Guidelines on writing a first quantitative academic article

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1 INTRODUCTION

Most post-graduate students cringe at the thought of having to distil a whole year's research work into a single journal article of 20 A4-pages. "It's impossible!", "I will never be able to do it", "7000 words … you must be mad!" are typically how students react when first confronted with the challenge of writing an academic article.

However, as Summers (2001:410) points out, you do not have to be an award winning novelist or rousing poet to report the results of a well-conceptualised and executed study. You only need to be organised, accurate, clear and concise in your writing. And you have to keep your eye on the details, because, when writing an academic article, "the devil is in the details" (Feldman, 2004:1).

The purpose of this document is to guide you in writing a first academic article in which the results of an empirical research study are reported. We will specifically focus on reporting the results of survey-based research involving the statistical testing of hypotheses.

There is no single correct way to write an academic article. While the framework, principles and examples presented here are based on articles that have appeared in leading academic journals, you may have to adapt it to comply with the requirements of a specific journal, academic department or study leader. It would also be worth your while to read the original articles by Feldman (2004:106), Bem (2003), Perry, Carson and Gilmore (2003:652-667), Summers (2001:405-415), Calfee and Valencia (2001), and Varadarajan (1996:3-6), as these authors provide valuable additional advice that have not been incorporated here.

The rest of this document is structured as follows: The first section provides an overview of the structure of an academic journal article. This is followed by a detailed discussion of each of the major sections in an academic article, namely the title, abstract, keywords, introduction, literature review, methodology, results and the final discussion section. The document concludes with brief remarks on writing the various drafts leading to a final article.

2 THE STRUCTURE OF AN ACADEMIC JOURNAL ARTICLE

The success or failure of an academic article is determined long before the first word is written or the first letters are typed. It all begins with the initial conceptualisation and design of a study. This is confirmed by Summers (2001:405-406) who lists four main reasons why articles are rejected by leading academic journals:

- The research does not make a sufficiently large contribution to the "body of knowledge" (i.e., to the literature) in a specific discipline. The study is purely descriptive or merely replicates previous research without adding anything new.
- The conceptual framework (i.e., the literature review) is not well developed. It lacks precise definitions of the core constructs and compelling theoretical motivation for the stated hypotheses.
- The methodology used in the study is seriously flawed (e.g., the sample is too small or the reliability and validity of the measures used are questionable).
- The author's writing style is disorganised and the article is not structured properly.

The focus of our discussion will primarily be on addressing the last reason mentioned above - a disorganised writing style that leads to a poorly structured article. We will, in other words, assume that the study has been properly designed to address the other three problems.

Articles in most academic journals are roughly 20 to 25 A4 pages (1½ line spacing) or 4000 to 7000 words in length. An academic journal article in which the findings of quantitative research are reported will typically have the structure outlined in Table 1.

Table 1: Typical structure of an academic article reporting the findings of a quantitative study

Title	8 – 15 words
Abstract	200 – 250 words
Keywords	6 – 8 keywords
Introduction	500 – 1 000 words
Literature review (Alternatively: Background, conceptual development or conceptual framework)	1 000 – 2 000 words

Methods (Alternatively: Methodology)
• Sampling
  ▪ Target population and research context
  ▪ Sampling
  ▪ Respondent profile
• Data collection
  ▪ Data collection methods
• Measures (Alternatively: Measurement)
	500 – 1 000 words

Results (Alternatively: Findings) • Descriptive statistics (Alternatively: Preliminary analysis) • Hypothesis testing (Alternatively: Inferential statistics)	1 000 – 1 500 words
Discussion • Summary of findings • Managerial implications • Limitations • Recommendations for future research	1 000 – 1 500 words
Total	4 000 – 7 000 words

Of the aforementioned elements, the title, keywords, abstract, introduction and discussion are perhaps the most important as these are the "doors and windows" through which a reader are most likely to access the article. It is, therefore, extremely important to use effective keywords, a title that grabs the attention and an engaging abstract in order to lure the reader to delve deeper into the introduction and discussion. The introduction and discussion should then entice the reader to read the rest of the article (Perry, Carson & Gilmore, 2002:657).

The structural elements listed in Table 1 are discussed in more detail in the sections that follow.

3 ARTICLE TITLE

The title, with a maximum of 8-15 words, is the first piece of bait that could lure a potential reader to notice and explore your research. Perry *et al.* (2002:657) offer the following general recommendations regarding the title:

- A title should attract the reader's attention.
- Journal editors prefer formal titles that are not too "clever" or "cute". Although it grabs the attention, the title "*More than a one night stand*" would, for example, not be appropriate for a journal article on relationship marketing.
- The title should clearly reflect the main theme, issue or position discussed in the article. Because it creates expectations about the contents of the article, the title should accurately reflect the nature and focus of the study and not create false expectations (Feldman, 2004:2).
- The title should be as specific as possible given the restrictions on length.
- Some of the keywords listed after the abstract should appear in the title (also see section 5 below).
- A title should preferably answer the following questions:
    - **What** will be researched?
    - **How** will the topic be researched?
    - **With whom?** – Describes the research population and units of measurement
    - **Where / in what context** will the study be conducted?

