western European respondents. Group one contained journals that were considered to have high journal research standing and group two contained journals that were considered to have lower journal research standing.

Independent sample t-tests were performed for the average scores for both groups of journals and across the two groups of respondents, and for each dimension. The tests revealed that there was no difference between the sample across group 1 journals but a significant difference was found for group 2 journals. Table 7.5 illustrates the results for this analysis. There was a significant difference between the perceived reputation ($t = -2.762 \ p < 0.006$) of the journals.

Table 7.5 UK vs. W. Europe

<table>
<thead>
<tr>
<th>Journal</th>
<th>Journal Research Standing Dimensions</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reputation ($\mu$)</td>
<td>Reviewing Standards ($\mu$)</td>
</tr>
<tr>
<td>Group 1</td>
<td>UK</td>
<td>W. Euro</td>
</tr>
<tr>
<td>JM</td>
<td>2.63</td>
<td>2.5</td>
</tr>
<tr>
<td>MS</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>IJRM</td>
<td>3.14</td>
<td>3</td>
</tr>
<tr>
<td>JMR</td>
<td>2.7</td>
<td>2.59</td>
</tr>
<tr>
<td>JCR</td>
<td>3</td>
<td>2.6</td>
</tr>
<tr>
<td>Group 2</td>
<td>Rep 0.006</td>
<td></td>
</tr>
<tr>
<td>IMM</td>
<td>3.44</td>
<td>3.8</td>
</tr>
<tr>
<td>JSM</td>
<td>3.6</td>
<td>3.62</td>
</tr>
<tr>
<td>JMRS</td>
<td>3.14</td>
<td>4</td>
</tr>
<tr>
<td>JMM</td>
<td>3.33</td>
<td>4.19</td>
</tr>
<tr>
<td>EJM</td>
<td>3.4</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Differences between the two groups of respondents were then measured for each dimension of journal research standing. Specific journals were not used in the earlier tests.
due to the small sample sizes and hence a higher chance of type II errors. However, they were used as a secondary measure to investigate the differences already found between the two groups. In particular, this analysis was used to check that not just one journal was causing the difference. Table 7.5 shows that differences in reputation were found in four of the journals the 10% level. What is also encouraging is that the differences were consistent, each journal in Group 2 was rated higher (the lower the mean, the higher the journal research standing) by the UK sample.

The results show that differences in journal research standing can occur between groups of journals. The results also show that perceptions of journals with a higher journal research standing tend to be more homogenous between countries, whereas journals with a lower journal research standing tend to be heterogeneous between countries. As a result the hypothesis is supported.

Accept Hypothesis 3a that the country where an academic has a permanent academic appointment affects their attitude towards the research standing of journals.

Hypothesis 3b states that the country where an academic's research training is gained affects their attitudes towards the research standing of journals. To investigate differences in the perception of the ten journals based on research training, comparisons were made between three distinct geographical groups. The respondents were split into groups based on whether their research training was gained in the US, the UK or Western Europe.

The initial analysis again examined differences using the averaged journals research standing for each dimension for all ten journals. This did not reveal any significant difference in the group means, so the journals were again split into two distinct groups. The differences between the groups of respondents for Group 1 journals were non-significant, but a slightly significant difference (p< 0.10) was found for the Group 2 journals. This encouraged further analysis of each journal within group 2. However, no significant difference was found between the three groups of respondents for any of the journals in Group 2. As a result the hypothesis is not supported.
Reject Hypothesis 3b that the country where an academic’s research training is gained affects their attitudes towards the research standing of journals. In other words attitudes towards a journal’s research standing is not dependent on the country where academics gain their research training.

Hypothesis 3c states that the research standing of a department affects attitudes towards the research standing of journals. To investigate departmental differences, data was collected using the RAE scores for each business school in the UK. A more accurate measure would have been to investigate the RAE scores for the marketing groups within departments, but as these score were not available the departmental score was seen as a suitable alternative. The remaining members of the sample were not used in this analysis, as a European wide measure of departmental research standing was not available.

To investigate differences based on the research standing of UK business schools, the RAE scores were compared against the dimensions of journal research standing. To aid the analysis, the RAE scores were divided into two groups. Group one included departments with an RAE score of 1-3 and the second group included departments with RAE scores of 4-5*.

Again, ten journals were analysed together thus averaging journal differences. Differences between the two RAE groups, using a combined scale of all three dimensions and the three dimensions was not found to be significant (Overall Research Standing t= .169 sig. 0.866). The journals were then split into the two distinct groups described in 6.6.3. This also produced a non-significant difference between RAE groups. As a result, the hypothesis was not supported.

Reject Hypothesis 3c that the research standing of a department affects attitudes towards the research standing of journals. In other words attitudes towards a journal’s research standing are not dependent on the research standing of that particular academic’s department.
7.3 Journal Specific Experiences

Although there was a good number of responses when analysing at an overall level, the number of responses per journal is much smaller. This is particularly so when analysing journal specific experiences where the responses are divided according to the dichotomous variables in Table 7.7. For example the Journal of Marketing Research had 11 respondents in the Yes category (at least one paper published in the journal) and 67 respondents in the No category. However, it is still possible to examine the available data and draw some meaningful conclusions. The decision was taken to investigate only the journals that had more than ten cases per category. Table 7.7 highlights in grey where there are sufficient cases for the analysis to take place. The analysis of these dichotomous variables was conducted using the analysis procedure set out in Figure 7.6.

<table>
<thead>
<tr>
<th>Figure 7.6 Analysis procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>The procedure as follows was conducted for section 7.3</td>
</tr>
</tbody>
</table>

For each journal where there are sufficient cases for the analysis the following procedure was used.

step 1. Select summated scale
step 2. Select random sample from larger group to equal the size of the smaller group. (Helps to overcome the equal-variance assumption, Diamantopoulos and Schlegelmilch, 1997).
step 3. Check assumptions for data analysis for both groups
step 4. Run significance testing
step 5. If significant, perform test – retest reliability analysis from step 3
step 6. Select summated scale and run analysis from step 3

Hypothesis 4a states that publishing in a journal affects attitudes towards the research standing of that particular journal. The normality assumption was evaluated and found to hold reasonable well. The equality of variance assumption was not needed since SPSS provided significance estimates based on unequal variance. Six journals were used to compare the respondents with at least one paper published in the journal with respondents
with no papers published in the journal. These journals are JMRS, JMR, IJRM, EJM, IMM and JM.

As can be seen in Table 7.8, for the six journals investigated, the effect of papers published had no significant effects on each dimension of journal research standing at the 5% level. One test was significant, but based on random variation this would be expected from 24 t-tests (6 journals x 4 measures). However a pattern did emerge across the journals in that the means were higher (High mean = low JRS) for most journals and most dimensions, when no paper was published. Although the differences were not individually significant, the consistent pattern tentatively indicates that there is some link between journal research standing and previous publications in the journal. However this is not conclusively shown in this research. As a result, the hypothesis is not supported.

Reject Hypothesis 4a that publishing in a journal affects attitudes towards the research standing of journals. In other words, attitudes towards a journal’s research standing are not dependent on whether an academic has published research in that journal.
Table 7.8 Affect of Papers published on perceptions of Journal Research Standing

One-Way Anova on the effects of 'no papers' and 'atleast one' paper published in the journal on Standing

<table>
<thead>
<tr>
<th>Journal</th>
<th>Content Quality</th>
<th>Reputation</th>
<th>Reviewing Standards</th>
<th>Overall Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>St. Dev</td>
<td>Mean</td>
<td>St. Dev</td>
</tr>
<tr>
<td>JMR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Papers</td>
<td>1.9</td>
<td>1</td>
<td>1.76</td>
<td>0.96</td>
</tr>
<tr>
<td>Atleast One</td>
<td>1.6</td>
<td>0.6</td>
<td>1.4</td>
<td>0.37</td>
</tr>
<tr>
<td>JNR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Papers</td>
<td>2.8</td>
<td>1.3</td>
<td>2.47</td>
<td>0.7</td>
</tr>
<tr>
<td>Atleast One</td>
<td>2.5</td>
<td>1</td>
<td>2.45</td>
<td>1.1</td>
</tr>
<tr>
<td>EJ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Papers</td>
<td>3.5</td>
<td>1.1</td>
<td>3.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Atleast One</td>
<td>4</td>
<td>1.6</td>
<td>3.2</td>
<td>1.3</td>
</tr>
<tr>
<td>IMM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Papers</td>
<td>4.34</td>
<td>1.2</td>
<td>3.92</td>
<td>1.25</td>
</tr>
<tr>
<td>Atleast One</td>
<td>4.3</td>
<td>0.9</td>
<td>3.72</td>
<td>0.8</td>
</tr>
<tr>
<td>JM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Papers</td>
<td>2.59</td>
<td>1.65</td>
<td>2.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Atleast One</td>
<td>1.9</td>
<td>0.6</td>
<td>1.6</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Hypothesis 4b states that rejection by a journal affects attitudes towards the research standing of that particular journal. Five journals were used to evaluate the effects of rejection by a journal on the perceptions of journal research standing. These were JCR, JMR, IJRM, EJM and the JM (Table 7.9). Normality was reasonable for all journal samples and the comparisons were evaluated at the 5% significance level. In this series of tests it was expected that one would be significant based on random variation. In this series of tests three journals produced significant results and this makes us reasonably sure that the results are not significant simply by chance. The JMR, EJM and the JM produced significant differences between those whose articles had been rejected and those who had not had articles rejected.
An interesting pattern also emerged from the data shown in Table 7.9. Journals that generally had greater research standing (those in group 1 see section 6.6.3) were given better journal research standing scores on average by respondents who had had articles rejected from the journal, compared to respondents who had not had articles rejected. However, the EJM, which was in group 2 of the ten journals, was scored in the opposite direction. In other words, those who had articles rejected from the JM, rated that journal higher than those who had not had articles rejected, and those who had articles rejected from the EJM, rated it lower. The IJRM on the other hand which lay in the centre of the hierarchy of the 10 journals, (see section 6.6.3) exhibited non-significant differences, with similar means and standard deviations.

Table 7.9 Affect of journal rejection on the perception of JRS

<table>
<thead>
<tr>
<th>Journal</th>
<th>Content Quality</th>
<th>Reputation</th>
<th>Reviewing Standards</th>
<th>Overall Standing</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCR</td>
<td>Rejected</td>
<td>2</td>
<td>1.6</td>
<td>2.65</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>Not rejected</td>
<td>2.5</td>
<td>0.7</td>
<td>2.3</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>JMR</td>
<td>Rejected</td>
<td>1.4</td>
<td>0.5</td>
<td>1.4</td>
<td>0.46</td>
</tr>
<tr>
<td></td>
<td>Not rejected</td>
<td>2.3</td>
<td>1.434</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>IJRM</td>
<td>Rejected</td>
<td>2.7</td>
<td>1.1</td>
<td>2.65</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Not rejected</td>
<td>2.6</td>
<td>0.9</td>
<td>2.59</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>EJM</td>
<td>Rejected</td>
<td>4.7</td>
<td>1.4</td>
<td>3.77</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Not rejected</td>
<td>3.6</td>
<td>1.3</td>
<td>3</td>
<td>1.45</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>almost</td>
</tr>
<tr>
<td>JM</td>
<td>Rejected</td>
<td>2</td>
<td>0.95</td>
<td>1.76</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Not rejected</td>
<td>2.3</td>
<td>1.39</td>
<td>2.13</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>almost</td>
<td>almost</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

The results show that significant differences can occur between those who have articles rejected from a journal, and that the effect may be positive or negative depending on the journal’s standing. As a result, the hypothesis is supported.

Accept Hypothesis 4b that rejection by a journal affects attitudes towards the research standing of that journal.
Hypothesis 4c states that editorial board membership affects attitudes towards the research standing of that particular journal. Only one journal was available for this test; the IJRM. Table 7.10 shows that on each dimension editorial board members rated the journal higher.

<table>
<thead>
<tr>
<th>Journal</th>
<th>Content Quality</th>
<th>Reputation</th>
<th>Reviewing Standards</th>
<th>Overall Standing</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>IJRM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EB member</td>
<td>2.6 0.5</td>
<td>2.52 0.7</td>
<td>3 0.6</td>
<td>2.8 0.5</td>
<td>16</td>
</tr>
<tr>
<td>Non-EB member</td>
<td>2.9 1.4</td>
<td>2.53 0.8</td>
<td>3.3 0.9</td>
<td>3.4 1.2</td>
<td></td>
</tr>
</tbody>
</table>

However, the two samples showed that the differences between editorial board members and non-members was consistent although not significant. As a result the hypothesis is not supported. What is also interesting to note is that variance of responses is much smaller for editorial board members.

Reject Hypothesis 4c that editorial board membership affects attitudes towards the research standing of journals. In other words, an academics opinion of a journal's research standing is not dependent on whether they are a member of the editorial board.

Hypothesis 4d states that reviewing articles for a journal affects attitudes towards the research standing of that particular journal. Five journals were included in this analysis, these were JMRS, JSM, IJRM and the JM (Table 7.11). The assumption of normality was reasonably good for all journal samples. Table 7.11 shows that the differences between journals were not always significant. However, the trend was similar across the journals. Referees tended to award a higher JRS (lower mean) than non-referees, suggesting that referees are inclined to be biased towards the journal. One exception to this was the JSM, (Journal of Strategic Marketing), where referees were significantly biased against the journal compared with non-referees. Due to the low response rate and the inconclusive
results it does not seem that meaningful differences exist. As a result the hypothesis is not supported.

Table 7.11 Affect of Reviewing on the perception of JRS

<table>
<thead>
<tr>
<th>Journal</th>
<th>Content Quality</th>
<th>Reputation</th>
<th>Reviewing Standards</th>
<th>Overall Standing</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMR</td>
<td>Mean: 3.65, St. Dev: 1</td>
<td>Mean: 2.9, St. Dev: 1</td>
<td>Mean: 3.1, St. Dev: 0.7</td>
<td>Mean: 3.3, St. Dev: 0.8</td>
<td>14</td>
</tr>
<tr>
<td>Non-referee</td>
<td>Mean: 3.98, St. Dev: 1.49</td>
<td>Mean: 3.5, St. Dev: 1.4</td>
<td>Mean: 3.7, St. Dev: 1.1</td>
<td>Mean: 3.8, St. Dev: 1.1</td>
<td></td>
</tr>
<tr>
<td>Significant</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>almost</td>
<td></td>
</tr>
<tr>
<td>JSM</td>
<td>Referee: 4.2, St. Dev: 0.9</td>
<td>Mean: 3.6, St. Dev: 0.9</td>
<td>Mean: 3.4, St. Dev: 0.6</td>
<td>Mean: 3.3, St. Dev: 0.6</td>
<td></td>
</tr>
<tr>
<td>Non-referee</td>
<td>Mean: 3.4, St. Dev: 1.2</td>
<td>Mean: 2.5, St. Dev: 0.9</td>
<td>Mean: 3.2, St. Dev: 1</td>
<td>Mean: 3.1, St. Dev: 0.77</td>
<td></td>
</tr>
<tr>
<td>Significant</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>IJRM</td>
<td>Referee: 2.46, St. Dev: 0.8</td>
<td>Mean: 2.34, St. Dev: 0.8</td>
<td>Mean: 2.9, St. Dev: 0.5</td>
<td>Mean: 2.58, St. Dev: 0.5</td>
<td></td>
</tr>
<tr>
<td>Non-referee</td>
<td>Mean: 2.9, St. Dev: 1.4</td>
<td>Mean: 2.68, St. Dev: 1.3</td>
<td>Mean: 3.2, St. Dev: 1</td>
<td>Mean: 3.1, St. Dev: 3</td>
<td></td>
</tr>
<tr>
<td>Significant</td>
<td>almost</td>
<td>no</td>
<td>almost</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>EJM</td>
<td>Referee: 4.2, St. Dev: 1.5</td>
<td>Mean: 3.3, St. Dev: 1.3</td>
<td>Mean: 3.2, St. Dev: 0.5</td>
<td>Mean: 3.4, St. Dev: 1</td>
<td></td>
</tr>
<tr>
<td>Non-referee</td>
<td>Mean: 3.6, St. Dev: 1.3</td>
<td>Mean: 3.3, St. Dev: 1.3</td>
<td>Mean: 3.2, St. Dev: 1</td>
<td>Mean: 3.1, St. Dev: 1.2</td>
<td></td>
</tr>
<tr>
<td>Significant</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>JM</td>
<td>Referee: 2.4, St. Dev: 1.4</td>
<td>Mean: 2.1, St. Dev: 1.4</td>
<td>Mean: 3.1, St. Dev: 0.9</td>
<td>Mean: 2.5, St. Dev: 1.1</td>
<td></td>
</tr>
<tr>
<td>Non-referee</td>
<td>Mean: 2.4, St. Dev: 1.4</td>
<td>Mean: 2.1, St. Dev: 1.4</td>
<td>Mean: 3.1, St. Dev: 0.9</td>
<td>Mean: 2.5, St. Dev: 1.1</td>
<td></td>
</tr>
<tr>
<td>Significant</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

Reject Hypothesis 4d that reviewing articles for a journal affect attitudes towards the research standing of journals. In other words an academics opinion of the research standing of a journal is dependent on whether they are a referee for that journal.