    In order to answer these questions, Grobler (2003) suggests the following basic structure for a title:

    Main theme or research topic: Research design + population + geographical area

Consider the following examples based on Grobler's (2003) suggestion:

Example 1:

Value profiles and susceptibility to interpersonal influence: A survey of student smokers at the University of Pretoria

Consumer trade-offs in jewellery purchases: A conjoint analysis among female mabé pearl buyers in Gauteng

Travellers' destination perceptions as a source of new product concepts: A Q-method study of summer visitors to the Bay of Fundy

The impact of need for social affiliation and relationship proneness on behavioural intentions: a survey of German consumers in a hairdressing context

Potential spectators' perceptions regarding safety and security at 2010 Soccer World Cup: a survey of students at the University of Pretoria

Due to restrictions on length, it may not always be possible to include all four the elements suggested by Grobler (2003) in a title. In such cases, the last two elements – population and geographic area – are often omitted. The title should, however, still clearly indicate the main topic and, if possible, also the research design of the study. Consider the following example:

Example 2:

Colour and shopping intentions: An experimental examination of the intervening effect of price fairness and perceived affect

The portrayal of preadolescent children in South African television commercials: a content analysis

Culture and parental communication style as moderators of children's influence on family purchases: a survey-based investigation

Note that there is no full stop at the end of a title.

The title, keywords and abstract should be written **after** you have completed the article and have a firm view of its structure and contents (Bem, 2003:14).

4 ABSTRACT

The abstract is a short **summary** of an article with a maximum length of 200 – 250 words. Most readers first scan the abstract in order to decide whether reading the rest of the article would be worthwhile. The abstract, therefore, serves as an important "window display" or "advertisement" for your work and provides an opportunity to impress the reader (Feldman, 2004:2).

The main problem with abstracts is that they are often so vaguely written that they do not grab the reader's attention. One should always try to give the reader enough concrete information in an abstract to get them interested in your work (Feldman, 2004:2).

Perry *et al.* (2003:658) recommend that an abstract should include the following seven elements:

- Element 1: The abstract has to start with a brief theme sentence to orientate the reader about the overall issue addressed in the article. This sentence should grab the reader's attention.
- Element 2: The abstract should then indicate the main aim or purpose of the study.
- Element 3: Next, the academic and/or practical importance of the study should be explained.

- Element 4: The methodology used in the study should also be briefly described.
- Element 5: The main findings of the study should be summarised.
- Element 6: A statement of conclusions should indicate the contribution made by the study in filling gaps in the literature.
- Element 7: Finally, the practical or managerial implications of the study's findings should be highlighted where appropriate.

These seven elements are highlighted in bold in the following two examples:

Example 3:

Abstract: [Element 1] Advertisements have become more risqué as companies vie for consumer attention in an over-saturated market. One such risqué approach is the use of "lesbian appeals"; appeals in which two female models are depicted interacting in a seemingly romantic or erotic manner. **[Element 2]** This study investigates the influence of lesbian appeals on consumer attitudes towards the advertisement and the brand, as well as on consumers' intention to purchase the product. **[Element 3]** The results should assist marketers to ascertain whether lesbian appeals are effective or whether such appeals offend consumers. **[Element 4]** A survey of hetero-, homo- and bisexual respondents (aged 18 to 30) **[Element 5]** found that there is a significant correlation between tolerance of homosexuality and acceptance of lesbian content in print advertisements. In addition, advertisements containing lesbian appeals attracted attention and interest and were not perceived as particularly immoral, exploitive or offensive. Advertisements containing clear lesbian interactions are more effective in attracting attention and being memorable than those with lower levels of homoerotic tension, but may lead to lower brand quality perceptions. The findings further indicate that homosexual consumers are not significantly more open to this type of advertising. **[Element 6]** Lesbian appeals may be an appropriate, though controversial strategy to get the attention of so-called "twenty-something" consumers. **[Element 7]** Marketers should, however, carefully evaluate the nature of the target market, the degree of homoerotic tension to be depicted and the nature of the product when considering lesbian appeals in advertisements.

Source: Adapted from Orr, Van Rheede van Oudtshoorn and Kotzé (2005:49); 246 words.

Example 4:

Abstract: [Element 1] Most research on business relationships and networks concentrates on social bonds, such as trust and commitment. Little research considers technical bonds and how they interact with social bonds within a relationship. **[Element 2 & 3]** Thus, this research investigates how technical bonds of information technology link with social bonds in the relationship between two organisations in a business system, in particular, between a franchisor and franchisees within a franchise system. **[Element 4]** First, a conceptual framework of the structure of a relationship between business alliance partners was synthesised from the business-to-business marketing literature. Then Australian franchisors were surveyed about the effects of their investments in information technology upon their franchisor-franchisee relationship. Structural equation modelling techniques were used to analyse the data. **[Element 5]** The results provided support for the conceptual framework, with the franchisor's increased technical competence from information technology improving the social bonds in a relationship but those bonds being secondary to further technical investment. **[Element 7]** An implication for managers is that investments in information technology operate through the social bonds within their business.

Source: Adapted from Perry, Cavaye and Coote (2002:75); 178 words.

Note that Element 6 was omitted from Example 4 above. This example is, therefore, not complete.

IMPORTANT: Please do not highlight the different elements of the abstract in bold and brackets as were done in these two examples. The different elements were merely highlighted here for the sake of clarity.

Also consider the following principles when writing the abstract (McLean, 2001:3):

- Since the abstract is a **summary** of the article, nothing should be in it that it not also included in the main text.
- An abstract is not an introduction. The article should be complete without the abstract. One way to ensure this is to write the abstract after you have completed the rest of the article.
- The abstract is normally written as a single paragraph. It is self-contained (i.e., it should be understandable without requiring the reader to read something else).
- The abstract should not contain any figures, tables or in-text references, just normal text. In-text references may, however, be included when one is replicating a previous study and this is specifically mentioned in the abstract.

5 KEYWORDS

A maximum of 6-8 keywords should be included in the article directly after the abstract. The keywords serve as hooks that draw the attention of potential readers and are also used to locate articles in an electronic database (Perry *et al.,* 2003:657).

The keywords should preferably reflect the discipline, sub-discipline, theme, research design and context (industry and/or country) of the study. Where appropriate, frequently used synonyms may be used as separate keywords. Consider the following examples:

Example 5:

Keywords: *Industrial marketing, business-to-business marketing, relationship marketing, IT investment, franchising, survey, Australia*

Keywords: *Retail atmospherics, behavioural intentions, colour, emotions, price fairness, experiment, USA*

Keywords: *Consumer behaviour, children's influence, product choice decisions, parental perceptions, parental communication style, culture, survey, Gauteng*

Keywords: *Services marketing, service quality perceptions, customer satisfaction, culture, experimental study, students, Pretoria*

The keywords should be typed in sentence case and in italics as is shown in Example 5 above. Sentence case means that only the first letter of the first keyword and the first letter of all proper nouns (Afr: "eiename") are written in capital letters.

6 INTRODUCTION

The introduction (recommended length: 500-1000 words) can be described as "… an executive summary that gives the reader and enticing glimpse of what is to come" (Perry *et al.,* 2003:658). As such, the introduction must grab the reader's attention by stimulating attention, interest, desire and action (Perry *et al.,* 2003:658). In other words, the introduction must effectively "sell" the study (Summers, 2001:410). Unfortunately, the introduction is often the most difficult part of an article to write (Feldman, 2004:2).

This section deals with three issues related to the drafting of an introduction. The six elements that are generally found in an introduction are first listed. This is followed by two examples of well-written introductions. Finally, the six elements of an introduction are discussed in more detail.

6.1 THE SIX ELEMENTS OF AN INTRODUCTION

An introduction generally consists of six elements:

- Element 1: The writer first has to state the broad theme or topic of the study.
- Element 2: Once the broad theme/topic has been introduced, its academic and practical importance (if applicable) has to be explained. In short, you should provide a convincing answer to the question: "Why should anyone give a damn about this article?" (Bem, 2003:3-4).
- Element 3: The author next summarises the available literature and cites the most important previous studies that are relevant to the current research. If an existing study were replicated, this should be clearly stated here. One should also include an in-text reference to the study that was replicated.
- Element 4: Next, the author indicates the most important gaps, inconsistencies and/or controversies in the literature that the current study will address. The author also explains the study's *main contribution* in such a way that the benefits to the reader are accentuated.
- Element 5 of the introduction must always provide a clear indication of the following:
  - 5.1 the *core research problem/question* to be addressed in the study,
  - 5.2 the *specific research objectives* that will guide your research,
  - 5.3 the *context* in which the study will be conducted, and
  - 5.4 the *units of analysis* of the study.
- Element 6: Finally, one has to provide the reader with an outline of the structure of the rest of the article.

(Perry *et al.,* 2003:658; Summers, 2001:410; Varadarajan, 1996:3)

Some of the aforementioned elements and sub-elements may be combined. You should not highlight the different elements of the introduction in brackets and bold as were done below.

Carefully study the following three examples[1]:

6.2 EXAMPLES OF WELL-WRITTEN INTRODUCTIONS

Example 6:

INTRODUCTION

[Element 1] Little research has been carried out in the area of new service development (NSD). **[Element 2]** Although some researchers have paid attention to service innovation and new service success factors (cf. de Brentani, 1989, 1991; de Brentani & Cooper, 1992; Easingwood, 1986; Jones, 1995; Scheuing & Johnson, 1989), little is known about how new services are actually developed (Johne & Storey, 1998; Sundbo, 1997). Furthermore, innovation has traditionally been associated with tangible products. As a result, the literature on new tangible product development is rich, but this literature does not capture the intricacies of NSD (de Brentani, 1989) because of the unique service characteristics of intangibility, heterogeneity, perishability and inseparability (Lovelock, 1983; Shostack, 1977; Zeithaml *et al*., 1985). That is, the NSD process may be different from the process involved in the development of a tangible product (de Brentani, 1995; Easingwood & Storey, 1995; Martin & Horne, 1993).