Table 7.12 Pearson’s R correlation: Journal Research Standing with Research Fit

<table>
<thead>
<tr>
<th>Journal</th>
<th>Reputation</th>
<th>Reviewing Std.</th>
<th>Content Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>JM</td>
<td>.450 (.000)</td>
<td>.365 (.000)</td>
<td>.584 (.000)</td>
</tr>
<tr>
<td>IMM</td>
<td>.520 (.000)</td>
<td>-.389 (.011)</td>
<td>-</td>
</tr>
<tr>
<td>MS</td>
<td>.341 (.014)</td>
<td>-</td>
<td>.432 (.002)</td>
</tr>
<tr>
<td>EJM</td>
<td>.516 (.000)</td>
<td>.219 (.066)</td>
<td>.470 (.000)</td>
</tr>
<tr>
<td>IJRM</td>
<td>.350 (.013)</td>
<td>-</td>
<td>.316 (.027)</td>
</tr>
<tr>
<td>JSM</td>
<td>.452 (.000)</td>
<td>-</td>
<td>.342 (.004)</td>
</tr>
<tr>
<td>JMR</td>
<td>.536 (.000)</td>
<td>.468 (.002)</td>
<td>.699 (.000)</td>
</tr>
<tr>
<td>JCR</td>
<td>.274 (.076)</td>
<td>-</td>
<td>.402 (.008)</td>
</tr>
<tr>
<td>JMM</td>
<td>.475 (.001)</td>
<td>-</td>
<td>.642 (.000)</td>
</tr>
<tr>
<td>Group 1</td>
<td>.437 (.000)</td>
<td>.210 (.000)</td>
<td>.447 (.000)</td>
</tr>
<tr>
<td>Group 2</td>
<td>.324 (.000)</td>
<td>-</td>
<td>.229 (.002)</td>
</tr>
</tbody>
</table>
Hypothesis 4e states that Research Fit affects attitudes towards the research standing of journals. The ten journals were individually examined and the results are presented in Table 7.12. The table shows that there was a significant positive correlation between both the reputation of the journal and the content quality of the journal with research fit. The reviewing standards were also correlated with research fit, but this effect was less consistent and weaker among the journals than the other two dimensions. As a result the hypothesis is supported.

Accept Hypothesis 4e that research fit affects attitudes towards the research standing of journals.

Hypothesis 4f states that perceived ability to publish in the journal affects attitudes towards the research standing of journals. In Table 7.13 the Pearson’s Product Moment correlation shows that there is very little relationship between the dimensions of journal research standing and the perceived ability to publish in the journal. Two correlations were significant at the 5% level, but the actual correlations were small. The two

Table 7.13 Pearson’s R correlation: Journal Research Standing with the perceived ability to publish in the journal

<table>
<thead>
<tr>
<th>Journal</th>
<th>Pearson’s R Correlation (significance)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reputation</td>
</tr>
<tr>
<td>JM</td>
<td>-.081 (.046)</td>
</tr>
<tr>
<td>IMM</td>
<td>-</td>
</tr>
<tr>
<td>MS</td>
<td>-</td>
</tr>
<tr>
<td>EJM</td>
<td>-</td>
</tr>
<tr>
<td>IJRM</td>
<td>-</td>
</tr>
<tr>
<td>JSM</td>
<td>-</td>
</tr>
<tr>
<td>JMR</td>
<td>-</td>
</tr>
<tr>
<td>JMRS</td>
<td>-</td>
</tr>
<tr>
<td>JCR</td>
<td>-</td>
</tr>
<tr>
<td>JMM</td>
<td>-</td>
</tr>
<tr>
<td>Group 1</td>
<td>-</td>
</tr>
<tr>
<td>Group 2</td>
<td>-</td>
</tr>
</tbody>
</table>
remaining correlations were only significant at the 10% level. Since it is likely that these correlations are significant simply due to chance, the hypothesis is not supported.

**Reject Hypothesis 4f** that perceived ability to publish in the journal affects attitudes towards the research standing of journals. In other words, an academic's opinion of the research standing of a journal is not dependent on their perceived ability to publish in that journal.

Table 7.14 Pearson’s R correlation: Journal Research Standing with Familiarity

<table>
<thead>
<tr>
<th>Journal</th>
<th>Reputation (Pearson’s R)</th>
<th>Reviewing Std. (Pearson’s R)</th>
<th>Content Quality (Pearson’s R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JM</td>
<td>.574 (.000)</td>
<td>.354 (.000)</td>
<td>.596 (.000)</td>
</tr>
<tr>
<td>IMM</td>
<td>.317 (.000)</td>
<td>.265 (.09)</td>
<td>-</td>
</tr>
<tr>
<td>MS</td>
<td>.367 (.009)</td>
<td>-</td>
<td>.368 (.009)</td>
</tr>
<tr>
<td>EJM</td>
<td>.160 (.000)</td>
<td>-</td>
<td>.576 (.000)</td>
</tr>
<tr>
<td>IJRM</td>
<td>.459 (.000)</td>
<td>.326 (.006)</td>
<td>.479 (.000)</td>
</tr>
<tr>
<td>JSM</td>
<td>.461 (.001)</td>
<td>.271 (.060)</td>
<td>.382 (.007)</td>
</tr>
<tr>
<td>JMR</td>
<td>.539 (.000)</td>
<td>.244 (.004)</td>
<td>.523 (.000)</td>
</tr>
<tr>
<td>JMRS</td>
<td>.583 (.000)</td>
<td>.380 (.011)</td>
<td>.607 (.000)</td>
</tr>
<tr>
<td>JCR</td>
<td>.298 (.049)</td>
<td>.301 (.047)</td>
<td>.498 (.001)</td>
</tr>
<tr>
<td>JMM</td>
<td>.731 (.000)</td>
<td>.214 (.173)</td>
<td>.724 (.000)</td>
</tr>
<tr>
<td>Group 1</td>
<td>.485 (.000)</td>
<td>.226 (.000)</td>
<td>.480 (.000)</td>
</tr>
<tr>
<td>Group 2</td>
<td>.476 (.000)</td>
<td>-</td>
<td>.382 (.000)</td>
</tr>
</tbody>
</table>

Hypothesis 4g states that familiarity with a journal affects attitudes towards the research standing of that particular journal. To measure respondent’s familiarity with the journal and assess the relationship between familiarity and journal research standing, two measures were used. The first measure used was the interval variable *’I constantly consult this Journal’*, and Table 7.14 shows the correlations between each dimension of journal research standing and familiarity with the journal.

Almost all of the correlations were significant and overall each dimension was positively correlated with familiarity. The dimension Reputation had correlations between .160 and .731 and Content Quality had correlations between .368 and .724. Reviewing Standards
was affected the least by familiarity with correlations between .214 and .380. This suggests that familiarity has a moderating influence on journal research standing.

The second measure is based on the research by Hult, Neese and Bashaw (1997). This approach is based on the assumption that respondents who failed to report a journal’s rank had insufficient familiarity on which to base a response. The method infers familiarity from the missing variables in the ranking survey. In the current study the respondents were asked to rank the ten journals included in the survey. Table 7.15 shows

<table>
<thead>
<tr>
<th>Journal</th>
<th>Freq1</th>
<th>Freq2</th>
<th>Freq3</th>
<th>Freq4</th>
<th>Freq5</th>
<th>Freq6</th>
<th>Freq7</th>
<th>Freq8</th>
<th>Freq9</th>
<th>Freq10</th>
<th>Mean</th>
<th>missV</th>
</tr>
</thead>
<tbody>
<tr>
<td>JM</td>
<td>86</td>
<td>23</td>
<td>25</td>
<td>21</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2.246</td>
<td>12</td>
</tr>
<tr>
<td>JMR</td>
<td>51</td>
<td>67</td>
<td>24</td>
<td>8</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2.447</td>
<td>13</td>
</tr>
<tr>
<td>JCR</td>
<td>26</td>
<td>25</td>
<td>50</td>
<td>28</td>
<td>13</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3.545</td>
<td>16</td>
</tr>
<tr>
<td>MS</td>
<td>33</td>
<td>26</td>
<td>23</td>
<td>16</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>14</td>
<td>3</td>
<td></td>
<td>3.963</td>
<td>19</td>
</tr>
<tr>
<td>IJRM</td>
<td>6</td>
<td>11</td>
<td>28</td>
<td>41</td>
<td>57</td>
<td>9</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>4.426</td>
<td>14</td>
</tr>
<tr>
<td>JMM</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>16</td>
<td>17</td>
<td>23</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>14</td>
<td>6.634</td>
<td>19</td>
</tr>
<tr>
<td>EJM</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>11</td>
<td>15</td>
<td>23</td>
<td>32</td>
<td>32</td>
<td>24</td>
<td>13</td>
<td>6.747</td>
<td>17</td>
</tr>
<tr>
<td>JMRS</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>28</td>
<td>24</td>
<td>25</td>
<td>22</td>
<td>31</td>
<td></td>
<td>7.238</td>
<td>23</td>
</tr>
<tr>
<td>IMM</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>11</td>
<td>32</td>
<td>25</td>
<td>20</td>
<td>16</td>
<td>37</td>
<td>7.342</td>
<td>28</td>
</tr>
<tr>
<td>JSM</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>26</td>
<td>20</td>
<td>27</td>
<td>28</td>
<td>31</td>
<td>7.494</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 7.15 Mean Rank for 10 Selected Journals vs Missing Values

The number of missing values was calculated for each journal and these are listed under MissV in Table 7.11. A rank correlation found that the two variables (mean rank and MissV) were related (r = 0.86 p< 0.000) and the rank orders was almost identical. One particular exception to this was the IJRM which, according to the missing value rule, should have been ranked third. One possible reason for this could be that in part the sampling frame was based on a European Marketing Academy List. The IJRM is the
official journal of EMAC and would therefore have a high familiarity with respondents, which would mean that more respondents were likely to rank the journal. Using either of the measures of familiarity there is significant evidence that they do influence journal research standing. As a result the hypothesis is supported.

Accept Hypothesis 4g that familiarity of a journal affects attitudes towards the research standing of journals.

Table 7.16 Summary of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Publishing Expertise</strong></td>
<td></td>
</tr>
<tr>
<td>Hypothesis 2a that job title affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 2b that the years spent researching marketing affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 2c that the percentage of research in marketing affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 2e that the productivity of an academic affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 2d states that the percentage of time spent researching affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td><strong>Cultural Infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td>Hypothesis 3a that the country where an academic has a permanent academic appointment affects their attitude towards the research standing of journals</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 3b that the country where an academic’s research training is gained affects their attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 3c that the research standing of a department affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td><strong>Journal Specific Experiences</strong></td>
<td></td>
</tr>
<tr>
<td>Hypothesis 4a that publishing in a journal affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 4b that rejection from a journal affects attitudes towards the research standing of journals</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 4c that editorial board membership affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 4d that reviewing articles for a journal affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 4e that research fit affects attitudes towards the research standing of journals</td>
<td>Accept</td>
</tr>
<tr>
<td>Hypothesis 4f that perceived ability to publish in the journal affects attitudes towards the research standing of journals</td>
<td>Reject</td>
</tr>
<tr>
<td>Hypothesis 4g that familiarity with a journal affects attitudes towards the research standing of journals</td>
<td>Accept</td>
</tr>
</tbody>
</table>
7.4 Conjoint Analysis - Interpreting the Conjoint Model

In chapter 3 the methodology and administration of the conjoint analysis experiments were discussed. In this section the results of the experiments are analysed and the interpretation of the model is discussed. The conjoint analysis was designed so that a ranking or coefficient for each journal could be obtained. The aim of the conjoint analysis was to provide a separate ranking of the journals which could be compared with the rankings based on the dimensions of journal research standing. The journals were divided into two subsets for the purposes of conjoint analysis and responses were obtained for each subset in terms of both ranks and ratings. As a result a total of four conjoint experiments were conducted.

Ordinary least squares regression was used to analyse both the ranking and rating data obtained from the two conjoint experiments. Usually regression is performed using a metric dependant variable as a non-metric dependant variable violates one of the assumptions of regression. However, in conjoint analysis the violation of this assumption has been found to have no or little effect on the results (Churchill, 1995; Carmone, Green and Jain, 1978; Cattin and Bliemel, 1978).

7.4.1 Quality of questionnaire responses

Due to the relative complexity of the approach it was important to estimate the quality of the questionnaire responses. A visual examination of the responses suggested that the experiments were completed in a similar manner across the respondents. To confirm this the data was tested using split sample reliability and non-response bias was estimated by comparing the early and late responses (Armstrong and Overton, 1977).

Non-response bias was assessed by looking at using the regression coefficients produced from the conjoint analysis. There were 28 coefficients for each respondent across the four experiments. The early respondents were those who responded within the first two weeks (n=60) and the late respondents were those who replied after being prompted by the follow-up survey (n=27). The two groups gave the greatest separation in terms of time to respond and a reasonable size sample. Only one coefficient was significant (t=2.311, sig.
0.023), but based on the random variation one significant result out of so many was expected. Therefore the analysis revealed that no significant difference existed between early and late respondents at the 5% significance level for the conjoint experiments.

To estimate the stability of the results, split sample reliability was used. The data was randomly split into two groups with a 70/30 break. The results for all for the rating and ranking experiments are shown in Table 7.17. An independent sample t-test was then undertaken on each journal (the results are shown in Table 7.17). Out of the twenty sets of results only one was found to be significant at the 5% level. However based on random variation, this was expected.

The ranking and rating experiments presented similar findings and as predicted the ranking experiments also produced the greatest spread of results and hence the greatest
differences between journals. However, both types of experiment were consistent in their prediction of research standing. Therefore, on the basis of the split sample and non-response analysis, and the consistency of responses, confidence can be placed in the reliability of the conjoint experiments in predicting the relative research standing of journals.

7.4.2 Aggregate conjoint models

As mentioned before, the journals were divided into two subgroups and each experiment had two dependent measures (rank-order and a rating scale). In this manner a total of four models were created for each respondent. By aggregating individual responses (models) a single model for all respondents was produced. These results are shown in Table 7.17 and Figure 7.18 for each journal. The means and standard deviations are shown in Table 7.17. The scores indicate the mean effect on the dependent variable for the overall model. The scores are negative because the higher the standing the lower the score reported on the measure (i.e. a rank of one is better than a rank of 5). These scores are inverted in Figure 7.18 to make the relative standing of each journal more clear.

Figure 7.18 Aggregated importance (regression coefficients) for each experiment
7.4.3 Experiment One

Experiment One refers to both the rating (1a) and rank order (1b) experiments for the first subset of journals presented in the questionnaire. The two experiments revealed very similar structures and the journals could be split into three categories. The Journal of Marketing and the Journal of Marketing Research were considered the two most important journals (i.e. journals with the highest journal research standing) and twice as important to a choice set, than the two least important journals. The middle journal was IJRM, and the least important journals were the JMM and EJM, which were almost identical in their relative importance.

The ranking experiment showed finer delineation between the relative standing of journals, suggesting that the JM was considered the most influential and the JMM the least influential journal. This pattern was consistent with the pattern of journals in Figure 6.13, but produced a wider separation between the most important least important journals.

7.4.4 Experiment Two

Experiment Two refers to the rating (2a) and rank order (2b) experiments for the second subset of journals presented in the questionnaire. This second subset of journals was different from the first subset of journals, aside from the journals used to bridge the two experiments. A similar structure was also present in this experiment between the ranking and rating experiments to the first experiment.

The most important journal was the JMR. The next three journals, the EJM and JMM and the JMRS had comparable importance. In experiment one (see Section 7.4.3) the IJRM bridged the most influential and least influential journals. In experiment two the IJRM was not used, and no journal represented the middle ground. In experiment two a conference paper was also include in the experiment. Respondents considered this to have almost no effect on the importance of the choice set. The results also show how the EJM has slightly more importance than the JMM, which is consistent with experiment 1.
The aggregated conjoint results show that all four of the above experiments consistently predict the relative importance of each journal. The results also show that when different journals are used comparisons are still possible between the experiments. The results are also comparable with the results for each dimension developed in chapter 6. As an alternative measure of research standing, conjoint analysis also produces results that are consistent with the ranking data presented in Table 7.15.

7.4.5 Cluster based conjoint models

Aggregate models, like those presented above, can often mask differences between respondents in a data set. Moore (1980) comments that ‘estimating part-worths at the individual level has more predictive power than alternative approaches, but becomes more difficult as the number of factors increases and is difficult for managers to use and understand’. An alternative to the individual or aggregate level model is the segmentation approach using cluster analysis (Hair et al. 1995). This approach clusters together those respondents who are most similar.

Cluster Analysis, using Ward’s Method, was performed on the results of all four experiments to investigate any underlying differences between respondents. After a visual screening of the dendograms, Calinski and Harabasz’s (1974) method was used to indicate the ‘best’ number of clusters. The method is known as the C-H measure and it evaluates the ratio of between-group differences and within-group differences. When the size of the difference becomes larger, the C-H value increases dramatically. This increase shows where the statistically optimal number of clusters is within the data. The C-H measure works in a similar way to the scree plot in factor analysis. The results of the C-H measure are presented in Figure 7.19.

The respondents in experiments 1a and 2b formed a gradual single cluster, whereas the respondents in experiment 2a appeared to form a two cluster solution, and in 1b a three cluster solution. The conclusions agreed with the visual interpretation of the dendograms.
As can be seen in Figure 7.19, the C-H measure for experiment 1a grows steadily, and for experiment 2b fluctuates around the 50 value, indicating that no real clusters exist for these two experiments. The C-H measure for experiment 1b grows gradually until there are three clusters. At this point there is a severe drop in the C-H value indicating a three cluster solution as the most likely outcome. In experiment 2a there is a 50% change in the C-H value between three clusters and two clusters, indicating that a 2 cluster solution exists. Figure 7.20 plots the mean responses for each cluster of respondents for experiments 1b and 2a.

The clusters produced in experiment 1b clearly show the differences in responses for each journal. The three clusters show that there are very different preferences for three journals. The respondents in cluster 1 regarded the JMR as the most important. The respondents in cluster two considered the JM to be the most important. The respondents in cluster three placed more importance on the IJRM. However, the three groups of respondents had consistent views about the JMM and EJM.
In experiment 2a the JMR is considered by the respondents in the first cluster to be considerably more important than the remaining journals. The respondents in the second cluster considered the JMRS more important. As in experiment 1b, the respondents were consistent in their views of the EJM and JMM. They were also consistent in their view of the importance of a conference paper at the Academy of Marketing.

The clustering in both experiments shows that preferences do exist for certain journals and can affect the relative standing of the journals. This evidence suggests that using conjoint analysis to estimate the relative standing of research journals provides meaningful results. It is also a means of separating the differences between clusters of individuals.
Chapter 8 - Discussion

This chapter discusses the findings uncovered in the study. The chapter is split into sections based on each of the hypotheses explored in chapter six and seven. Initially the importance of scale items and the multi-dimensional nature of the construct journal research standing is explored. Following this, the moderating effects of publishing expertise, cultural infrastructure and journal specific experiences are discussed. Finally, the results of the conjoint experiment are considered.