[Element 3] A major point of difference between product development and service development is the involvement of customers in services (Ennew & Binks, 1996). Services tend to involve customers in their delivery, and the purchase of services tends to involve a longer commitment and therefore a more intimate relationship with customers (Alam, 2000; Harris *et al*., 1999; Martin *et al*., 1999; Sundbo 1997). Thus, customer orientation plays a more important role in service firms than in tangible product firms because of the four service characteristics noted above (Hartline *et al*., 2000; Kelly, 1992). That is, customer input and involvement in the service innovation process may be more useful than in the development of tangible products (Langeard *et al*., 1986; Martin & Horne, 1995; Normann, 1991; Vermillion, 1999).

[Element 2 & 3] Moreover, several emerging trends in the market place, such as heightened customer expectations, advances in technology and new forms of competition arising from the Internet and e-commerce and increasing deregulation of many service industries, are bringing increased competition to markets (Bitner *et al*., 2000; de Brentani, 1995; Lovelock *et al*., 2001; Wymbs, 2000). Because of this competition, many service firms are developing new services, but there is a lack of strategic focus on NSD and development competencies (Kelly & Storey, 2000; Martin & Horne, 1993). Therefore, the new service failure rate is high (Cooper & Edgett, 1996), caused by the lack of an efficient development process and up-front homework (de Brentani, 1991; Drew, 1995; Edgett, 1994; Edgett & Jones, 1991) and the lack of customer orientation and input (Martin & Horne, 1995). That is, undertaking NSD provides challenges to service firms and their managers (Barczak, 1995). These challenges include deciding how to organise for NSD and how to develop new services that are responsive to customer needs.

[Element 4] Past research on NSD has concentrated only on two broad issues: success factors of new services and normative NSD models. Considering the issue of a NSD model in particular, the literature is almost silent on the details of NSD stages and their interface with the customer. Consequently, we have an incomplete picture of the way new services are developed.

[1] Please note that these examples were adapted from articles that appeared in different academic journals. The referencing methods used in the examples are generally not the same as the method prescribed in the Department of Marketing and Communication Management's guidelines on referencing in academic documents. Always use the referencing method prescribed by your department or by a particular journal.

[Element 5.1] Against this background, the purpose of this research is to answer the research question: "How can a NSD program in the **[Element 5.3]** financial services industry be managed?" **[Element 5.2]** More specifically, this research has two objectives:

(1) To develop models for new financial service development that include the stages in the NSD process; and

(2) To explore the input that customers provide at various stages of the NSD process.

[Element 4 – main contributions] That is, this research attempts to identify key stages of the development process and ties them to customer involvement and input for the first time. Essentially, this research responds to the call for a new thinking about the NSD process and draws inspiration from Barabba (1995) and Wind and Mahajan (1997) who have stressed the need for creating a new service/product development model that will enable customers to provide input throughout the development process. In addition, this research is delimited to **[Element 5.3]** business-to-business services because business-to-business transactions are by far the more numerous in a modern economy but are under-researched (Gummesson, 1994).

The findings of this research are expected to assist practitioners in developing successful new services by proposing structured processes of NSD and increasing practitioners' awareness of the need for collaboration with potential customers during a service development project.

[Element 6] The paper has four parts. First, it reviews the extant literature relevant to NSD and customer orientation. Then the research methodology is presented and data analysis techniques are discussed. Next, the findings are discussed and summarised. The paper concludes with a discussion of theoretical and managerial implications and directions for further research.

Source: Adapted from Alam and Perry (2002:515-516); 771 words.

While quite well-written, the introduction in Example 6 does not include a clear indication of the *context* in which the study was conducted or the *units of analysis* investigated. Make sure that you clearly address these two issues in your article.

Example 7:

INTRODUCTION

[Element 1] Today's fast-paced world is becoming increasingly characterised by technology-facilitated transactions. Growing numbers of customers interact with technology to create service outcomes instead of interacting with a service firm employee. Self-service technologies (SSTs) are technological interfaces that enable customers to produce a service independent of direct service employee involvement. Examples of SSTs include automated teller machines (ATMs), automated hotel checkout, banking by telephone, and services over the Internet, such as Federal Express package tracking and online brokerage services.

[Element 2 & 3] Although extensive academic research has explored the characteristics and dynamics of interpersonal interactions between service providers and customers (Bettencourt & Gwinner, 1996; Bitner, Booms & Tetreault, 1990; Clemmer & Schneider, 1996; Fischer, Gainer & Bristor, 1997; Goodwin, 1996; Goodwin & Gremler, 1996; Hartline & Ferrell, 1996; Rafaeli, 1993), much less research has investigated customer interactions with technological interfaces (Bitner, Brown & Meuter, 2000; Dabholkar, 1996). The continuing proliferation of SSTs conveys the need for research that extends beyond the interpersonal dynamics of service encounters into this technology-oriented context. This need is illustrated in many ways: For example, almost half of all

retail banking transactions are now conducted without the assistance of a bank teller (Lawrence & Karr, 1996). In addition, although some SSTs have become commonplace (e.g., ATMs and pay-at-the-pump terminals), more innovative SSTs continue to be introduced. For example, the Internet enables shoppers to purchase a wide variety of products without having to visit a retail outlet or converse with a service employee. In some states, users can file for divorce or evict a tenant using an automated kiosk rather than go through the traditional court system. Electronic self-ordering is currently being developed by fast-food restaurants, and self-scanning at retail stores has been tested and is projected to become widely available in the future (Dabholkar, 1996; Gibson, 1999; Merrill, 1999).

[Element 4] It is increasingly evident that these technological innovations and advances will continue to be a critical component of customer-firm interactions. These technology-based interactions are expected to become a key criterion for long-term business success. Parasuraman (1996) lists the growing importance of self-service as a fundamental shift in the nature of services. Although many academic researchers have acknowledged a need for greater understanding in this area (Dabholkar, 1996; Fisk, Brown & Bitner, 1993; Meuter & Bitner, 1998; Schneider & Bowen, 1995), little is known about how interactions with these technological options affect customer evaluations and behaviour.

[Element 5.1] To further our understanding, we explored service encounters involving SSTs to identify sources of satisfaction and dissatisfaction. **[Element 5.2]** The research questions driving this study are as follows:

- What are the sources of customer satisfaction and dissatisfaction in encounters involving SSTs?
- Are the sources of customer satisfaction and dissatisfaction with SST encounters similar to or different from the sources of customer satisfaction and dissatisfaction with interpersonal encounters?
- How are satisfying and dissatisfying encounters with SSTs related to attributions, complaining, word of mouth communication and repurchase intentions?

To investigate these questions, we combined the critical incident technique (CIT), originally developed by Flanagan (1954), with quantitative measures of attributions, complaining behaviour, word of mouth communication and repurchase intentions.

[Element 6] The rest of the article is structured as follows: First, the extant literature on service encounters, self-service technologies and customer responses to SST encounters are reviewed. This is followed by a description of the research methods and procedures used in the study. The results of our enquiry are then discussed. Finally, implications, limitations, and directions for future research are offered.

Source: Adapted from Meuter, Ostrom, Roundtree and Bitner (2000:50-51); 580 words.

While very good, this introduction again does not clearly indicate the specific *context* and *units of analysis* of the study. Also note that the authors refer to themselves as "*we*". You are not allowed to do this. Keep your writing impersonal.

Example 8:

See if you can identify the aforementioned six elements of an introduction in the following example. The answer appears as a footnote at the bottom of page 12.

INTRODUCTION

Numerous market trends suggest a growing role for product packaging as a brand communication vehicle. These include a reduction in spending on traditional brand-building mass media advertising (Belch & Belch, 2001), an increase in non-durable product buying decisions at the store shelf (Prone, 1993; Rosenfeld, 1987; Vartan & Rosenfeld, 1987), and growing management recognition of the capacity of packaging to create differentiation and identity for relatively homogenous consumer non-durables (Spethmann, 1994; Underwood, 1999). As with all point-of-purchase communication vehicles, the primary role for product packaging at the shelf is to generate consumer attention by breaking through the competitive clutter.

Although managerial focus toward packaging has increased of late, a review of the marketing literature reveals relatively little theoretical work in the area of packaging, and specifically, few efforts examining its impact on consumer attention. Early packaging research focused on the general characteristics and role of package design (Cheskin, 1971; Faison, 1961; Schucker, 1959; Schwartz, 1971), including packaging as a means of communication (Gardner, 1967; Lincoln, 1965) and as a variable influencing product evaluation (Banks, 1950; Brown, 1958; McDaniel & Baker, 1977; Miaoulis & d'Amato, 1978). Additional research integrated packaging with other extrinsic cues (e.g., price, brand name) to examine the influence on product quality perceptions (Bonner & Nelson, 1985; Rigaux-Bricmont, 1982; Stokes, 1985). Other packaging-related research includes studies examining the veracity and communicative competence of packaging (Polonsky *et al*., 1998; Underwood & Ozanne, 1998); ethical packaging issues (Bone & Corey, 2000); and research measuring the impact of package size on consumer usage (Wansink, 1996). More recently, research examining the visual impact of packaging includes studies measuring the impact of relative package appearance (e.g. typical, novel, colour) on consumer attention, categorisation and evaluation (Garber *et al*., 2000; Plasschaert, 1995; Schoorsman *et al*., 1997); and Pieters and Warlop's (1999) examination of visual attention during brand choice. Despite these works, little is known about the specific type and amount of product information (e.g. visual and/or verbal information) that is appropriate for the package stimulus in order to maximise its communication effectiveness at the point of purchase.

The purpose of this paper is to contribute to the theoretical understanding of package design and buyer behaviour by examining one major design component; that is, the effects of incorporating visual product imagery (i.e., product pictures) on the package. Because the existence of product pictures on packages varies within and across product categories, we chose to examine whether brands containing visual information realise a strategic advantage over competitive brands containing only verbal information. If brands gain attention and consideration on the basis of their point of purchase appearance, an understanding of the impact of package design elements is crucial to enhance point of purchase communication. These issues may be particularly important in the case of brand repositioning, new brand introductions, the signalling of product changes, brand extensions, and in categories in which the use of pictures on packages would provide a strategic method of differentiation (Garber *et al*., 2000).