8.1 Importance of Scale Items

The first hypothesis (1a) was to determine the importance of the scale items developed in the exploratory research stage of this study. The forty items were split into two kinds of items. There were ten quantifiable items and thirty perceptual items that explored particular nuances of journal research standing. The quantifiable items are discussed first.

8.1.1 Quantifiable items

The results in Section 6.3 showed nine of the ten quantifiable items were considered to be important. Double blind reviewing was consistently rated as the most important item. This is interesting as it implies that the ability to perform double blind reviewing is an important step in a journal's development. What it may show is that once a journal has built up a critical mass it has the ability to be more selective in its choice of articles and therefore able to use a consistent and structured reviewing system such as double blind reviewing. However, double blind reviewing is also a poor discriminator, especially between the journals in this study as all the journals operated a double blind reviewing process and in some cases triple blind reviewing. This suggests that journals are recognised when they perform double blind reviewing, in other words that they have joined a select club of journals that have high research standing. It is also interesting that double blind reviewing was considered more important than journal citation rate which is the most widely used quantitative measure of research journals (see chapter 2). This is perhaps an indication that journal
differences within groups are less important than differences between groups of journals as defined by their reviewing standards.

The encouraging finding from this research is that citation rates are perceived as the second most important quantitative element of journal research standing. Although there are one or two sceptics, and flaws do exist in the predictions of standing based on citations (Chapter 2), this measure appeals to respondents in this study as an important element of journal research standing. As citations rates and double blind reviewing were considered similarly important, this research also supports Laband and Piette (1992) research, which showed a link between double-blind reviewing and higher citation rates.

Circulation size within the academic community was also a very important element of journal research standing. This is also interesting because of its association with citation rates (Peritz, 1994). Peritz (1994) showed the high correlation between citation rates and circulation size. One of the criticisms of citation indicators is that citations are affected by circulation sizes. The current research suggests that researchers should recognise the inter-dependence of these two items, rather than attempt to specify which item is the cause or effect. The importance of international citation sources and the journal's coverage by international referencing services may be a further reason as to why there is this link with circulation size. Circulation size, citation rates and double blind reviewing were the most important quantifiable items. The links between them found in previous studies reinforce the content validity of these items.

Four of the remaining items were only moderately important to the construct. These four items dealt with specific issues. These items included a more specific element of circulation size, individual subscription rates. It is not surprising that this item is less important, as less than 10% of journal subscriptions are by individuals (Page, Campbell and Meadows, 1997). Two of the items related to the role of the editor and the importance of competition for the post. The least important item was a journal's affiliation to an academic society. Perhaps the affiliation serves not to add or detract from the standing of a journal but to facilitate its assimilation into the journal network and act in a promotional way, by increasing the visibility of the journal.
As many individual subscriptions are free, through societal membership (Page, Campbell and Meadows, 1997), affiliation to an academic society readily leads to greater visibility. Later in this chapter we discuss other evidence of the link between visibility and journal research standing.

8.1.2 Perceptual items

The results in Section 6.4 showed that the perceptual items developed to represent the construct were, with the exception of one item, considered to be important. The order of importance showed no obvious pattern that corresponded to the determinants discussed in chapter 4. In fact the top ten most important items were a cross-section of issues encouraging the likelihood of multiple dimensions within the items. Twenty eight of the items had a rating that was better than 3 on the seven point scale. It is therefore suggested that items identified in the exploratory research were important representations of the nuances of journal research standing. Some interesting findings highlighted by the perceptual items follow.

The most important perceptual items referred to the influence on future research and a rigorous reviewing process. These can be considered to be the perceptual equivalent of the quantifiable measures of citation rates and double blind reviewing, which were rated as the most important quantitative items. Visibility (mean importance = 2.15) of the journal could be considered the perceptual equivalent of circulation size (mean importance = 2.16) and had an almost identical mean importance.

Other elements of the reviewing process, such as the reviewers and the editors, were also rated as important elements of a journal’s research standing. The editor featured in the top ten perceptual items. The editor’s role in selecting appropriate reviewers was seen as important to journal research standing. This again confirms some of the qualitative data which suggested that journal research standing depends on the quality of reviewers and the ability to select and ‘pull in the top people to do the review’ (Interviewee 2). The importance of the editor and the editorial board also supports Page, Campbell and Meadow’s (1997) views of the important elements of journal quality.
The contribution of the referees was also recognised as important. Referees are not only required to act as filters to screen articles out, but also contribute in the improvement of research papers. This supports Armstrong’s (1996) view that reviewer feedback should focus less on the results and more on the way research is conducted and should include advising submitting authors of more appropriate research strategies. Interviewee 2 corroborates this when he suggested that in top journals, reviewers ‘tend to be renowned and expert. You see that not because of the name of the reviewer but because of the quality of comments and the depth of knowledge...’

Consistent high quality articles was rated the second most important perceptual item. Consistency seems to lie at the heart of quality from our understanding of total quality management. Consistency also seems to lie at the heart of perceptions of a journal’s research standing, both in terms of the quality of articles and consistency in the reviewers’ feedback. Hence the results also suggest that it is important for a journal to be able to attract both good reviewers and good authors. Good reviewers and good authors are less likely to want to deal with lesser rated journals. Interviewee 2 explains that to increase a journal’s standing you have to ‘attract good authors – the best people will not send a paper off...encourage the best people to publish and that will increase the readership because they know that the top names are in there. This will start to raise the standard of other papers that are sent in.’

Greater importance was placed on developing theoretical knowledge rather than methodological knowledge. This goes against some of the feelings of the interviewees in the qualitative research (chapter 4) who suggested a distinction between methodological and theoretically driven journals. Some interviewees suggested that methodologically orientated journals were often perceived to have higher journal research standing, especially quantitative methodological orientated journals.

Only one of the thirty perceptual items was considered unimportant. The usefulness of articles as teaching material was considered unimportant. Perhaps this is due to the nature of primary research, which can be highly technical or specific in nature, making the material inaccessible or impractical to non-experts. Whether the over
complication of research writing may enhance the research standing of journals remains debatable.

8.2 Dimensions of Journal Research Standing

The second and third hypotheses (1b and 1c) investigated the dimensionality of journal research standing. After the construction and evaluation of the structure behind the thirty perceptual items, eighteen measures remained and these produced a simple three dimensional structure of journal research standing. These dimensions were then used to create summed scales.

The three dimensions represent ways in which we are exposed to the journal and how we evaluate the journals. In the new structure the items make sound logical sense. The first dimension (Section 6.5.1) included items that described extrinsic benefits and surface cues of a journal and was named Reputation. The second dimension (Section 6.5.2) included items about the quality of refereeing and the editorial review board and was called Reviewing Standards. The third dimension (Section 6.5.3) included items about the salience of the subject matter and the standard of research conducted and was termed Content Quality. The three dimensions were applied to the 10 journals included in the study and performed well in discriminating between journals.

8.2.1 Reputation

Reputation, the first dimension created in Section 6.5.1 through the scale development process, isolated six items. On close examination of the items and their individual wording, it is apparent that this dimension grouped together items that related to the extrinsic benefits of the journal and issues relating to surface cues.

To be published in a journal can often be a great achievement, and the reaction of others and the effects on promotion and tenure prospects are indicative of the research standing of the journal. The perception of the editor and editorial board were also important to this dimension. Specifically, the international respect of editors increases the standing of research journals. The impression we have of the editorial team also plays an important role in determining the reputation of a journal. Visibility of the
journal, which increases the likely impact, was also important to a journal’s reputation. Journal research standing is affected by perceptions of the credibility of the research when it is used as source material in new research papers. Each item in the dimension referred to the reputation of a journal. Key phrases in the items reflect this and included ‘admire’, ‘honour’, ‘respected internationally’, ‘improve promotion/tenure prospects’ ‘visible’ and ‘adds credibility to new research’. The items also associate issues about the journal with an academic’s own research standing.

The items in the Reputation dimension of journal research standing are issues that academics believe without even seeing the actual journal. These are often referred to in marketing as surface cues, in other words the journal’s reputation. Therefore this dimension shows that not only do intrinsic qualities determine journal research standing but the reputation of any association with the journal affects academics’ perception of the journal.

The performance of this dimension once applied to the ten journals using the summated scales (generated by attitude statements), showed that significant differences existed between journals. The journals were split into two groups (Table 6.12). Using the summated scale, the reputation of the Journal of Marketing and the Journal of Marketing Research were the highest and the Journal of Marketing Management had the worst reputation of the ten journals. Perhaps the reason for the Journal of Marketing Management having the worst reputation is its more parochial nature than the other nine journals, although differences between journals within each group were only marginal. It was also interesting that the reputation of the Journal of Marketing exceeded the reputation of the Journal of Marketing Research. This is consistent with the long standing reputation of the Journal of Marketing as the leader in marketing research. Lazer (1976) points out that the Journal of Marketing is in a sense ‘a keeper of the standards and integrity of the discipline’.

8.2.2 Reviewing Standards

The second dimension, Refereeing Standards, had six items that covered three main elements. These elements related to the process of reviewing and selecting articles,
the editor and reviewer, and the reviewing feedback.

The dimension is represented by issues that relate to the referees, particularly concerning feedback comments made by referees about the articles they review. The level of detail and thoroughness of comments are important in determining journal research standing. It is also important that the comments concentrate on improving the paper for high journal research standing. The items that relate to the editor refer to his or her ability to select the appropriate reviewer. Another important item is that the editor is also knowledgeable about the issues and can independently evaluate research, and if necessary adjudicate between conflicting reviews. These items are eloquently summed up by Interviewee 6: ‘The editors need to be efficiently eclectic, broad minded, to make sure that referees’ comments are objective and the referees are picked objectively.’ The international respect of the editorial board influences the perceptions of the reviewing standards and is an indication of the importance of selectivity in the choice of reviewer. In particular, a larger pool of potential reviewers increases the chances of better reviewers, especially since some areas of research are extremely specialised.

For the ten journals included in this study, Reviewing Standards was less discriminative that the other two dimensions. Journals were rated within a smaller band. The pattern of ratings was dissimilar to the other two dimensions and produced a different rank order. The Journal of Marketing Research was rated the highest and Industrial Marketing Management was rated the lowest. These two journals were also the only significantly different journals on this dimension. The IMM was significantly different from the top four rated journals and the JMR was significantly different from the bottom five rated journals. Perhaps one of the reasons for the lack of discrimination is that all of the journals used in this study were at least double blind reviewed, an issue discussed in Section 8.1.1.

8.2.3 Content Quality

There were six items in the third dimension Content Quality. This dimension consists of items that refer the importance of the topic, rigor and relevance to academics. This
factor also suggests that the consistency of quality is also important.

Dissemination of knowledge is arguably the primary purpose of a journal. In this research two types of knowledge were identified theoretical and methodological knowledge. Two items that represent content quality were the contribution by the journal to the literature of theoretical and methodological knowledge.

Two items were related to the rigorous manner in which the research was conducted. It was not surprising to find that these issues were related to Content Quality rather than Reviewing Standards. This is because these items focused on the end result rather than the internal mechanism of reviewing, which constructed the dimension Reviewing Standards. Another item that was also partly related to the Reviewing Standards was the issue of consistent quality, another aspect of the end product of reviewing. As we have already discussed, consistency is an important part of quality, and hence Content Quality.

The final item in this dimension that represented an element of Content Quality was the centrality of the journal within the marketing (discipline) literature. This is interesting as many citation studies are based on core journals (chapter 2). This item may indicate why niche journals and interdisciplinary journals are often poorly rated. This is especially true in citation studies, perhaps more evidence suggesting that there is a link between the social phenomena of research standing and the quantification of citations.

The performance of this dimension again split the ten journals into two distinct groups of five journals. Significant differences were found in all cases for the two groups of five journals. Figure 6.13 shows the clear distinction made by this dimension. The top five journals showed a clear ordering of the journals. What was interesting in the second group was the similarity of scores. In the second group of five, the scores were almost identical, whereas for the previous dimensions the differences between scores were larger. Content Quality was able to discriminate better between groups, although in the second group of journals. Content Quality was the poorest within group discriminator. The ranking of journals based on Content Quality reinforces the comments made by Interviewee 18 suggested that ‘there is a well defined
order of journals at the top and then a lot of other journals below that’.

8.2.4 Differences between journals

Based on perceptions of importance three dimensions were produced that represented key aspects of the concept journal research standing. These dimensions were perceived to be distinct and separate dimensions, thus the construct journal research standing is multidimensional. This multidimensional nature is illustrated when using the three dimensions to assess the journal research standing of ten selected journals. The dimensions of journal research standing showed that differences did occur between journals. These differences varied between the dimensions for each journal. The dimensions Reputation and Content Quality showed the greatest discrimination between journals and the dimension Reviewing Standards discriminated less between the ten journals.

Journals we expect to have high journal research standing have a high score on all three dimensions. This includes journals such as the Journal of Marketing. Journals that we expect to have low journal research standing we can reasonably expect to have low scores on all three dimensions. An example of this is the Journal of Marketing Management. However because of the independence of each dimension the score on one dimension does not always predict the score on another dimension. An example of this is the Journal of Strategic Marketing where the journal had a high score on Reviewing Standards and lower scores on the other two dimensions. Therefore, to understand differences between journals we need the three underlying dimensions of journal research standing because journals can score better on one dimension than on the other two.

Based on each of the three dimension the ten journals separated into two statistically significantly different groups (Table 6.12). The first group could. feasibly be considered as international journals. These journals had an international distribution, international review board and international authorship. Except for the IJRM these journals are also American based. These journals could be considered to be some of the core research journals in the marketing discipline. The second group of journals were perhaps less international and represent some of the second tier journals in the
marketing discipline, catering for a smaller audience.

The results from examining the selection of ten journals revealed that respondents did rate the dimensions for each journal differently. The differences in the scores for each dimension for most of the ten journals were significant based on the paired sample t-tests. Respondents perceived differences in journals and these were borne out in the distinct dimensions.

8.3 Moderating Variables

In Section 8.2 the three dimensions of research standing were discussed. In essence these are the key attributes that determine academic opinion about the research standing of journals. In this section those attributes are investigated to determine if there are systematic differences between academics. The effect of publishing expertise, cultural infrastructure and journal specific experiences are discussed.

8.3.1 Publishing Expertise

In Section 7.1 hypotheses 2a – 2d were investigated to determine the moderating effects of publishing expertise on journal research standing. Differences found by Weber and Stephenson (1981) between different job titles were not supported by this research. The findings of this research were also un-supportive of the effects of other measures of publishing expertise. In chapter 5 we discussed the representativeness of the respondents and saw that the sample included a high proportion of senior academics. According to these results on publishing expertise no significant differences existed. Differences between senior and junior academics are not important in the evaluation of a journal’s research standing. Thus these results are also encouraging for generalisations to be made from this study.

According to brand evaluation literature the ability to recognise differences between products and product attributes is based on expertise (Alba and Hutchinson, 1987; Johnson and Russo, 1984). Common sense would suggest that evaluating journals is not dissimilar to evaluating brands. Based on the theory of brand evaluation, when evaluating brands people with high expertise evaluate products on core attributes
whereas people with low expertise rely on surface cues. When evaluating journals we could expect a similar pattern. Academics with high expertise would be expected to evaluate specific elements of a journal such as Reviewing Standards and Content Quality, which could be considered core attributes. Academics with low expertise would be expected to rely on surface cues such as the Reputation, and would be expected to be similar for respondents with different levels of expertise. As no differences were apparent the results also go against the marketing theory of brand evaluation which expects to find differences based on expertise.

One plausible explanation for the lack of difference between levels of expertise is the effect of peer referral and opinion leadership within the marketing community. Identified in the qualitative research was the moderating factor 'referrals by peers'. As one Interviewee (13) commented 'the reputation of a journal is largely in the common understanding of peer groups.' As no differences between levels of publishing expertise were found in the evaluation of the research standing of journals, the findings in Section 7.1 suggest that the influence of peers (opinion leaders) is strong with regards to the evaluation of journal research standing.

8.3.2 Cultural Infrastructure

In Section 7.2 hypotheses 3a – 3c were investigated to determine the moderating effect of the cultural infrastructure and, specifically, cultural differences were investigated at three levels. At a general level, cultural differences based on geographical differences were investigated to determine if they affect responses. At a more local level, cultural differences based on the local culture (i.e. differences between business schools of different research quality), and cultural differences based on the geographical location of the research training, were investigated. In particular three hypotheses were investigated, the results of which are presented in Section 7.2.

The results reported differences between academics in the UK and Western Europe. However differences were not found for all journals. The research found that the five journals which were consistently top across each of the dimensions were not considered significantly different across the respondents in the two groups. One reason for this is that these journals can be considered truly international journals and
highly influential journals in Marketing. The analysis found that the bottom five journals were considered significantly different based on the dimension Reputation. Western European academics considered these journals to have a lower reputation than academics in the UK. Perhaps this is an indication of the parochial nature of these journals. However the Journal of Strategic Marketing (one of the bottom five journals) performed similarly well across the two groups. Although this journal is not highly regarded in comparison to the top five journals in this study and although it is also a relatively new journal, it seems to be establishing itself within an international context. Therefore, geographic differences affect the Reputation of a journal in some circumstances. These differences are more evident for journals which have a lower journal research standing.

The cultural differences based on the research quality of the academic’s current institution were only investigated for UK Business Schools because of the limited availability of RAE data. No evidence was found of differences in journal research standing based on the research quality of the institution. This is encouraging for generalisations made from this research because it is implied that the opinions of academics at top business schools are similar to those at lesser rated Business Schools. It also supports the notion that peer referral is strongly connected with perceptions of journal research standing. It is encouraging that research training does not affect the perceptions of journal research standing. This means that attitudes are not fixed in stone and can change over time. This is encouraging for journal editors who hope to enhance the standing of their journal through changing academic perceptions.

8.3.3 Journal Specific Experiences

In Section 7.3 hypotheses 4a – 4g were investigated to determine the moderating effects of journal specific experiences on journal research standing. Jobber and Simpson (1985) referred to ‘self-serving bias’ as a moderating factor in the evaluation of journal research standing. In this research these bias issues were called journal specific experiences. Five hypotheses were investigated to detect self-serving bias and two hypotheses were investigated (familiarity and research fit) to detect other sources of journal specific experiences. The perceived ability to publish had no
significant correlation with the research standing of the ten journals, which confirms that publishing in the journal does not affect a journal’s research standing.

Four key variables were investigated to determine if ‘self-serving bias’ existed. These variables related to issues concerning publishing achievements and editorial duties. Generally the research rejected the hypotheses that self-serving bias exists in academics evaluations of the research standing of journals. However weak evidence suggests that some bias may exists. The differences between academics who had published in a journal and those that had not published in a journal was investigated. The analysis found that those academics who had published in the journal rated the research standing of the journal higher than those academics that had not published in the journal. Although the differences were not significant these differences were consistent across the journals investigated, suggesting that there could be a link between publishing activities and journal research standing.

Having a submission rejected by a journal was also investigated to determine if this biased the perceptions of a journal’s research standing. The results found that the pattern of differences in the means was mixed. For some journals the direction of the effect when a submission had been rejected increased the mean score for journal research standing and for others it reduced the mean score for journal research standing. The difference between increasing and decreasing the mean score for journal research standing seems to be dependent on the average journal research standing. For example, having a submission rejected by a top rated journals (JMR, JM and JCR) had a positive effect on journal research standing, whereas for a lesser rated journal (EJM) rejection had a negative effect on that journal’s research standing.

A reasonable explanation for this finding is Festinger’s (1957) theory of cognitive dissonance. This is a well-known theory in psychology, and is also known in consumer behaviour as ‘buyer’s remorse’. The theory is based on the premise that ‘any decision between alternative courses of action will lead to a state of psychological tension or dissonance’. After a course of action has been chosen, the ‘actor’ will justify his or her decision by re-evaluating the alternatives, so that the chosen alternative appears more positive than other alternatives. Cognitive dissonance could be created when academics have a submission rejected by a journal. When
submitting a paper the initial expectation of any contributing author is generally that the paper will be accepted (or at least sent back for revisions). When the article is rejected the initial decision to submit to the journal is called into question and thus creates cognitive dissonance. Festinger (1957) anticipates that we seek strategies that will reduce cognitive dissonance. Two likely strategies in the context of having a submission rejected may be adopted. One is that the academic grows cynical and suggests that the journal is not worth the effort, down grading its importance or standing, i.e. 'the reviewers don't know what they are talking about'. The second dissonance reducing strategy would be to inflate the standing of the journal, i.e. 'the journal must be good, because I can't publish in it'. The strategy adopted could well depend on the journal. As journal research standing reduces the expected likelihood of acceptance increases and so the dissonance reducing strategy may also change.

Jobber and Simpson (1985) also suggested that membership of the editorial board may bias academics' opinions of a journal's research standing. The analysis of responses about the IJRM showed that no significant difference existed between editorial board members and non-editorial board members. This is encouraging for the editor as it suggests that the editorial board have an unbiased understanding of the relative standing of their journal. Another part of the editorial process is the reviewers who are closely linked with the research published in the journals. The exploratory hypothesis which stated that differences existed between reviewers and non-reviewers was rejected. Again it is encouraging that reviewers are also unbiased in their understanding of the relative standing of the journal.

The hypotheses that examined self-serving bias were almost all rejected. This is encouraging as it suggests that academics have a consistent and considered view of the research standing of journals. However, another element of journal specific experiences is our familiarity and research fit with the journals. These two aspects help us to understand the degree to which a journal is important to a researcher's own research interests. Familiarity was examined using the variable 'I constantly consult this journal' and a familiarity index. The results of both measures found that there was a significant moderating effect on the research standing of all ten journals included in the experiment. Research Fit was also found to be significantly influential on the
research standing of the ten journals. These results suggest that academics are biased towards journals that are important to their own research. Whereas self-serving bias is directly associated with journals, the bias caused by familiarity and fit seem to be more subtle. It is likely that academics are unaware of this bias.
Chapter 9 - Conclusions

"If you are immersed in a field as I am you pick up almost by osmosis, that the best journal is this one, and this one is better than that one at this area and it is all very subtle, but it is there" (Interviewee 1)

The quote above, made some three years ago by the first Interviewee in the exploratory research, demonstrated to some extent what academics believe about the notion of research standing of journals. It is believed that opinions are created through conducting research and then writing up research for submission to a journal. Subsequent learning and understanding of the academic research process then drive these opinions.

After performing a literature review and concluding that little attention had been given to understanding the antecedents of what makes one journal ‘better’, or at least seem ‘better’, than another, the research task was revealed as somewhat more complex than first thought. The research conducted in this thesis seized this opportunity and the challenges it presented to move forwards in our understanding of the concept journals research standing.

9.1 Introduction

From the literature review the merits and failings of existing methods of assessing the standing of research journals were discussed. These methods included peer review using single item measures, and citation analysis using the Impact Factor score. Peer review was seen as too simplistic and did not reflect the nuances that make up journal research standing. It also suffered from basic measurement issues such as reliability and stability. The literature review encountered a variety of terms and expressions to represent ideas that related to journal research standing and similar ideas such as quality and importance. Perceptual measures were also thought to be contaminated by self-serving bias and other factors that could significantly influence perceptions. The cross discipline literature review was also critical of the use of citations as a catholic measure of journal research standing. However, although citations have their problems, they were thought to be an indicator of research standing to some degree.
The literature review suggested that a new multi-dimensional measurement instrument was needed to accurately portray the construct journal research standing, and an investigation of bias was necessary to understand response differences.

The methodology followed the principles of Churchill’s 1979 paradigm for developing better measures of marketing constructs. Therefore two types of investigation were performed. Firstly, a qualitative investigation was performed to examine the construct and determine its domain. Secondly, a quantitative study was used to develop a set of items that could be used to measure journal research standing.

In addition to standard scale development techniques conjoint analysis was used as an alternative method of measuring research quality. The conjoint experiment was used to gain an insight into how academics rate or rank different journals. It mirrored a similar process conducted by the RAE where academics were required to put forward their four best pieces of output. The methodology suggested that by using a variety of measures to evaluate the new scales, greater insight was possible which would help to progress our understanding in this area.

9.2 Findings

In this section the research questions set out in Chapter 1 are answered.

What are the important elements of journal research standing?

From the qualitative interviews many new items and issues were discovered that appears as possibly important elements of journal research standing. An initial item pool of 66 items was developed. The items were constructed into Likert scale statements. These were then pre-tested and the pool was reduced to set of high quality statements. These were then administered to a large sample of respondents for examination. The evaluation indicated that only two of the items were not important and this left 38 items. Nine items were quantifiable and 29 items were perceptual. The important elements (items) related to a multitude of issues, and were discussed in chapter 4. In summary the important elements of journal research standing included issues such as the authors, the reviewers and reviewing process, the contents and output, the editorial board and the readership.
Is journal research standing a multi-dimensional construct?

The 29 perceptual measures were investigated using principle component analysis. Items that had a poor correlation or were loading onto more than one dimension, were removed. This left 18 items that were divided into three orthogonal dimensions. The

<table>
<thead>
<tr>
<th>Table 9.1 Scale items for the dimensions of journal research standing</th>
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<tr>
<td><strong>Reputation</strong></td>
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<tr>
<td>• Authors are admired after publishing in the journal</td>
</tr>
<tr>
<td>• Editorial board members consider it an honour to be on the board</td>
</tr>
<tr>
<td>• The editor is respected internationally by [Marketing] research academics</td>
</tr>
<tr>
<td>• Articles published in the journal can improve promotion/tenure prospects</td>
</tr>
<tr>
<td>• The journal is highly visible in the academic research community</td>
</tr>
<tr>
<td>• Referencing articles from the journal adds credibility to new research papers</td>
</tr>
<tr>
<td><strong>Reviewing Standards</strong></td>
</tr>
<tr>
<td>• The referees for the journal provide detailed comments for submitting authors</td>
</tr>
<tr>
<td>• Referees’ comments give information that the submitting author is able to use to improve their research paper</td>
</tr>
<tr>
<td>• Referees comprehensively address all the issues</td>
</tr>
<tr>
<td>• Editorial board members are respected internationally by [Marketing] researchers</td>
</tr>
<tr>
<td>• The editor is capable of making independent editorial decisions</td>
</tr>
<tr>
<td>• The editor is capable of selecting appropriate referees</td>
</tr>
<tr>
<td><strong>Content Quality</strong></td>
</tr>
<tr>
<td>• The journal is important to the dissemination of theoretical knowledge</td>
</tr>
<tr>
<td>• Articles published in the journal are consistently high quality</td>
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<tr>
<td>• The journal is important in the dissemination of methodological knowledge</td>
</tr>
<tr>
<td>• The reviewing process is rigorous</td>
</tr>
<tr>
<td>• Central to the discipline [marketing] research literature</td>
</tr>
<tr>
<td>• Articles demonstrate methodological rigour</td>
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</table>
first dimension was Reputation, the second was Reviewing Standards and the third was Content Quality. This was a neat and logical solution, which also exhibited good statistical properties. In conclusion, journal research standing is a multi-dimensional construct. The scale items are listed are listed in Table 9.1.

Do academics acknowledge the multiple dimensions of journal research standing?

Ten journals were analysed. The selection of journals was chosen to represent a range of quality and style. The respondents were also reasonably familiar with most journals. Differences were examined between the three dimensions across all ten journals and between the dimensions for each journal. The analysis found that significant differences did occur, both between dimensions and between journals. The differences between dimensions, indicated that respondents to the survey could evaluate the dimensions differently, thus perceiving real differences between the dimensions. This supported the hypothesis that academics can discriminate between the dimensions. The analysis of differences between journals using the three dimensions suggested a hierarchy within the set of ten journals. However, the ten journals used in the analysis tended to split into two significantly different groups. In conclusion, academics acknowledged the multiple dimensions of journals research standing and acknowledged differences between journals.

What moderating factors affect academic opinions of journal research standing?

Apart from a consideration of the attributes of a journal, as discussed in chapter 6, this research hypothesised that academic perceptions can be affected by extraneous variables, such as differences in academics’ experience. Key moderating variables were examined, these were publishing expertise, cultural infrastructure and journal specific experiences. Publishing expertise was found to have no significant effect on journal research standing, where as some moderating effects were found for the other two variables. In conclusion, country of origin, research fit, familiarity and submission rejection are moderating factors that affect academic opinions of journal research standing.
9.3 Contribution

This study makes several contributions to the literature on journal evaluations. Previous studies have ranked and rated journals to determine which journals are rated higher than other journals. This research is the first empirical examination of the important attributes of journal research standing. The second contribution of this research is that it has found a multi-dimensional structure within these core attributes. The research also found that these dimensions are also perceived to exist in academic evaluations of the research standing of academic journals. The third contribution of this research is that it is the first empirical study to examine the moderating factors that affect academic opinions of journal attributes. Finally, the research found the use of conjoint analysis to be a useful tool in examining perceptions of academics with regard to evaluating the research standing of academic journals.

9.4 Implications

9.4.1 Implication to editors and journals

For editors and their journals, the major implication of the findings is that there are three dimensions to journal research standing. These dimensions impact on an editor's ability to manage the research standing of the journal. Each dimension must be attended to in order that the research standing of a journal is sustained or enhanced.

In the light of these dimensions, Editors and their journals should also be aware of three types of relationship that impact on a journal's research standing. Firstly, there is the relationship between the readers and the journal, and this relationship is concerned with the Content Quality of the journal. Secondly there is the relationship between the contributors (authors and rejected authors) and the journal. This relationship focuses on the Reputation of the journal. Finally, there is the relationship between the reviewers/referees and the journal. This relationship is concerned with the Reviewing Standards of the journal. In the first two relationships, we, as academics, consider 'what the journal can do for us', in the third relationship we consider what the 'what we can do for the journal'. Managing these relationships is one step towards managing the research standing of the journal.
However, editors must also consider how to start the process of building journal research standing. Without a willing review board, without willing contributors and without willing readers, the journal cannot build journal research standing. Since the perceptions of a journal are explicitly linked with the competitive academic community, and the competitive forces influence changes in journals and in the research methods and topics considered by academics.

The evaluation of the ten journals also suggests that clusters of journals may exist. Grouping journals into categories may be more appropriate than ranking journals into a sequential list, as the respondents in this study perceived this study within group differences were less severe than between group differences.

9.4.2 Implication for academics

The implications of this research for academics are numerous. In this section some of the important issues are addressed with regard to academics publishing in academic journals and monitoring journals. The three dimensions identified show that as academics, we contemplate a journal’s research standing based on three different aspects: the reputation of the journal, the reviewing standards of the journal and the content quality of the journal. Within each of these dimensions this research has also described the critical indicator, which affect those dimensions. Firstly, these results aid academics in developing their own perceptions of the research standing of journals in a purely descriptive manner. Secondly, the dimensions can help academics construct their own lists of journals for the benefit of measuring their own performance or others.

The research also illustrated that academics are biased towards journals they know more about. The research suggests that academics need to be more open minded when they are evaluating journals they are less familiar with. They need to be impartial in their judgements of the three dimensions. The use of quantifiable measures should also be taken into account; citation analysis and circulation size being the most important. On the other hand, academics should be aware that other academics are biased against journals they are less familiar with. This suggests that academics should be aware of the importance of visibility of the journal to the audience the academic is trying to reach, as this can result in greater rewards for their research.
9.5 **Limitations**

This study has three limitations. The first limitation is related to the nationality of the academics questioned. The sample covered two populations of interest, the UK and Western Europe. The investigation was not extended to cover other nationalities such as the influential United States. This exclusion of the United States was in part due to the difficulty of obtaining data, particularly in terms of mailing questionnaires.

Secondly, the findings of this study may only apply to marketing journals. Whether the results can be extended to other research disciplines, especially to disciplines such as the pure sciences and engineering is a matter of speculation. The research was also conducted using a small number of English orientated marketing journals. The rating of the ten journals in this research should be treated in the context of this research as calibration of journals. The ratings constructed are relative to the journals used. In addition the hypotheses tested to understand the effects of familiarity on a journal's research standing, may have been served better by examine the effects of language barriers. One suggestion is the inclusion of non-English test journals in the instrument. Within an EMAC context where Dutch and German academics have a larger presence, the use of German or Dutch journals would allow cross-national comparisons to be investigated.

Finally, the low response rate for specific issues included in the instrument reduced the sensitivity of some results. The classification of some categorical variables was also impeded by the small sample sizes, resulting in some specific distinctions being lost in the analysis. This could have caused some hypotheses to be rejected when they may well have been accepted if larger sample sizes had been available. The low response rate was also a factor when choosing the analysis techniques. Larger sample sizes would have allowed more sophisticated techniques, in some circumstances, to evaluate the effects of moderating variables.

9.6 **Directions for future research**

9.6.1 **New samples, new disciplines, new journals**

Further research should concentrate on the application of the purified measure to different populations. The lower than expected response rate and the choice of
sampling frame could have, although not detected, produced a non-representative sample of the population. One notable omission from the survey is a representative sample of the US marketing scene. Data from this particular sample could be used to investigate the generalisability of the dimensions of journal research standing.

Furthermore, scales should be applied to other disciplines, especially outside the humanities. Journals in the pure sciences and engineering tend to be different from Social Science journals, not least in rejection rates, which tend to be significantly higher.

Using samples selected on the basis of usage of journals would help in the investigation of differences due to self-serving bias. This approach would increase samples sizes for comparing between, for example, respondents with articles published in the journals and those that had not had articles published in the journals. This would go some way to overcoming the problem of low responses rates, and hence small sample sizes.

9.6.2 Analysis of conjoint models

The results of the conjoint analysis in chapter 7 showed that clusters existed within the sample of academics. Further analysis should investigate these clusters and the individual conjoint models on which the clusters are based. The aim of this would be to investigate whether the hypothesised bias found to affect journal research standing was also evident using the conjoint measure of journal research standing.

9.6.3 Use of E-mail surveys

Although conceptually appealing, the application of conjoint analysis is limited due to a number of practical problems. A major problem is that only a few journals could be included in this design, that in a more thorough setting many more journals would have been evaluated. An alternative to the current design may be to use a hybrid conjoint analysis design, which allows respondents to screen the weakest journals before conducting the conjoint analysis. Conjoint analysis could also be used to investigate the contribution of other forms of output to research excellence. A useful survey approach would be to use the Internet for data collection. Costes (1999)
provides a detailed review of the issues surrounding e-mail/Internet surveys. This would reduce the costs associated with mailing and enable a more complex and interactive questionnaire to be used.

9.6.4 **Causal and effect indicators**

Using traditional scale development techniques there is often a tendency to overlook the true dimensionality, opting to regard a high alpha and high correlations as evidence of unidimensionality. However, these traditional techniques can mask the underlying nature of variables which may belong to separate dimensions. Bollen and Lennox (1991) show distinctions between two types of variables. ‘Effect’ indicators are dependent on the latent variable and thus increase and decrease together, i.e. they covary. Scales constructed using effect indicators conform to the classical domain sampling theory and traditional techniques applied to these variables will be a realistic reflection of the scale dimensionality. The second type of indicator variables are known as ‘Causal’ indicators. These indicators determine the latent variable. This means that these variables may not necessarily covary. ‘Traditional measures of reliability and the examination of the correlation matrix of indicators are so ingrained that researchers have failed to realise that these are not appropriate under all situations’ (Bollen and Lennox, 1991).

This research used the classical approach to investigate the dimensions of Journal Research Standing. Scales were constructed using the ‘importance’ data collected. The scales were then applied to the selected journals. Using the classical approach means that it was assumed that all of the variables within each dimension were effect indicators and thus covary. The scales were summated and then applied to each journal. This created an averaging process of the variables within the scales. Future research may wish to investigate the nature of scale items and the measurement model within each dimension to determine if there are casual indicators present as opposed to effect indicators.

9.6.5 **Response styles**

Investigating response differences that are due to content-irrelevant factors is another avenue for further work. Response styles to questionnaire items in particular, is one of
these factors. Baumgartner and SteenKamp (1999) identified five common response styles. Two possible styles that may affect the analysis of journals using the multi-item scale presented are acquiescence (yes saying) and use of the mid-point. In the evaluation of journals it could be anticipated that less familiarity and lower expertise would mean that respondents are less discriminating between journal attributes in a similar way to brands attributes. These differences would therefore be evident in their responses. Further work should investigate this phenomenon as a way of determining more accurately the differences (if any) between experts and non-experts at the journal specific level.