A second important issue to address is whether the effects of product pictures vary across products and/or brands. For example, would visual product imagery be more advantageous for high-equity national brands or for less familiar private label and/or second tier national brands whose brand perceptions have historically been more problematic? This article provides a theoretical framework to address these packaging issues and explores some contingencies under which package pictures are more or less effective. We hypothesise that the effects of package pictures are moderated by the degree of brand familiarity and by the degree to which product benefits are experiential. Thus, the paper's central research objectives are:

- To determine whether the inclusion of a picture of the product on a package significantly influences attention to the brand and product choice.
- To determine whether the effects of placing a product picture on a package differ according to the degree of consumer familiarity with the brand.

- To determine whether the effects of placing a product picture on a package differ for products that vary in the level of experiential benefits they provide.

Information generated from this research should provide managers with a greater understanding of the package's ability to communicate and the nature of its effects on consumer attention and product choice.

The remainder of the article is structured as follows: First, a conceptual framework explaining the effect of package design on two dependent variables, namely attention to the brand and brand choice, is presented. Next, the procedures used to test the hypothesized effects of package design, brand familiarity, and level of experiential benefits on attention and choice in an experiment is described. The findings of the study are then presented. The article concludes with a summary of the study's research contributions and directions for future research.

Source: Adapted from Underwood, Klein and Burke (2001:403-404); 792 words, see answer in footnote[2].

6.3 ADDITIONAL COMMENTS ON DRAFTING AN INTRODUCTION

Consider the following additional guidelines when drafting an introduction:

- You should always include all six the aforementioned elements in an introduction.

- **Element 1:** An academic article should be written in such a way that an intelligent layperson (i.e., a non-academic person) will understand what you mean and be able to follow the broad outlines of what you did and why (Bem, 2003:3). It is, therefore, important to introduce the broad theme/topic of your study in an opening paragraph in such a way that the reader understands exactly what the study is all about. This can, *inter alia*, be achieved by clearly defining the core constructs that are covered in the study in non-technical terms and by providing examples to illustrate these constructs where appropriate (see Example 7 above).

  Bem (2003:5) provides the following guidelines for writing the opening paragraph of an introduction:

  - Write the opening paragraph in plain English without using technical jargon.
  - Do not plunge the unprepared reader straight into a problem or theory. Take the time necessary to lead the reader to a formal statement of the research problem step by step.
  - Use examples to illustrate unfamiliar constructs or technical terms.
  - Use a catchy opening statement, preferably a statement about the behaviour of people or organisations.

[2] Answer to Example 8:
[Element 1] – Starts at the beginning of line 1.
[Element 2] – Starts at the beginning of line 10 and continues at the start of line 58 until the end of line 60.
[Element 3] – Starts in line 12, before "Early packaging research …"
[Element 4] – Starts in line 26, before "Despite these works …"
[Element 5] – Starts at the beginning of line 31.
[Element 6] – Starts at the beginning of line 62.

Consider the following examples of opening paragraphs provided by Bem (2003:5):

Example 9:

Wrong: Several years ago, Ekman (1972), Izard (1977), Tomkins (1980) and Zajonc (1980) pointed to psychology's neglect of affects and their expression.

[Comment: This statement, which is not particularly catchy, contains an unfamiliar term, affects, and it not a statement about the behaviour of people].

Correct: Individuals differ radically from one another in the degree to which they are willing and able to express their emotions.

Example 10:

Wrong: Festinger's theory of cognitive dissonance [unfamiliar term] received a great deal of attention during the latter part of the twentieth century.

[Comment: This is not a statement about the behaviour of people and is also not particularly catchy].

Correct: An individual who holds two beliefs that are inconsistent with one another may feel uncomfortable. For example, a person who knows that he or she enjoys smoking, but believes it to be unhealthy, may experience discomfort because of the inconsistency or disharmony between these two thoughts or cognitions. This feeling of discomfort was called *cognitive dissonance* by social psychologist Leon Festinger (1957), who suggested that individuals will be motivated to remove this dissonance in whatever way they can.

Note how this last example leads the reader from familiar terms (*beliefs, inconsistency, discomfort, thoughts*) through transition terms (*disharmony, cognitions*) to the unfamiliar technical term *cognitive dissonance*, thereby providing an explicit, but non-technical, definition of it (Bem, 2003:5).

- **Element 2:** The academic importance of a topic/theme (i.e., Element 2) can be motivated by referring to a lack of previous academic research on the topic or by highlighting important gaps, inconsistencies and/or controversies in the academic literature that warrant further investigation. The practical importance of a topic can be accentuated by referring to a specific management question/problem highlighted in industry publications or by quoting appropriate industry statistics to illustrate its practical importance. These approaches are often combined. Consider the following two examples:

Example 11:

[Practical importance] Over $100 billion is spent per year in the USA alone on gifts (Ruth *et al*., 1999), making understanding gift-giving behaviour an important issue for many retailers and brand managers. **[Academic importance – lack of previous research]** While research has been conducted on the value of gifts purchased (e.g. Belk, 1979; Garner & Wagner, 1991), for whom gifts are purchased (cf. Heeler *et al.*, 1978; Komter & Vollebergh, 1997; Laroche *et al.*, 2000; Otnes *et al.*, 1993; Sherry *et al.*, 1993; Sprott & Miyazaki, 1995), and why gifts are purchased (cf. Andrus *et al.*, 1986; Belk, 1979; Belk & Coon, 1991; Beltramini, 2000; Komter, 1996; Komter & Vollebergh, 1997; Mick & Faure, 1998; Laroche *et al.*, 2000; Wolfinbarger, 1990;), little attention has been given to the reasons why gifts are chosen and, more particularly, the use of brand associations for a gift.