9.6.6 ‘Apples and Oranges’

Some of the criticisms commentators have made of ranking journals in one hierarchy is that we are not comparing like with like. They suggests that ranking journals is similar to comparing apples and oranges. This research has investigated the notion of research standing and a model that represents the key ideas that influence the research standing of academic journals. Specifically, this research has identified three distinct dimensions that effect research standing and which form the basis for meaningful comparisons.

However, there is scope for further research in to an understanding of the diversity and range of journals, both in terms of topic content and philosophical viewpoint. Two recent papers (Tellis, Chandy and Ackerman, 1999; Pieters, Baumgartner, Vermunt and Bijmolt, 1999) used citations with some success to examine the structure of marketing journals. However, the two papers did not agree on the dimensions (or axis) for comparison. The current research found two major dimensions that differentiated the substantive content within a journal: methodological and theoretical. Tellis et al (1999) had three classification themes for journal articles, theoretical, empirical and methodological while using two dimensions to explain diversity of journal content (Verbal-Math and Lab-field). Pieters et al (1999) used two dimensions, Psychology – Business and Methodological/Formal – Substantive/empirical. Further research should investigate the dimensions of journal content, to establish typologies or other meaningful ways to categorise and segment journals.
9.7 Journals as Brands

Throughout the research ideas and notions have been stirred up that are normally akin to the ideas and theories that play an important role in marketing and brand evaluation. This is not surprising as the task of evaluating these objects could be considered comparable. Journals and products both have (brand) names, they both have tangible and intangible elements, and they both have a degree of perception and reality. Furthermore, journals and brands exist within a competitive environment, competing for users, and in the case of journals for submitting authors, for reviewers and even for editors. The actual contents of a journal are also competing with other journals content for significance, in the same way brands are co-ordinated by a team of individuals to achieve their goals. For a journal to be considered similar to a product, then, there must be an exchange relationship, either functional, social and/or psychological.

These exchanges seem to exist, one exchange is between the reader and the journal. Another exchange is between the submitting author and the journal. Then there are exchanges between libraries and other interested groups and the exchanges between the editor and review board and the journal. Not only that but the distinction between the user and producer is blurred, as in services marketing (e.g. public houses, restaurants) where clients contribute to the ambience. Further research may wish to investigate these different exchanges as a way of understanding the elements of a journal. This approach would provide more meaningful information for a greater variety of interest groups. The current research sought to provide information from just one perspective, that of academics (i.e. the consumer). As Hunt (1979) points out ‘Sadly, most administrators of non-profit organisations and many academicians in other areas still do not perceive that many problems of non-profit organisations are basically marketing in nature, and that there is an extant body of knowledge in marketing academia and a group of trained marketing practitioners that can help resolve these problems’. Perhaps journal publishing houses and journal editors should look towards marketing for attaining a greater understanding of how journals should be managed and developed.
9.7.1 Pioneering advantage

One example of marketing phenomena that journals seem to follow, and which has similarities to brand development is the concept of Pioneering Advantage (Carpenter and Nakamota, 1989). This is one possible explanation of why the age of a journal is related to its standing. If we consider research standing in a similar way to market share we can easily draw comparisons. Carpenter and Nakamota, (1989) show, that on top of other variables relating pioneering advantage, how buyer learning and preference formation plus perceptual distinctiveness play important roles in preference structures of brands. In particular they show how pioneering advantage of a brand can alter perception of the true ideal point. Pioneering advantage also seems to affect perceptions of Journal Research Standing.

As in brands those that came first (e.g. Journal of Marketing/Marketing Research) have an advantage over later entrants. Generally, comparisons of brands are made through a heuristic judgement process and, at the outset, category (research discipline) knowledge is minimal. As a category (discipline) evolves, the concept of the ideal point for the discipline favours the pioneer. This is because the later entrants are compared with respect to the pioneer. This can cause a shift in the ideal point towards the pioneer's attributes. The pioneer becomes the cognitive referent. For journals, this could mean that the journal becomes, for example, the core journal and the foundation for future research, and hence a journal with high journal research standing.

Carpenter and Nakamota (1989) suggest that in order to compete with pioneers, later entrants need to develop a sufficient level of distinctiveness in order to gain competitive advantage. This leads to the creation of a new market segment (e.g. Journal of Consumer Research). Copy cat marketing leads to long term lower market share. Therefore, those journal that do succeed have created a new market segment. One of the more recent marketing journals is the International Journal of Research in Marketing, which has been developed as a successful product with an ever increasing journal research standing, that caters for a European community of marketing researchers.

Beyond the perceptual/learning effects on pioneering advantage, are issues such as entry barriers that can help the pioneers sustain an advantage. Journals face the
problem of a short supply of the best reviewers, editors, authors, whereas the pioneers can hold and retain such personnel to maintain their advantage over rival journals. Hence they can create barriers to entry and perpetuate their pioneering advantage. Further research should investigate pioneering advantage more closely as one way of explaining the preference structure of academic journals.

9.8 Conclusion

The complexity of understanding the concept of journal research standing is split between the perceptions of individuals and the collective academic environment. Journal research standing is determined by the perceptions we have of the Reputation, Reviewing Standards and the Content Quality of a journal. These dimensions are also determined by how others perceive them to be. Both the research standing of a journal and our perceptions are created within a subjective universe in which the nature of research and the ways of conducting research change over time.

This thesis has created an instrument that can measure journal research standing and hence which can therefore track these continuing changes. The research also found significant evidence that academics can be biased towards journals depending on their relationship with the journal. Further research should look towards marketing theory to extend our understanding of journal research standing within a context that considers academics as consumers, users, creators and promoters of journals.
References


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Scientometrics. 1 (4), 359-375.


179. Pieters, Baumgartner, Vermunt and Bijmolt, 1999


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Appendix 1
Interview Schedule

Personal Experience
Could you tell me about your research career so far?
What experience will you have with research journals?
When you first started publishing what was your perception of journals?
What were/are your views of marketing journals?
What are the characteristics of a journal that has academic standing?
How do journals in other fields relate to the marketing hierarchy of journals?
Have you had any good/bad experiences of journals that have affected your perception?

Academic research standing
Does the nature of material effect which journals you publish in?
How would you orientated your research towards publishing in 'better' journals?
What other ways can you enhance your standing?
What effect will publishing in a sub-field have on your standing?
How would you differentiate between journals (that could enhance your research standing)?
Do you publish in any fields?

Journal Research Standing
General questions
What are the aims of a journal?
If you edited a journal how would you increase its standing?
How would you increase the standing of a journal?
What makes a top journal?
How would you differentiate between journals on a domestic level?
Is there a set of criteria that could be used to differentiate journals from each other?

Specific/probing questions
Is reviewing critical to the standing of a journal
Is research standing based on general Vs specialist journal content?
Does the publishers effect the standing?
How do affiliations affect the ranking of a journal?
Does the lead time required to publication differ with journals?
Are there any historical developments that effect the standing of a journal?
What differences are there in the reviewing process?
Could you have just one journal?
What does practitioner orientated mean?
What do you mean by rigorous reviewing?
What makes a good review process?
What makes good research?
Does American mean International?

Research Environment
Is the research environment competitive?
When you started researching did you think about targeting journals to enhance your career?
How does the RAE distinguish between international and national excellence?
Appendix 2
Dear Professor <<SURNAME>>

We would like your help with our research. We are seeking to discover the important dimensions of marketing research journals. The results will be useful to both research academics and journal editors. As a prominent marketing academic your views are very important to this investigation.

In the questionnaire we use the term journal research standing to focus on journals that are considered to have research prestige. To make the questionnaire less demanding on your time we are using a bridging design. Each respondent has been asked to evaluate only a small portion of possible journals. The list of journals that you are asked to comment upon is therefore incomplete.

We hope you will help by completing the enclosed questionnaire. Your response will be treated in complete confidence and only aggregate results will be reported. As a token of our appreciation for returning the completed questionnaire, £1 (~1.5 Euro) will be donated on your behalf to the International Red Cross.

Your support is greatly appreciated

Yours sincerely

Professor John Saunders
Dean, Aston Business School

Andy Hirst
Doctoral Researcher,
Loughborough University

PS: Please return the enclosed postcard if you would like to obtain a comprehensive and early report of the findings.
Appendix 3
Journal Research Standing Questionnaire

This questionnaire is designed to elicit your perceptions of research journals in Marketing. Please read the instructions at the beginning of each section of the questionnaire (indicated by a double line box). The first part simply asks you to rate the importance of different characteristics that a journal may possess. These characteristics refer to the concept called academic research standing.

<table>
<thead>
<tr>
<th>Please evaluate the importance of the following characteristics for a journal that can contribute to your personal academic research standing</th>
<th>Very Important</th>
<th>Important</th>
<th>Unimportant</th>
<th>Very Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For a journal to contribute to your academic research standing, it is important that...</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1. The journal has a double blind reviewing process</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Articles in the journal use citations from international sources</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Editors are appointed by an academic society, e.g. the AMA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Editors are appointed for a fixed period only</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Journals are affiliated to an academic research society</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1. The journal is included on an international referencing service e.g. ISI SSCI</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. The journal is highly cited/referenced by other journals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. The journal produces special issues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. The journal has a high subscription by individual academic researchers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. The journal is widely circulated within the academic community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1. Authors are admired after publishing in the journal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Academic researchers find it desirable to subscribe to the journal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Editorial board members consider it an honour to be on the board</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Articles are influential to future research</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. The journal is important to the dissemination of theoretical knowledge</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tbody>
</table>
For a journal to contribute to your academic research standing, it is important that:

<table>
<thead>
<tr>
<th>Importance Level</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td><strong>Very Important</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Important</strong></td>
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<tr>
<td><strong>Very Unimportant</strong></td>
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</table>

1. Reviewing submitted papers to the journal is a valuable source of new information
2. Articles published in the journal are consistently high quality
3. The journal is important in the dissemination of methodological knowledge
4. Authors consider it a great achievement to publish in the journal
5. The journal attracts the best authors to publish in it

1. Internationally respected researchers publish in the journal
2. Articles in the journal are useful as teaching material
3. The reviewing process is rigorous
4. Referencing articles from the journal adds credibility to new research papers
5. Articles published in the journal can improve promotion/tenure prospects

1. The journal is highly visible in the academic research community
2. The referees for the journal provide detailed comments for submitting authors
3. Editorial board members are respected internationally by academic marketing researchers
4. Papers are easy to publish in the journal
5. The editor is respected internationally by academic marketing researchers

1. Articles need reworking before they are accepted
2. Academics constantly consult this journal
3. Referees’ comments give information that the submitting author is able to use to improve his or her research paper
4. Referees comprehensively address all the issues
5. Articles demonstrate methodological rigor

1. The journal is central to the marketing research literature
2. The editorial board members are the best people for the subject matter they review
3. The editor is capable of making independent editorial decisions
4. The editor is capable of selecting appropriate referees
5. The journal targets academic marketing researchers
Below is a set of statements with four journals listed opposite.

- Using a 7 point scale place a number in the box to indicate how strongly you agree/disagree with each statement.
- Use 1 to indicate that you strongly agree with the statement and 7 if you strongly disagree with the statement.
- For intermediate responses use any whole number between 1 and 7, 4 indicates you neither agree or disagree with the statement.
- Endeavour to complete each statement, but if you are unable to provide an answer for any statement or journal, please leave the box empty and continue with the next statement or move across to the next journal.

The following statement is true:
1 = Strongly Agree; 7 = Strongly Disagree;
4 = Neither agree or disagree

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<tr>
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<tbody>
<tr>
<td>1. I admire the authors in this journal</td>
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<tr>
<td>2. If I had sufficient funds I would subscribe to this journal</td>
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<tr>
<td>3. It would be an honour to be an editorial board member for this journal</td>
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<tr>
<td>4. Articles in this journal are influential to future research</td>
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<tr>
<td>5. This journal is important to the dissemination of theoretical knowledge</td>
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<tr>
<td>6. If you reviewed articles for this journal it would be a valuable source of new information</td>
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<td>7. This journal publishes consistently high quality papers</td>
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<tr>
<td>8. This journal is important to the dissemination of methodological knowledge</td>
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<td>9. Marketing academics consider it a great achievement to publish in this journal</td>
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<tr>
<td>10. This journal attracts the best authors to publish in it</td>
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<tr>
<td>11. Internationally respected researchers publish in this journal</td>
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<tr>
<td>12. Articles in this journal are useful as teaching material</td>
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<tr>
<td>13. The reviewing process of this journal is rigorous</td>
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<tr>
<td>14. Referencing articles from this journal can add credibility to your research</td>
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<td></td>
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<tr>
<td>15. This journal can improve promotion/tenure prospects</td>
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<tr>
<td>16. This journal is highly visible in the academic research community</td>
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<td>17. I only read articles from this journal when they are recommended</td>
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<td>18. The editorial board for this journal is well-respected internationally</td>
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<tr>
<td>19. Papers are easy to publish in this journal</td>
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<tr>
<td>20. The editor of this journal is respected internationally by marketing researchers</td>
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</tbody>
</table>
The following statement is true:
1 = Strongly Agree; 7 = Strongly Disagree;
4 = Neither agree or disagree

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</thead>
<tbody>
<tr>
<td>1. Articles submitted to this journal will need reworking before they are accepted</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. I constantly consult this journal</td>
<td></td>
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<tr>
<td>3. Referees’ comments for this journal give information that the submitting author is able to use to improve their research paper</td>
<td></td>
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<td></td>
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<tr>
<td>4. The referees for this journal comprehensively address all the issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Articles in this journal demonstrate methodological rigor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. This journal is central to the marketing research literature</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The editorial board for this journal are the best people for the subject matter they</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The editor of this journal is capable of making independent editorial decisions</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. The editor is capable of selecting appropriate referees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. This journal targets marketing academics</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>11. This journal has a close fit with my own research interests</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. This journal bestows academic research standing on the authors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I could publish in this journal if I wanted to</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>14. I intend to submit a paper to this journal in the next four years</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>15. It is time-consuming to publish in this journal</td>
<td></td>
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</tbody>
</table>

Please answer the following questions. For yes or no questions circle the appropriate number.

<table>
<thead>
<tr>
<th>Question</th>
<th>Journal of Marketing</th>
<th>Industrial Marketing Management</th>
<th>Marketing Science</th>
<th>European Journal of Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many articles have you had published in this journal (include any joint publications)</td>
<td>YES 1</td>
<td>YES 1</td>
<td>YES 1</td>
<td>YES 1</td>
</tr>
<tr>
<td>Have you had a paper rejected by this journal?</td>
<td>YES 1</td>
<td>YES 1</td>
<td>YES 1</td>
<td>YES 1</td>
</tr>
<tr>
<td>Are you or have you been a member of the editorial board for this journal in the last five years?</td>
<td>YES 1</td>
<td>YES 1</td>
<td>YES 1</td>
<td>YES 1</td>
</tr>
<tr>
<td>Have you refereed/reviewed submissions to this journal in the past five years</td>
<td>YES 1</td>
<td>YES 1</td>
<td>YES 1</td>
<td>YES 1</td>
</tr>
</tbody>
</table>
Below is an experiment to understand how you compare journals which might appear on academic résumé’s or CVs.

- There are five different sets of journals’ articles.
- Each set represents an academics research output for a 4 year period. What would be your impression of his/her research excellence?
- Firstly, Rate each set’s aggregate international research excellence, do not rate each journal separately.
- Secondly, Rank the five sets in order of international research excellence.

<table>
<thead>
<tr>
<th>Sets</th>
<th>Rate</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The aggregate research excellence for these set are...(circle a number below) - repeat for each set</td>
<td>rank all 5 sets in order of excellence</td>
</tr>
<tr>
<td></td>
<td>International Excellence</td>
<td>National Excellence</td>
</tr>
</tbody>
</table>
| 1    | 1 International Journal of Research in Marketing article  
     | 2 Journal of Marketing Management articles  
     | 1 Journal of Marketing article | 1 2 3 4 5 6 7 | □ |
| 2    | 1 Journal of Marketing Research article  
     | 2 European Journal of Marketing articles  
     | 1 International Journal of Research in Marketing article | 1 2 3 4 5 6 7 | □ |
| 3    | 2 European Journal of Marketing articles  
     | 2 Journal of Marketing Management articles | 1 2 3 4 5 6 7 | □ |
| 4    | 1 Journal of Marketing Management article  
     | 1 Journal of Marketing article  
     | 1 International Journal of Research in Marketing article  
     | 1 European Journal of Marketing article | 1 2 3 4 5 6 7 | □ |
| 5    | 1 Journal of Marketing article  
     | 1 Journal of Marketing Management article  
     | 1 Journal of Marketing Research article  
<pre><code> | 1 European Journal of Marketing article | 1 2 3 4 5 6 7 | □ |
</code></pre>
<table>
<thead>
<tr>
<th>Sets</th>
<th>Rate</th>
<th>Rank</th>
</tr>
</thead>
</table>
| 1 | 1 AM (MEG) Competitive Conference paper**  
2 Journal of the Market Research Society articles  
1 European Journal of Marketing article | International Excellence: 1 2 3 4 5 6 7  
National Excellence: 1 2 3 4 5 6 7  
No Excellence: | |
| 2 | 1 AM (MEG) Competitive Conference paper**  
1 Journal of Marketing Research article  
1 Journal of the Market Research Society article  
1 Journal of Marketing Management article | International Excellence: 1 2 3 4 5 6 7  
National Excellence: 1 2 3 4 5 6 7  
No Excellence: | |
| 3 | 1 European Journal of Marketing article  
1 Journal of Marketing Management article  
1 Journal of Marketing Research article  
1 Journal of the Market Research Society article | International Excellence: 1 2 3 4 5 6 7  
National Excellence: 1 2 3 4 5 6 7  
No Excellence: | |
| 4 | 2 Journal of the Market Research Society articles  
2 Journal of Marketing Management articles | International Excellence: 1 2 3 4 5 6 7  
National Excellence: 1 2 3 4 5 6 7  
No Excellence: | |
| 5 | 1 European Journal of Marketing article  
2 Journal of Marketing Management articles  
1 AM (MEG) Competitive Conference paper** | International Excellence: 1 2 3 4 5 6 7  
National Excellence: 1 2 3 4 5 6 7  
No Excellence: | |
Below is a collection of journals that have been chosen to represent the wide array of marketing journals. The list is not meant to be complete. Please rank the journals according to your perceptions of ACADEMIC RESEARCH STANDING, where 01 = Highest Standing, 10 = Lowest standing

<table>
<thead>
<tr>
<th>Journal</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Industrial Marketing Management</td>
<td></td>
</tr>
<tr>
<td>2. Journal of Marketing</td>
<td></td>
</tr>
<tr>
<td>3. Marketing Science</td>
<td></td>
</tr>
<tr>
<td>4. European Journal of Marketing</td>
<td></td>
</tr>
<tr>
<td>5. Journal of Marketing Management</td>
<td></td>
</tr>
<tr>
<td>6. International Journal of Research in Marketing</td>
<td></td>
</tr>
<tr>
<td>7. Journal of Strategic Marketing</td>
<td></td>
</tr>
<tr>
<td>8. Journal of the Market Research Society</td>
<td></td>
</tr>
<tr>
<td>9. Journal of Marketing Research</td>
<td></td>
</tr>
<tr>
<td>10. Journal of Consumer Research</td>
<td></td>
</tr>
</tbody>
</table>

Finally, please could you provide some information about yourself and your research career.

Please indicate your job title: (circle the appropriate number)

- Professor 1
- Lecturer 3
- Senior Lecturer 2
- Other (specify) 4

How many years have you been researching marketing issues?

How many articles have you had published in refereed journals in the last three years?

What percentage of your published research has been related to marketing issues over the past 5 years?

What percentage of your time working as an academic is spent on research?

In which country did you gain your (doctoral) research training?

In which country do you have your permanent academic appointment?

In which business school/department do you have a permanent position?

In which business school/department have you spent most of your research career?
Published Research Papers
Determinants of Journal Research Standing: A Qualitative Investigation in Marketing

Competitive Paper

Andy Hirst and David Coates, Loughborough University Business School, UK
John Saunders, Aston Business School, UK

Abstract

The current academic research climate necessitates the need for a greater understanding of the mechanisms which determine the research standing of academic journals. This paper studies the current literature and conducts exploratory research to construct a conceptual framework for the research standing of academic marketing journals. The literature review revealed two dominant methodologies and concluded that these measures lacked sensitivity and did not adequately represent the underlying construct of the research standing of academic journals. An experience survey of an international sample of business and marketing academics provided initial insights. The research revealed a multi-dimensional framework of journal research standing. The research concluded that due to the problems of a small sample, further research is necessary to substantiate these exploratory findings.

Introduction

“A lot of people, judging from things [journal submissions] I got when I have been on the editorial board, don’t know what the journal is trying to do.”

(Former editor and RAE panel member)

Publishing research in the UK has changed over recent years. The nature of performance criteria placed on university departments and business schools has meant that more emphasis

Corresponding Author: Andy Hirst, Loughborough University Business School, Loughborough, Leics. LE11 3TU
E-mail: A.S.Hirst@Lboro.ac.uk Tel: 01509 263171 x4615
has been placed on research output. To be considered a successful academic researcher, the researcher needs not only to publish, but also must be seen to publish in journals that are deemed appropriate by funding bodies, potential employers and for the RAE.

For the experienced researcher this may not present a problem, but for the un-initiated no comprehensive measure exists to aid European marketing academics in choosing appropriate journals.

'the development of a weighting scheme of different types of marketing publications appropriate to the European scene would be an important step towards the construction of a comprehensive measure of publication performance for comparative purposes' (Diamantopoulos, 1996).

A theme of existing research is to argue the merits of the existing methods of measuring the research standing of academic journals, rather than trying to understand the construct being measured or its theoretical underpinning (Weisheit and Regoli, 1984). These methods are dominated by the use of either citation analysis or peer review (Jones, Brinn and Pendlebury, 1996).

Past research into the research standing of academic journals has used a variety of terms such as prestige and quality. This research uses the term research standing of academic journals to cover all these ideas. This research seeks to develop a framework to understand the determinants of the research standing of academic marketing journals. The structure of the paper is as follows: First we review the issues that surround the measurement of research and research journals. This is followed by a discussion of the research methods used to collect and interpret the qualitative research data collected in the current research. Finally we present the results and discuss opportunities for further research.
Literature Review

From a comprehensive cross-discipline literature search two dominant methods were found to have been used to measure the research standing of academic research journals. These were citation analysis and peer review. Citation analysis estimates the usage of research journals in scientific research writing. Peer review is based on the measurement of academic opinion and is usually conducted via a postal survey.

Citation analysis measures the number of citations or references an article receives from other articles published in academic journals. If the citations to articles are calculated for a particular journal we have a journal citation rate. This is then used to grade each journal within a discipline. The process can be performed in two ways. Firstly, citations can be counted manually, but this is extremely time consuming and practically impossible in the modern academic environment due to the growth in research output and research journals. An alternative method is to use an American database produced by the Institute of Scientific Information (ISI), called the Science Citation Index or the Social Science Citation Index (Garfield, 1979a; Virgo, 1977). The database enables the researcher to count, in various ways, the number of citations received by a journal.

In many ways citations can indicate research quality. For example, the review found that citations are correlated with departmental research ratings (Thomas, 1987; Oppenheim, 1995) and can predict Noble Laureates (Cole and Cole, 1971). However, several factors can affect the results of citation analysis. These include: the type of journal/research (Newman and Cooper, 1993); the social and political research network (Collin et al, 1996); processing errors (Oppenheim, 1996); and negative use of citations (Garfield, 1979). Luukkonen (1997) discusses the meaning of citations and the inferences research has sought. Weisheit and Regoli
(1984) concluded that ‘citation analysis makes little sense without some guiding conceptual framework’. A summary of the issues which effect Citation Analysis is given in Table 1.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Implications to citation scores</th>
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<tr>
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<td>Bias towards journals which are centrally located journals within the citation network of the citing journals.</td>
<td>Singleton, 1976 provides a review of bias within citation analysis.</td>
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<td>Centrality index²</td>
<td>Overcomes bias of a few citing journals, but works on the same premise that high citations are a function of quality.</td>
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<td>Not all journals are catalogued by the Institute for Scientific Information.</td>
<td>The ISI database is a commercial firm created for a US academic network. There is a bias towards US journals (this bias is in decline).</td>
<td>Exploratory research conducted by the author (1996).</td>
</tr>
<tr>
<td>Type of journal</td>
<td>Review journals and journals promoting techniques are cited more.</td>
<td>Woodward and Hensman, 1976</td>
</tr>
<tr>
<td>Familiarity and circulation /accessibility</td>
<td>Inclusion on abstracting service increases a journal's citability.</td>
<td>Garfield, 1979</td>
</tr>
<tr>
<td>Type of article</td>
<td>Review journals (and articles) tend to be for current awareness and are cited less than empirical research. Methodological articles are cited more.</td>
<td>Woodman and Hensman, 1976; Garfield, 1979</td>
</tr>
<tr>
<td>Cross disciplinary studies</td>
<td>Average number of citations per article/journal differ between subject disciplines. Biases journals from disciplines which have higher citation rates for journals (sum of article cited within these journals).</td>
<td>Garfield, 1979</td>
</tr>
<tr>
<td>Citing practice</td>
<td>There are many reasons for citing, quality of work is not always the reason for citing the articles within a journal.</td>
<td>Luukkonen, 1997</td>
</tr>
<tr>
<td>Blurred construct</td>
<td>Citation counts are used to measure a variety of construct without theoretical underpinning e.g. Quality; Importance; Research Potential; Impact; Something or other; Prestige; Utility; Scientific activity.</td>
<td>Weisheit and Regoli, 1984</td>
</tr>
<tr>
<td>Geographical location of journal /academic networking</td>
<td>Journals from countries with a high academic population perform better in citation studies. Bias against languages other than English. Cited more within home network.</td>
<td>e.g. Jobber and Simpson, 1988; Poole and Regoli, 1981; Balsig, 1960; Martin and Irvine, 1980; Singleton, 1976; Peritz, 1994; Garfield 1979</td>
</tr>
<tr>
<td>Unit of measurement e.g. impact factor; immediacy index; straight citation; self citation rate; latent impact of articles</td>
<td>Using different formulae and time periods to calculate the citation counts, alters the results of the study.</td>
<td>Luukkonen, 1990; Hall, 1970; Doyle and Arthurs, 1995; Luukkonen, 1990</td>
</tr>
<tr>
<td>Citing errors result in journals not being counted.</td>
<td>29% of articles have major citation flaws. Errors can be treated as random across journals. This could have a major effect on less cited journals when articles are on average cited only 1.7 times.</td>
<td>Oppenheim, 1996; Chapman, 1985</td>
</tr>
<tr>
<td>Citing errors result in journals not being cited.</td>
<td>Using different formulae and time periods to calculate the citation counts, alters the results of the study.</td>
<td>Singleton, 1976; Peritz, 1994; Garfield, 1979</td>
</tr>
<tr>
<td>Citing errors result in journals not being cited.</td>
<td>Circulation and familiarity increase citation rates. Peer review (based on a US sample) is linked to citations.</td>
<td>Gordon, 1982</td>
</tr>
</tbody>
</table>

One way to view the citations a journal receives is to consider citations as the core product of that journal, i.e. citations are evidence that the journal has been used by other authors to produce...
their own research. Previous research is a sub-assembly for the new research and then the new research becomes a sub-assembly for the next research. If we chose to adopt this view then it follows that citations indicate the journals usefulness to the scientific community or literature. Todorov and Glanzel (1988) also suggest that ‘journal rankings based on citation measures prove to be more international and not easily obtainable by other methods’. However, this literature search also showed that citations are also dependent on a variety of endogenous and exogenous variables. Using citations to measure journals should be used with caution or as a guide in decision making. ‘Citation Analysis is not meant to replace judgement, but to make it more objective and astute’ (Garfield, 1979). On balance, citation rates are a positive indicator of research quality, and this can reflect the prestige or research standing of a journal.

The term ‘peer review’, in the context of measuring academic journals has come to mean rating journals on a single scale. These scales have been used to evaluate constructs such as prestige, importance and quality. Peer review surveys have been based on either postal questionnaires or telephone surveys administered to either small expert samples or to large representative samples, with the aim of ranking or rating a selection of journals (see table 2). Many of these surveys are geographically limited, based in only one country. An alternative to both these methods have been the combination of informal and unstructured judgements made by peers and departmental committees.

There are three core problems associated with ranking/rating journals using perceptual methods: response bias (Jobber and Simpson, 1988); understanding of the measurement construct (Martin and Irvine, 1983); and the respondent’s familiarity with the journal (Poole and Regoli, 1981). Some studies have been conducted in the UK but most research has been based in the US. The UK research was also mainly for internal use and not to provide scientific fact.
<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristic</th>
<th>Range of Journals surveyed</th>
<th>Sampling method and size</th>
<th>Measurement technique - Construct investigated</th>
<th>Top 5 Marketing journals in each study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fry, Walters and Scheuermann, 1985</td>
<td>Academics and Practitioners AMA and AM</td>
<td>50 Business journals</td>
<td>Systematic 304</td>
<td>4 point single scale - Quality</td>
<td>JMR, JM, JCR, JAR</td>
</tr>
<tr>
<td>Brown and Becker, 1987 - A replication of other studies by the same authors</td>
<td>Chairman of marketing departments</td>
<td>52 commonly cited in the Journal of Marketing</td>
<td>119 AACSB departments</td>
<td>4 point single scale - Quality</td>
<td>JM, JMR, JCR, JAR</td>
</tr>
<tr>
<td>Luke and Doke, 1987</td>
<td>Department heads, 2 of each faculty rank</td>
<td>Frequently cited in Marketing Lit. appeared in previous studies widespread popularity and readership in marketing</td>
<td>108 faculty (35 institutions) from 1985-86 AACSB list</td>
<td>Listed top 10 journals from a list of 64 journals, plus another journals not listed if required - Importance</td>
<td>JM, JMR, JCR, JR</td>
</tr>
<tr>
<td>Gordon and Heischmidt, 1992</td>
<td>Departmental Chairpersons at AACSB member school</td>
<td>40 Marketing journals</td>
<td>128 AACSB departments</td>
<td>JMR base index to score journals - perceived value</td>
<td>JMR, JM, JCR, MS, JR</td>
</tr>
<tr>
<td>Hult, Neese and Bashaw, 1997</td>
<td>AACSB/non-AACSB- accredited institutes</td>
<td>63 Journals plus respondent option</td>
<td>309 responses</td>
<td>Ranking index for Prestige and Popularity</td>
<td>JM, JMR, JCR, JR, JAMS</td>
</tr>
</tbody>
</table>

Previous research using a single item scale was unsuccessful in understanding how academics rate journals. Such research is also fraught with measurement problems of single item scales such as precision, reliability and scope (Spector, 1992). This research recognises that the concept research standing of academic journals may have different dimensions and that a single item scale could not capture these dimensions.

'If respondents were specifically asked to evaluate marketing journals on several dimensional criteria, the data obtained could be evaluated with more sophistication when analysing faculty perceptions of these journals.' (Hull, Neese and Shaw, 1997)
In the literature many terms have been used to describe the hierarchy of research journals such as prestige, quality, reputation or impact. In this research we use the term Journal Research Standing to represent the plethora of terms.

Research Methodology

The purpose of this study is to gain an insight and develop a framework to understand the phenomena of research standing when considering academic journals. In this study it was also considered important to establish a coherent global view. The literature review revealed that little research exists that helps the academic understand the determinants of Journal Research Standing (JRS). Thus the study sought to discover the critical dimensions/variables of journal research standing and provide the groundwork for more rigorous hypothesis testing.

An experience survey was conducted on 21 individuals who were considered to have a range of expertise and knowledge of research and research journals. Churchill (1995:p152) remarks that it is a waste of time to interview those who have little competence or little relevant experience. Thus a judgement sample of marketing professors was selected. To ensure a range of views a small sample of junior academics was also used.

Due to a lack of research in this area no clear framework existed to investigate the concept of Journal Research Standing. Therefore semi-structured interviews were used to investigate the phenomena. Using an interview schedule as a rough guide the interviewer was able to react to the individual situations whilst following a general outline of research issues. Approximately 15 hours of interview data were collected. When the interview was recorded the tapes were transcribed verbatim so that bias was not introduced at an early stage of the analysis. When notes were taken, they were written up straight after the interview. Given the exploratory focus of the study, the field work was seen as a continuous learning process. The interviews
developed organically and knowledge gained from one interview was used in subsequent interviews to tailor the interview and provide greater focus (Miles and Huberman, 1994). The transcripts were coded after the qualitative research had been completed, otherwise there may have been a danger that new data was being sought out to justify the developing framework.

The interviews were conducted to obtain insights into four key areas:

- the credentials of the academic and their experience in publishing
- the research environment in which they work
- the characteristics of Journal Research Standing
- and the factors that can effect their personal research standing.

**Qualitative Data Analysis**

Miles and Huberman (1994) suggest a two stage process to analyse qualitative data. Initially the data should be analysed within-case and then a cross-case analysis should be performed to integrate the findings into a systematic data display. The within-case analysis helped to reduce the data into a form that could be analysed for commonality across different respondents. It could also improve the generalizability of the findings. Once within-case analysis was complete, cross-case analysis was performed. Cross-case analysis summates the views of all the individual cases (interviewees). Ragin (1987) identified two approaches to cross-case analysis. The variable-orientated approach was seen as the most appropriate for this study. The approach focuses on the analysis of variables across all cases. What emerged from this study were eight key themes which determine a journal's research standing.

**Results**

The respondents identified many issues that determine the standing of marketing journals. These were partitioned into eight key themes. These were: the reviewing process; the authors;
the readership; the contents; journal output; individual context; cultural infrastructure; and the editorial team. These are elaborated on below and where they conform to empirical evidence and previous research this is highlighted.

**General Characteristics of the Sample Interviewed**

To protect the anonymity of the respondents it is not possible to directly identify each interviewee. A summary of general demographic information is provided in Table 3. To minimise the cost of the survey a sample of experts was selected from the UK marketing and business research scene and this was supplemented with an international perspective taken from the delegates at the 1996/7 EMAC conference. As well as being considered senior research academics, each respondent was also active or had participated in editing journals, reviewing and assessing research. Some had also been panel members for the Research Assessment Exercise.

**Determinants of Journal Research Standing**

To re-iterate this research intended to investigated the concept of Journal Research Standing. It did not intend to provide substantive conclusions but to provide a foundation for further research by providing useful insight. The literature review found that little conceptual development had been conducted in this area. This means that we have little to draw on and so in this research we draw on the interviews to enlighten the reader and provide further understanding of the conceptual themes. The eight components are divided into two main categories: attributes and non-attributes (Park and Srinivasan, 1994). The attributes are those which relate to the journal’s intrinsic characteristics and the non-attributes which relate to the symbolic properties of the journal.
Table 3 Demographic information of respondents

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Number</th>
<th>Geographical Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Professor</td>
<td>13</td>
<td>UK(8) EU(3) US(2)</td>
</tr>
<tr>
<td>International Marketing Professor</td>
<td>2</td>
<td>EU(2)</td>
</tr>
<tr>
<td>International Business Professor</td>
<td>1</td>
<td>UK</td>
</tr>
<tr>
<td>Management Science Professor</td>
<td>1</td>
<td>US</td>
</tr>
<tr>
<td>Marketing Lecturer</td>
<td>2</td>
<td>UK(2)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>UK(11) EU(5) US(3)</strong></td>
</tr>
</tbody>
</table>

Note: EU = non-UK European

Attributes

Editorial Team

The editorial team often comprises, the editor, assistant editors, the editorial board and the reviewers, but the roles and the organisational structure can vary considerably between journals. However, the editorial team provide quality assurance and determine the type of research which is published (Anderson and Goldstien, 1981).