Source: Adapted from Parsons (2002:237).

Note that it is not enough to simply state that little or no previous research have been conducted on a specific topic. If you want to use this argument, you will have to show that you have extensively reviewed the most recent South African and international literature on the topic using an approach similar to the one illustrated in Example 12.

Example 12:

A key instrument of many retailers' communication strategy is their store window displays (Chain Store Age Executive, 1989). Previous research suggest that consumers are very likely to attend to and acquire information from window displays (Castaneda, 1996; Fletcher, 1987). **[Practical importance]** Similarly, a renewed faith among retailers in the ability of window displays to capture consumers' attention and draw them into a store has generated renewed interest in this communication tool after years of neglect (Discount Store News, 1994; Horvitz, 1998). **[Academic importance – lack of previous research]** An extensive search of leading electronic journal databases, including EBSCOHost, Emerald, Google Scholar, Proquest and ScienceDirect, suggest that no academic research has examined whether, how, and for whom window displays work.

Source: Adapted from Sen, Block and Chandran (2002:237).

- **Element 3:** The summary of available literature (i.e., Element 3) should be very concise (see the three examples provided earlier) and should be limited to the most recent studies that are DIRECTLY relevant to your own research. Summers (2001:410) suggests the following generic approach for summarising the available literature on a topic:

  "Previous research has addressed several aspects of [topic]: (1) _____ (cite two or three relevant articles), (2) _____ (cite two or three relevant articles), and (3) _____ (cite two or three relevant articles)."

  It is always best to focus on studies that were conducted in the recent past (i.e., in the last three to five years).

  If you have replicated existing research, this should be clearly indicated in Element 3. You should also include an in-text reference to the study that was replicated.

- **Element 4:** Since academic research is aimed at expanding our knowledge of a specific topic, a study should aim to address or solve specific gaps, inconsistencies and/or controversies in the literature. A researcher should explicitly state the major gaps, inconsistencies or controversies that an article will address in Element 4 of the introduction and explain why addressing these issues are important (also see the preceding discussion of Element 2). One should also discuss the main contribution of a study here. Summers (2001:408) lists 17 ways in which a study can contribute to the "body of knowledge" in a particular academic discipline. These 17 possible contributions can also be used to motivate the importance of a study.

- **Element 5** of the introduction must always provide a clear indication of the following:
  - 5.1 the *core research problem/question* to be addressed in the study,
  - 5.2 the *specific research objectives* that will guide your research,
  - 5.3 the *context* (e.g., industry, market, geographic area, organisation and/or culture) in which the study will be conducted, and
  - 5.4 the *units of analysis* of the study.

Each of these four issues is discussed in more detail below.

Element 5.1 - A statement of the core research problem / research question: To be successful, a research project must have a specific and clearly defined main purpose or goal. In other words, one must be able to briefly, but convincingly, answer people when they ask the question: What exactly is the main goal of your research?

When defining the main purpose or goal of a study, it helps to think in terms of a specific academic or managerial problem that the study will attempt to solve, or in terms of a core question that the study will attempt to answer. Experts refer to this as a study's problem statement or its core research question.

The problem statement or core research question should be phrased in such a way as to present the "… single goal of the total research effort" (Leedy & Ormrod, 2005:47).

One can explain the main purpose or goal of a study either in the form of a concise problem statement **OR** in the form of a core research question. You do not have to do both! A problem statement should be in the form of one or more grammatically complete sentences, while a core research question should be in the form of a single question. Consider the following examples:

Example 13: Problem statements

> "The main purpose of this study was to investigate South African consumers' attitudes towards female nudity in print advertisements and also to determine how these attitudes are related to consumers' religiosity – i.e., the degree to which consumers regard religion as an important aspect of their lives."
>
> "The main goal of this study was to determine if the domain specific innovativeness (DSI) scale could be adapted to identify innovators in the category of alcoholic beverages among undergraduate students in Pretoria."
>
> "The main purpose of this study was to investigate the attitudes of young, amateur skateboarders (aged 10-17) in Pretoria East towards the wearing of protective gear when practising the sport in a skate park. The study also sought to identify demographic and psychographic factors that could explain these attitudes."

Example 14: Core research questions

> "The core research question that guided this study can be stated as follows:
>
> What are South African consumers' attitudes towards female nudity in print advertisements and how are these attitudes related to consumers' religiosity?"
>
> "The core research question that guided this study is:
>
> Can the domain specific innovativeness (DSI) scale be adapted to identify innovators in the category of alcoholic beverages among undergraduate students in Pretoria?"
>
> "This study attempted to answer the following core research questions:

What are the attitudes of young, amateur skateboarders (aged 10-17) in Pretoria East towards the wearing of protective gear when practising the sport in a skate park? Which demographic and psychographic factors can be used to explain these attitudes?"