The editor controls the dissemination of submissions to referees and provides an initial screening of articles to determine their compliance with the editorial policy. It is important at this stage that the editor selects the correct reviewer. The reviewer or reviewers should possess the expertise to understand the methodology and the subject under investigation. Selecting the appropriate reviewer can be difficult as this will depend on the editor's skill and knowledge. One respondent commented that:

'The editor needs to have good judgement about who are good/top academics. The editor needs to be sufficiently eclectic and broad minded, to make sure that the referees comments are objective and the referees are picked objectively' (respondent 6). Hence:

*Proposition 1: Editors of journals with high Journal Research Standing will be able to objectively select the appropriate submissions and referees.*
Compounding the problem of selecting appropriate reviewers, is the fact that reviewers are under no obligation to review and therefore journals compete for the appropriate reviewers. However in some instances reviewing submissions for a journal can also be an honour as the reviewer perceive that they have been selected to maintain the exacting standards of the journal. Therefore the journal will have a supply of reviewers and top journals (journals with high research standing) will be able to 'pull in the top people to do the review' (Respondent 1).

**Proposition 2: Journals with high Research Standing will be able to select leading academics as reviewers.**

**Reviewing Process**

A consistent view among the respondents was that having multiple blind reviewing was an indication of the research standing of the journal. However this view is not universal and some would suggest that it is possible to determine the origin of the research without the authors' names. Armstrong (1996) argues for a change in philosophy from 'whether to publish a paper to how to publish it'. He suggests that the current practice of peer review has met with limited success. One respondent commented on the difficulty of reviewing submissions.

"When something is really well documented, when something is really well researched, the methodology is fantastic, that's another thing, but nothing ever is, nothing is perfect, so it relies on judgement and on the collective judgement of referees and the editor and whoever else is involved, and then comes this view of an article." (Respondent 6)

The consistency of the reviewing process and publishing 'fewer dud articles' (Respondent 6) is essential to maintaining the research standing of the journal.
‘If you look at some journals you wonder how a paper has gone through any sort of refereeing process, the next paper, it is quite clear it has done because it has attention to various sorts of detail.’ (Respondent 7) Hence:

**Proposition 3: Consistency of published research papers is a measure of Journal Research Standing.**

Hand in hand with consistency must also follow quality. This was often considered by the respondents to be reflected in the level and detail of feedback received by respondents from reviewers, and also by the chances of acceptance. Thus we should expect that:

**Proposition 4: Quality of feedback is a measure of Journal Research Standing**

**Proposition 5: Acceptance rate is a measure of Journal Research Standing**

**Authors**

A desire to publish in a journal to gain personal research standing was also considered to be important. The respondents recognised that the reputation and reaction of others who had published in the journal would positively influence their perception of the research standing of a journal. One respondent recognised that we ‘judge authors because they publish in a journal and rate the journal because of the authors’ (Respondent 8). Hence:

**Proposition 6: The desire to publish in a journal and the reputation of the authors is a measure of Journal Research Standing.**

**Readership**

The readership was also considered to be important for a journal to have high research standing. The respondents indicated that an international readership was evidence of a journal’s acceptance within the knowledge marketplace. Although a certain type of reader and the manner in which the journal were used was also important. Hence we should consider that:
Proposition 7: The expertise and distribution of the readership indicates Journal Research Standing.

Journal Output

Journal output was also considered by the respondents to be important for Journal Research Standing. The respondents reflected on three types of output. Primarily the contribution to knowledge and the use of the research in other publications. This was consistent with current evidence that suggests that citation rates as a surrogate measure correlate to standing and other quality hierarchies (e.g. Gordon, 1982). The third view is taken by the respondents was that journals with research standing would also aid the career development of the published author (Luukkonen, 1992), and also the editorial board members. Therefore:

Proposition 8: Contribution to knowledge is a positive indicator of research standing

Proposition 9: Publishing in journals with high Journal Research Standing will also enhance the research standing of publishing authors.

Contents

The contents (the articles and research notes etc.) of a journal were also considered to be an important indicator of Journal Research Standing. Hirst, Stagg and Saunders (1997) found five factors that influence manuscript selection. The current study found that journals with high research standing emphasised methodological and conceptual considerations. The respondents also placed importance on the communication style used to report research findings. Often there was a divide between qualitative and quantitative research techniques. One professor commented on the over-emphasis on quantitative research techniques rather than on the conceptual development of the topic, suggesting that ‘it doesn’t matter if it is about camel dung you find in the desert’ (Respondent 1)...if its quantitative research it will get published.
Proposition 10: The contents of journals with research standing will place an emphasis both methodological and conceptual rigour

Some research suggests that an obtuse writing style indicates the standing or prestige of a journal. Hartley, Trueman and Meadows (1988) found little evidence to suggest that readability was related to prestige.

Non-Attributes

Cultural Infrastructure

One of the most important variables identified by respondents in the research was a journal’s integration into the research network of researchers and tended to imply historical trends influenced a journal’s research standing, Carpenter and Nakamoto (1989). The marketing research literature also recognises that pioneering advantage for products can benefit long term success/market share. If we consider citation rates as market share then journals who benefit from pioneering advantage will have a higher citation rate. Therefore:

Proposition 11: Older journals will have greater research standing than younger less established journals

Reward and recognition system of the cultural infrastructure was also important as indicators of Journal Research Standing. When seeking out information about the research standing of different journals, respondents often based their judgements on the referral of peer groups and senior colleagues. Collin, Johansson, Svensson and Ulvenblad (1996) supported the view of the respondents who commented on a split in research cultures and traditions between European and American academics.

Proposition 12: The cultural infrastructure influences the research standing of journals
Individual Context

As consumers develop their skills in discriminating between products, so academics learn and develop their ability to discriminate between research journals. At an individual level academics make judgements using their personal experiences (Habermas, 1972; Myrdal, 1958).

For example one marketing professor explained:

‘The comments that you get back show that the people who are making the comments know what they are talking about. Where if you send it to certain other journals you get comments back which makes you think what on earth is this...’

Having the ability to discriminate between journals will also play an important role in the measurement of Journal Research Standing. This has also been a factor in the evaluation of brands (Johnson and Russo, 1984). Thus:

*Proposition 13: Familiarity and expertise will affect Journal Research Standing*

Pre-disposition towards a journal will be a source of bias towards journals (Jobber and Simpson, 1986). A respondent suggested that ‘we must not over look the obvious, that people have vested interests’.

The display chart in Figure 1 summarises the findings of the key themes which determine the research standing of academic journals.

*Figure 1 - Display Chart of the Determinants of Journal Research Standing*
Conclusions

This research has sought to highlight the key factors which can affect the research standing of an academic journal, and also the factors which can affect the measurement of Journal Research Standing. To discuss these factors a structure of eight distinct themes was uncovered and explained. These were the editorial team; the reviewing process; the authors; the cultural infrastructure; the individual context; the journal contents; journal output; and the readership. These themes were split into two groups: attributes and non-attributes. The findings confirm that the phenomena of Journal Research Standing is multi-dimensional and we need to improve current methodology to improve its measurement.

We have provided an important insight into the complex socio-physical phenomena of Journal Research Standing and identified a set of variables which can be used in further research. Using a larger sample the relative importance of each variable can be assessed. Further research should seek to replicate these findings within different research disciplines, especially outside
the social sciences. Further research should also seek to empirically test the relationships between the uncovered variables and the latent variable Journal Research Standing.

References


Calibrating Research Journals: A Model for Marketing Academics

EMAC 1997 Doctoral Paper
Andy Hirst, John Saunders and David Coates

Abstract
This research aims to establish a multi-dimensional model to rate academic journals. The aim of this research is to develop a sensitive method of calibrating academic research journals to assess academic research standing. The research applies a marketing research methodology to explore the phenomenon and adapts a framework from psychology to support further investigation. It is anticipated that this measurement model will not only be useful in marketing but will be generalizable to other academic disciplines. This paper is composed to appeal to all participants of the colloquium and presents the issues in a manner that may hopefully provoke discussion at the colloquium.

Keywords: Scale Development, Academic Journals.

Introduction
Over recent years, pressure to publish research has become increasing competitive. Researchers are being asked to submit research to journals which will offer the highest utility for their departments. Unfortunately no comprehensive measure exist to aid the European marketing academic to target journals. Likewise, no measure exists for their assessors to evaluate these journal; 'the development of a weighting scheme of different types of marketing publications appropriate to the European scene would be an important step towards the construction of a comprehensive measure of publication performance for comparative purposes' (Diamantopoulos, 1996). This research aims to establish a multi-dimensional model to rate academic journals. It is anticipated that this measurement model will not only be useful in marketing but will be generalizable to other academic disciplines.

The Debate
The debate on what method should be used still centres around two dominant methodologies (Jones, Brinn, Pendlebury, 1996). These are citation analysis and peer review. Citation analysis measures the extent to which articles are cited (or referenced) by other published material. Peer review studies take a snapshot of academic opinion regarding various journals chosen for the study (Luke and Doke, 1987).

1 Contact address: Andy Hirst, Loughborough University, Leics., LE11 1PW Tel. 00-44-1509-263171 x4615. E-mail A.S.Hirst@Lboro.ac.uk
2 There are many other ways of using citation to investigate bibliographic structures within scientific communication See Garfield, 1979b. Hamel and Mazze, 1973
Citation analysis can be performed in two ways. Firstly, citations can be counted manually. This is extremely time consuming and practically impossible in the modern academic environment due to the growth in research output and research journals. The second method is to use an American database produced by the Institute of Scientific Information (ISI), called the Science citation index or the Social Science citation index (Garfield, 1979a; Virgo, 1977). The database enables the researcher to count, in various ways, the number of citations received by either an author/article or a journal. This study evaluates its use as a tool to evaluate journals. Peer review, in the context of evaluating journals, has come to mean rating journals on a single five point scale, evaluating constructs such as prestige, importance and quality. Questionnaires or telephone surveys have been distributed, to either small expert samples or to large representative samples, with the aim of ranking or rating a selection of journals. An alternative to both these methods have been the informal and unstructured judgements made by peers and departmental panels etc. in their attempt to evaluate themselves and others for comparative purposes.

Literature Review
A literature survey carried out across a variety of disciplines has revealed that attention has been drawn away from investigating and understanding the constructs to debating the validity of both methods. Little evidence exists to support these two approaches as valid measure of such an important task. Compounding these problems is the fact that no exploratory study has been carried out to understand how academics rate journals. This research draws upon an established marketing methodology as a way of investigating these issues.

Citation Studies
Scientometrics a journal dedicated to investigating bibliographic structures within the academic research environment still debates the usefulness and appropriateness of citations analysis. Luukkonen (1997) discusses the meaning of citations and reason for citing particular research. Her research explains two schools of thought, the Latourian and Mertonian. The Mertonian view is that citations are an institutional system of reward and recognition. This view is adopted by citation studies to purport there usefulness as a tool to evaluate research. i.e. the greater the number of citations received by an author the higher the reward. This reward (a high citation rate) reflects the quality of the research and its usefulness to other scientists. In the light of this, citation studies in general have implied several reasons for a journal/article receiving a high citation rate. These have ranged from quality (Jobber and Simpson, 1988), prestige (Peritz, 1994) and importance (Poole and Regoli, 1981) to 'something or otlice (Singleton, 1976). Citations studies measure the usefulness of an article or journal to another article within another journal.

The number of citations a journal receives will depend on the journal. Citing journals occurs not just because the journal is of the highest quality. Citing practice will depend on the language the journal is written in; the reputation of the authors; the availability of the journal; the accessibility of the journal (Luukkonen 1990); the topic of the journal and the social and political networks which disseminate research (Collin, Johansson, Svensson and Ulvenblad, 1996). Luukkonen (1997) comments that 'In spite of the variety of uses references have a major function in scientific texts: that of mobilising allies in the defence of knowledge claims'. In defence of
Table 1  
Summary of Citation Issues and implications

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<td>Garfield, 1979</td>
</tr>
<tr>
<td>Type of article</td>
<td>Review journals (and articles) tend to be for current awareness and are cited less than empirical research. Methodological articles are cited more.</td>
<td>Woodman and Henman, 1976, Garfield, 1979</td>
</tr>
<tr>
<td>Cross disciplinary studies</td>
<td>Average number of citations per journal between subject disciplines. Biases journals from disciplines which have higher citation rates for journals (sum of article cited within these journals)</td>
<td>Garfield, 1979</td>
</tr>
<tr>
<td>Citing practice</td>
<td>There are many reasons for citing. Quality of work is not always the reason for citing the articles within a journal.</td>
<td>Luukkonen, 1997</td>
</tr>
<tr>
<td>Blurred construct</td>
<td>Citation counts are used to measure a variety of construct without theoretical underpinning e.g. Quality, Importance, Research Potential, Impact. Something or other, Prestige, Utility, Scientific activity.</td>
<td>Weiskopf and Regoli, 1984</td>
</tr>
<tr>
<td>Geographical location of journal</td>
<td>Journals from countries with a high academic population perform better in citation studies. Bias against languages other than English&lt;sup&gt;4&lt;/sup&gt;</td>
<td>e.g. Ader and Simpson, 1958, Poole and Regoli, 1981; Rating, 1960, Martin and Irvine, 1980, Singleton, 1976; Peritz, 1994, Garfield 1979</td>
</tr>
<tr>
<td>Unit of measurement e.g. Impact factor; Immediacy index; Straight citation; Self citation rate, Latent impact of articles</td>
<td>Using different formulae and time periods to calculate the citation counts, alters the results of the study.</td>
<td>Hall, 1970, 1976, 1990; Doyle and Anstur, 1995; Luukkonen, 1990</td>
</tr>
<tr>
<td>Citing errors result in journals not being counted</td>
<td>25% of articles have major citation flaws.</td>
<td>Burton et al, 1995, Singleton, 1976, Garfield, 1979</td>
</tr>
<tr>
<td>Imputing errors result in journals not being cited</td>
<td>Errors can be treated as random across journals. This could have a major effect on less cited journals when articles are on average cited only 1.7 times.</td>
<td>Oppenheim, 1996, Chapman, 1985</td>
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<tr>
<td>Citing have had high correlations with alternative measures</td>
<td>Circulation and familiarity increase citation rates. Peer review (based on a US sample) is linked to citations.</td>
<td>Peritz, 1995, Gordon, 1982</td>
</tr>
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Citation analysis, authors must to some degree include citations which will increase the quality of their own research and therefore include citations from quality journals. Also Citation Analysis has found high correlations with other measures of quality. A summary of the diverse issues which effect Citation Analysis can be found in table 1. On balance, citation rates are a positive indicator of research quality, and this can reflect the prestige of a journal. However, they should be used with caution as a guide in decision making, and not as a stand alone instrument.

<sup>3</sup>To complete a citation study, a number of journals are selected, from these journals the citations to other journals are counted.

<sup>4</sup>A Centrality index is a mechanistic evaluation of journals to determine there position within the citation network. Centrality is calculated as the percentage of its citations that a journal receives from a pre-determined sample of journals.
Peer Review

The Peer review methodology has been used across a wide range of disciplines and there relevant journals: Accounting⁵ (Weber and Stevenson, 1981; Hull and Wright, 1990); Business (Fry, Walters and Scheuermann, 1985); Social Sciences (Nelson, Buss and Katzko, 1983); Biomedical; International Business (Okoroafo and Brunner, 1992); and economics. A summary of the peer review literature that rates marketing journals is available in table 2. As well as being used to rate journals it has also been used to rate University departments; measure faculty scholarship or research performance (Dembkowski et al., 1994; Gillett, 1989). Peer review has also been carried out at a department consensus level. Erasmus University produced a list of business journals. Their classification system on the reviewing process and the nature of material published. They placed business journals into five categories: International top scientific journal, international scientific journal, international Dutch journal, Dutch scientific journal and Dutch journal without referee system. This list places importance on blind refereeing, theoretical hypothesis-testing journals which have international standing. This is a useful approach for internal use but may not hold up to external validation. However it does provides further insight into the journal evaluation process.

⁵A review of peer review studies in Accounting are provided in Brinn, Jones and Pendebury, 1996
Peer review has also been criticised. The debate concerning the use of peer review has concentrated on the validity and reliability of research findings. In the past research has attempted to measure actual prestige and actual quality of a journal. It can also be said that no formal definition of quality exists, and whether this is absolute or pragmatic is debatable. Day and Peters (1994) argue that quality is defined as the closeness of fit to the editorial policy. According to Kerin (1996) the Journal of Marketing has changed its editorial policy almost every decade. We must assume that it has not changed the quality of the work published and we cannot rightfully expect that other journals should abide by its editorial policy. The articles published in a journal will depend on three elements. The quality of the research; the requirements of the journal (editorial policy); and errors or bias occurring within the submission process. Martin and Irvine (1983) report that 'quality is still relative rather than absolute, and it is not just intrinsic to the research, but is something judged by others who, with different research interests and social and political goals, may not place the same estimates on the quality of a given paper'. The central question of this research is whether variance occur between different

<table>
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<tr>
<td>Fry, Walters and Scheuermann, 1985</td>
<td>Academics and Practitioners AMA and AM</td>
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<td>Systematic 304 81.3% Academic</td>
<td>4 point single scale - Quality</td>
<td>JMR, JM, JCR, JAR, JR</td>
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<td>Brown and Becker, 1987 - A replication of other studies by the same authors</td>
<td>Chairmen of marketing departments</td>
<td>52 commonly cited in the Journal of Marketing</td>
<td>119 AACSB departments</td>
<td>4 point single scale - Quality</td>
<td>JMR, JMR, JCR, JAR, JR</td>
</tr>
<tr>
<td>Luke and Doke, 1987</td>
<td>Department heads, 2 of each faculty rank</td>
<td>Frequently cited in Marketing Lit. appeared in previous studies widespread popularity and readership in marketing</td>
<td>108 faculty (35 institutions) from 1985-86 AACSB list</td>
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<td>JM, JMR, JCR, JR, JAR</td>
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<td>Gordon and Heischmidt, 1992</td>
<td>Departmental Chairpersons at AACSB member school</td>
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<td>JMR base index to score journals - perceived value</td>
<td>JMR, JM, JCR, MS, JR</td>
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</table>

research environments using the proposed instrument. Rather than estimating levels of quality this research examines a journals ability to bestow academic standing. The research investigates
marketing academic perceptions from a sample of active researchers from Europe and North America.

Peer review has also been rejected, because it has inherent bias. Jobber and Simpson (1988) suggests that academics are self serving and exhibit favouritism towards certain journals. Another criticism of peer review is the validity of the sample chosen to rate the journals. Also, previous studies have used a combination of academics and professionals (across research disciplines) and a combination of research and non-research journals. This has resulted in a low rater response rate per familiar journal (Nelson, Buss and Katzko, 1983).

Familiarity
A methodological issue borne out of the literature is the familiarity which academics have of research journals. Often this has been evaluated using a five point scale from unfamiliar to familiar. Many studies have found that response rates per journal (item non-response) in a questionnaire is low. Poole and Regoli (1981) explain that:

Perhaps the most damaging methodological criticism of this study involves the rater response rate per journal. For the 42 journals evaluated (we exclude Law and Society Review because it was not included in the original list of journals sent to the respondents), the rater response rate ranged from less than 10% (n=16) for the Prison Service Journal to nearly 80% (n=134) for Crime and Delinquency. We further observe that the mean response rate for the journals was 56. In other words, the average number of raters per journal represented only 33% of all potential raters. Similarly, the median number of raters was 47. Thus, half of all journals were judged by only 28% of the potential raters.

Peer review research has also assumed that each respondent gives a similarly weighted response to the question familiar or unfamiliar. Unfortunately no methodological justification has been given. The current research adopts a multiple item approach which can evaluate familiarity at deeper level. The model of familiarity includes: readership, editorial membership, submission experience and a closeness of fit measure of the journals ability to satisfy desk research needs.

Summary of Literature review
So far the literature search has revealed that perceptual based instruments to evaluate journals relies mainly on single item instruments to measure the performance of a journal against the construct of investigation. The literature has tentatively suggested that journal quality and performance is multi-dimensional. It is necessary to isolate on dimension and identify the antecedents which differentiate academic marketing research journals. The literature has also suggested that response rates, response bias and the familiarity with a journal hinder the measurement of journals. Therefore it is necessary to investigate these dilemmas and also determine if a rigorous multiple item measure which can offer greater reliability, validity and generalizability.

Conceptual Investigation

Academic Research Standing
Throughout the literature review many different constructs have been used in the assessment of research journals. This research addresses the question of which constructs (if any) are relevant.
It also addresses whether it is possible to group all the terms and deem them one construct, or treat them differently as individual constructs. For example, terms such as quality, importance, prestige and impact have been used. The theoretical framework which surrounds this research has had little investigation (Weisheit and Regoli, 1984). Martin and Irvine (1983) make the distinction between quality, importance and impact. The intention of this research was to focus on the notion of research quality.

However, quality has now come to mean two different things. Firstly, quality can be used to describe the standard of research in absolute terms and a gold standard could be used to judge the quality of a journal. Applying this framework to research journals is difficult. Each journal has its own editorial policy and aims to position itself within the literature. New journals tend to cover smaller areas of research and thus are specialised. Other journals aim to interface the academic/practitioner boundary and other journals may concentrate on the methodological issues. The list is endless and it would be hard to judge the boundaries which could make these distinctions and segmentations. Within the literature there is a natural structure of journals and if each journal consistently publishes research which is considered the ‘best’ then it could be deemed high quality. The problem faced by using this gold standard approach is that a clear answer does not exist. Research quality is governed by the watchdogs within the academic community and they make judgements based on what they consider to be ‘best’.

The second view of quality is that defined by the total quality management literature, i.e. ‘fitness for purpose’. This is difficult to judge, because there are no standards for degree of fit, and purpose is specific to each individual journal. Day and Peters (1994) relied on the editorial policy (or mission statement) for each journal and then judge their fit empirically with a sample of readers/users. The current research aims to produce a generalizable model which can be used to compare other sets of journals. The notion of prestige was seen as a more appropriate construct. Prestige is a form of social hierarchy. Journals could be measured by this because to some degree academics from a similar background will consider a journal to have more or less prestige. It can also be considered as a relevant construct because it relates to academic career advancement and provides a benchmark to evaluate themselves against others. Differences in opinion must exist and a premise of this research is that differences do occur. Whether these are systematic and based on experience, culture etc. is as yet unknown. To contend with the specificity of this research the notion of academic research standing was seen as a more appropriate construct for this study. This term is used instead of prestige which is thought, by the author, to be too general and ambiguous. It allows the research to be constrained to academic research literature giving the study a clear purpose.

Another issue concerning the conceptual definition of this research is the lack of understanding of the constructs. Research has concentrated on producing ranks for journals, but this has not been underpinned by an exploratory investigation of the construct. The scale development methodology makes provision for this desire to understand the nature of the construct and advance the development of this journal evaluation literature.
Research Culture
As mentioned earlier bias or differences exist within the academic community. Collins Johansson, Svensson and Ulvenblad (1996) found that research patterns of America and Europe management academics were dichotomous. They based this relationship on the different incentive schemes and research paradigms and suggest that these factors influence the choice of journal in which to publish the research. If there is a divide in the research community of European and US academics then there must also be a difference in the amount of prestige that these academics attribute to various journals; a hypotheses of the current research. They also found that US academics find it easier to conform to the European paradigm. One possible reason for this is that researchers are more adaptable in the US than in Europe. Implying that researchers in Europe are poor quality. If this was the case then equally the standard of journal must also be worse, because Europeans will write, review and read these journals. The current research does not believe this to be the case but suggests an alternative hypothesis, that journals from the US are often more difficult to publish in than European journals due to the evolution of the literature in management and marketing, which has been driven by American literature for many years, will also have played its part in constructing the hierarchy that exists today.

Theory of Planned Behaviour
The conceptual framework for this study has been borrowed from the social psychology literature. The complete framework, presented below, uses the Theory of Reasoned Action (Fishbien and Ajzen, 1975) as a model which helps the understanding of attitudes and their relationship to behaviour. TRA has been extended to include a third variable Perceived Behavioural Control. Perceived Behavioural Control refers to an individuals perception of whether a task is easy or difficult to perform (Conner and Sparks, 19966). The extended model is now called the Theory of Planned Behaviour (Ajzen, 1985), and is shown as a linear regression equation below.

\[ w_1A + w_2SN + w_3PBC = BI \]

Where: 
- \( A \) = Attitude
- \( SN \) = Subjective Norm
- \( PBC \) = Perceived Behavioural Control
- \( BI \) = Behavioural Intension

Planned Journal Submission
The use of this model has been limited to an explanatory framework. The model is not intended to comply with Ajzen original model. The reason for this is due to the primary purpose of the research being to develop a model to measure a journals academic research standing. The following discussion surrenders to this fact but attempts to point out where it can be relevant to the discussion. That is the intention to submit an article to a journal for publication. The following diagram illustrates the planned journal submission model.

*Chapter 5 provides a useful explanation of TPB and its uses.
Attitude

Firstly, TPB assesses the attitude an individual has to a particular behaviour. Generally this is measured by asking respondents to evaluate a predetermined outcome. In the current model this element has been substituted with a 30 item scale (still under construction) which assesses a journal's ability to bestow academic standing. The assumption is made that increasing or maintaining this academic standing is a crucial part of the decision process when wishing to submit and using this scale will determine infer an academics intention to submit. The scale includes five salient dimensions. These were: Readership, the refereeing process, the editorial board membership (including the editor), the authors and the journal's contents.

Subjective Norm

The second element which is a focus of in the current research is the subjective norms which exist. A hypothesis of the research is that different backgrounds and abilities will reveal different attitudes towards a journal (see Research Cultures). Therefore the current research aims to measure whether these hypothesised effects exists, and if so, how do they impact on their decision to submit to a journal.

Perceived Control

The final element of the model perceived control can have a dramatic effect on someone's ability to submit to a journal. Control factors can be from two sources. Internal sources such as a researchers perceived ability to publish, their knowledge and their understanding of the journal. Also they can be effected by external sources such as time factors, cost factors, and as purported by Collins et al. (1996) research paradigms.

As previously mentioned this research aims to use the theory of planned behaviour as a basis to understand how attitudes are formed etc. Apart from three social psychology components, journals have intrinsic properties. We will now briefly discuss these variables before presenting the Journal Calibration model.
Journal Qualities
The second major part of this research is to combine subjective evaluations with objective (or quantitative) measures. The model of planned submission is presented below and incorporates the summated rated scale and objective measures discovered during the exploratory research stage in the scale development process. The objective measures taken from exploratory research stage of the scale development process are; acceptance rate, societal membership, the age of the journal and circulation, and impact (measured by the citation Impact factor). Other measures have been considered but were discounted because of data collection problems.

Journal Calibration Model
The following model illustrated the salient factors which will determine academic standing.

Research Methodology
To measure the phenomenon scale development methodology was chosen as the most appropriate methodology A review of the literature found that there are many variations of this methodology but they tend to follow a similar theme (e.g. Mohoney, 1995; Hinkin, 1995 and Devellis, 1991). In marketing Churchill’s (1979) paradigm for developing better measures of marketing constructs was identified. Choosing Churchill’s paradigm over the other models would have very little difference. Also Churchill’s paradigm has been developed within the marketing literature and would be readily understandable by marketing researchers. Since the publication of Churchill’s paradigm amendments have been proposed. For example, Gerbing and Anderson (1988) proposed the use of confirmatory factor analysis to determine unidimensionality, and Rentz (1987) proposed the use of generalizability theory to measure multiple source of variance. An illustration of this paradigm measurement model is show in table 3. Conjoint analysis was chosen as a method to estimate convergent validity. This is because in the UK, government research funding is awarded to universities assessed as having high research standing. One measure is based on the part-worths of four best papers of
department staff submitted for assessment. Conjoint analysis may provide a greater understanding of these part-worths.

A major reason for choosing the scale development methodology is that we are able to understand and model how respondents rate each journal. In the past the single item measures has been used to rate journals (table 2). Apart from not being able to investigate how each respondents defines the construct being tested (quality, prestige etc.), the method is also fraught with measurement problems (e.g. precision, reliability and scope, Spector, 1992).

**Sample Frame**

Sampling academics from the chosen sampling frame has another problem. Should the sample be devised proportionately or disproportionately. The nature of the academic environment is such that very few are full professors where as most academics are beneath this, just as there are few highly skilful researchers. Therefore, each stratum will be served by a smaller or larger population size on which to draw. The population of interest to this research are marketing

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*Calibrating Research Journals: A model for Marketing Academics. EMAC Doctoral Colloquium 1997*
academics. The sampling frame chosen to represent the population are: The American Marketing association (AMA) and the European Marketing Academy (EMAC). The assumption is that members of these groups are central to marketing research and reflect the views of the population of marketing researchers.

Scale Development

Defining the Construct

As discussed earlier the construct under investigation in this study is academic research standing. Often this is referred to as prestige and for sake of argument a semantic discussion, and interpretation of these constructs is not discussed here. It is prevalent however to highlight that Academic research standing is a more specific construct and better describes the research domain.

Designing the Scale

To design the scale two approaches were used; the literature review and the experience survey. The experience survey approach tries to 'tap the knowledge and experience of those familiar with the general subject being investigated' (Churchill, 1991). Sampling the respondents does not require a probability sample, as this would be a waste of time especially if the respondent cannot articulate their experience and knowledge. It was decided that this approach would be the most suitable for this study due to the availability of respondents. 'The investigator intensively collects information from the key informants and is free to enlarge or shrink the 'sample size' depending on when the answers reach a point of exhaustion (when there is nothing new being said)' (Mahoney, Thombs and Howe, 1995). Combined with a semi-structured interview, scale items were elicited by using Kelly (1955) triads. This was performed in the minimum Context card format.

To understand the views and perspectives of an international cross-section of academics, the 1996 EMAC conference was chosen as a convenient location to interview academics. Marketing professors were chosen from the population of delegates as these were seen as experts with both experience and knowledge of research journals. To increase the sample size and ensure that the views of the marketing fraternity had been exhausted, marketing professors from a variety of different research rated business schools in the UK were consulted. These experts were chosen for their experience with rating research journals or their involvement with marketing and business journals. Among other sources consulted for the expertise were publishers and the Institute for Scientific Information. Devellis (1992:75) suggests the use of experts to review the item pool. It is anticipated that feedback from the 1997 Doctoral colloquium and EMAC conference will be another source of expertise.

Item Analysis

Firstly, internal consistency scores produced by Cronbachs Coefficient Alpha to test the overall dimensionality of the scale. It is anticipated that a high alpha score will be present and indicate a high commonality of items in the scale. Also item inclusion/exclusion effects will identify problematic variables. The second stage in the item analysis process is to use factor analysis.
Two main types of factor analysis exist. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Exploratory factor analysis aims to discover latent variables within the data, whereas Confirmatory Factor analysis tests an hypothesised factor structure. Coefficient alpha can be re-used to test the elicited or confirmed factors.

Pilot Testing
Scale development is an iterative process and this requires scales to be reworked and tested on different samples. Testing new sampling frames and other academic disciplines is out of the scope of this research. It is essential, however, to refine the scale using pilot samples of the population. This research intends to apply two pilot studies to the scale. The initial pilot uses will use a small sample of marketing academics from a range of experiences. This will be used to assess question wording and questionnaire complexity. The second pilot will be used to estimate the adequacy of the items. Nunnally and Bernstein (1994) suggests a development sample of 300 respondents. This will enable the sample to be sufficiently large enough 'to eliminate subject variance' (DeVellis, 1992).

Reliability
The importance of reliability it that according to Peter (1979) 'A necessary (but not sufficient) condition for validity of measures is that they are reliable. Reliability can be defined broadly as the degree to which measures are free from error and therefore yield consistent results.' Reliability is 'the agreement between two efforts to measure the same trait through maximally similar methods' Churchill (1991). There are three ways to measure the reliability of a scale. Test-retest (or coefficient of stability) measures the same construct at two different times and is used to test the temporal stability. Alternative form and internal consistency or (coefficient of equivalence, Cronbach, 1947) are measured by coefficient alpha or split half reliability. Reliability measures are not concerned with the assessment of the construct to determine if it is predicting or can predict accurately; this is validity. What reliability assessment aims to achieve is whether the instrument performs consistently.

Rentz (1987) proposed an alternative method of assessing the reliability of an instrument. The generalizability framework allows the researcher to partition 'variance among error and non-error sources' (DeVelis, 1991:p39). 'Generalizability theory is essentially domain sampling in which one considers issues such as how well the ratings of a particular judge generalise to the domain of judges in general.' (Nunnally and Bernstein 1994:p279). For example, the literature search found, using less sophisticated measures, that there was considerable variance among academics. This variance may be systematically related to the respondents academic experience (as defined by the research). If however, there was systematic variance among academics, it would not be possible to differentiate the systematic variance from any other source of error.

If this variance is acknowledged then a Generalizability study (G-Study) can isolate this variance as a dimension (which is referred to as a facet). It is possible to isolate more than one facet, such as the mode of administration, but the current research will involve one mode of administration and therefore a G-study for the current research would be a single facet study. The G-study would then provide evidence to suggest that the instrument can be generalized across all the
levels of the facet, in this case, respondents. If just the reliability coefficient (coefficient alpha) was calculated, then the amount of error without attributing it to a specific source is only identified (DeVelis, 1991: p41). It will also be important to provide evidence that suggests that the measure works reliably across journals. However, Peter (1979) suggests that it is difficult to interpret and the reward cost (time) relationship may be wasteful because ‘error variance may be minimal to errors in scale development’. Due to time constraints this part of the analysis may not be possible.

Validation- Conjoint Analysis

In the UK academic research is evaluated by a panel of experts. This is known as the research assessment exercise or RAE. A set of researchers from each department are asked to submit what they consider to be their four best papers. The department then submits a batch of researchers’ outputs and this is then graded by the funding council. By using a conjoint model we can mirror this process.

Conjoint analysis is a measurement technique that enables marketing managers to gain insights into consumer preferences towards products, brands and services. Conjoint analysis has been widely used in commercial research (Wittink, Vriens and Burhenne, 1994) and the term Conjoint analysis is often used to group a multiplicity of research paradigms. This research uses a basic additive conjoint model to construct an experiment to investigate the part worth utilities of a set of marketing journals when considered in groups of four.

In many conjoint studies preference set are elicited by using a number of attributes which the product or brand possesses. The quantity of each attribute determines the respondents preference. However with the current research rather than considering product attributes, we intend to evaluate the part-worths of sets of four journals for there level of international excellence, i.e. if ten journals are used in the study and we deem these to be attributes (under normal conjoint designs), each attribute has two levels, present or absent thus producing a $2^{10}$ array. The construct ‘international excellence’ is the term used to evaluate research performance of British universities by the RAE.

The problem of using this approach is that conjoint analysis does not easily lend itself to selecting combinations of four. One way of approaching this problem is to select an orthogonal array which will have four journals (or attributes) present at one time. So far the research has found only one such array; a $2^7$ array. This means that we can only consider 7 attributes at one time. Fortunately, it is possible to combine two separate experiments - using a bridging design (Green and Srinivasan, 1990; Rosko, Devita, McKenna and Walker, 1985 i.e. have each respondent perform two experiments and then combine them.

A second problem with this experiment is that a realistic design must include more journals with lower excellence. For example, it is highly unlikely that an individual can produce four articles that would be published in the Journal of Marketing Research. An initial solution is to include less journals and increase the appearances of lower ranked journals (the exploratory research...
found that there was a common hierarchy among many of respondents) previous studies show this to exist among the highest ranked journals (table2).

Summary

This research paper has attempted to highlight the key issues effecting this doctoral thesis. It by no means covers all the issues and in some instances some have been left out to preserve the structure of the paper. The doctoral research proposed by this paper applies an established marketing research methodology to an existing and novel problem. A literature review and exploratory investigation were conducted and the research is now entering the data collection stage using a new model. The model will assess the academic research standing of marketing journals. A conceptual framework using the theory of Planned Behaviour aims to contribute an insightful view of academic attitudes towards marketing research journals. The research uses conjoint analysis to measure convergent validity and it is anticipated that the research will assist European researchers, editors and publishers to assess their contribution to the scientific literature.

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