Element 5.2 - The research objectives: Once you have formulated a clear problem statement or core research question reflecting the main goal or purpose of your study, it is time to consider the more specific research objectives that you want to achieve.

Achieving your research objectives should lead you to solve the main research problem or answer the core research question. One of your objectives may be to test specific hypotheses, while others may relate to the gathering of descriptive data or to the development of a conceptual framework based on available literature.

You should consider the following guidelines when drafting research objectives:

- Research objectives must be presented in a bulleted list and should be phrased in the form: "To determine …", "To investigate …", "To evaluate …", "To compare …"
- Research objectives should be listed in order of importance or from the most general to the most specific.
- Research objectives can be viewed as a set of "promises" made to the reader; promises that the researcher undertakes to achieve in the study. Be realistic in the promises you make! Limit the number of objectives you set by focussing your attention on four or five core objectives that will enable you to solve the research problem or answer the research question posed. Make sure that your study is properly designed to achieve these.
- Each objective should focus on a single issue. Be careful for objectives containing the following words: "and", "or", "as well as". These words often indicate a composite objective dealing with more than one issue.
- The objectives should logically flow from the problem statement or core research question. The reader should be able to see why it is necessary to achieve a specific objective in order to solve the main research problem or answer the core research question.
- Do not confuse research objectives with managerial objectives. Research objectives will focus on the things you want to do or achieve as a direct result of your research effort. As such, research objectives usually contain the following verbs:
  - To analyse …
  - To compare …
  - To describe …
  - To determine how many / which percentage …
  - To develop a typology / classification scheme / conceptual framework …
  - To identify …
  - To investigate …
  - To review the most recent literature …
  - To test …

Your research objectives should **not** focus on any managerial actions or activities that may result from the study. It is, therefore, incorrect to have research objectives in an academic study such as the ones listed in Example 15 below:

Example 15: Incorrect research objectives

- To advise management on how best to improve the quality of service delivered to customers at Kievits Kroon Country Estate
- To develop an intervention plan in order to improve internal communication between top management and operational staff.

Consider the following two examples of well-written problem statements and the associated research objectives:

Example 16:

The purpose of this study was to determine the influence of nudity in print advertisements on consumers' ability to recall the brand being advertised and to investigate gender differences in consumers' attitudes towards nudity in advertising.

More specifically, the study aimed to achieve the following specific research objectives:

- To determine whether more brand names can be recalled in print advertisements containing non-sexual appeals than in print advertisements containing sexual appeals.
- To determine whether there are gender differences in the influence of nudity in advertising on consumers' ability to recall the brand name involved.
- To determine whether there are gender differences in consumers' attitudes towards nudity in advertising.

Example 17:

This study firstly analysed how consumers perceived certain elements of the servicescape - layout accessibility, facility aesthetics, seating comfort, electronic equipment or displays and cleanliness - at three different leisure events (i.e., a rugby match, live music performance and viewing a film in a cinema). Secondly, the purpose of this study was to determine how customers' perceptions of these servicescape elements are correlated with their perceptions of the overall functional quality of the service.

The following specific objectives were guided the research:

- To replicate Wakefield and Blodgett's (1996:45-61) study in a South African context, specifically in three previously unexplored leisure contexts, namely a rugby match, a music performance and a movie theatre.
- To determine and compare customers' perceptions of selected servicescape elements, namely layout accessibility, facility aesthetics, seating comfort, electronic equipment or displays and cleanliness, across the three leisure contexts mentioned above.
- To determine and compare how customers' perceptions of the selected servicescape elements correlate with their perceptions of the overall functional quality of the service at the three leisure contexts mentioned above.

Element 5.3 – The context of the study: Element 5 of the introduction should also contain a clear, but brief description of the specific context in which your study was conducted. Depending on the nature of your study, the context could refer to the

specific country, region, industry, industry sector, organisation, culture and/or consumer groups in or among which the study was conducted (e.g., spectators at a rugby match at Loftus stadium; middle managers in the South African retail baking industry; undergraduate commerce students at the University of Pretoria). It could also refer to the specific forms / variants of a phenomenon or object that you have studied (e.g., nudity appeals in fashion magazine advertisements, product placements in movies; the effects of music tempo on visitors to regional shopping malls in Gauteng; the motivations of shark cage divers in Vals Bay).

The context may be specified as part of the core problem statement / research question or in the research objectives. Alternatively, it can also be described separately as part of Element 5 of the introduction.

In Example 17, the researchers described the context as part of the problem statement and research objectives. They specifically indicated that the study focused on five elements of the servicescape - layout accessibility, facility aesthetics, seating comfort, electronic equipment or displays and cleanliness - at three different leisure events (i.e., a rugby match, live music performance and viewing a film in a cinema) in South Africa. The researchers could have been more specific by indicating that these three leisure venues are situated in Pretoria.

In Example 16, the researchers highlighted two contextual aspects in their problem statement and objectives. They mentioned that the study focussed on print advertisements and also that they investigated gender differences in consumers' attitudes. The researchers could have been more specific by, for example, also indicating that the study was conducted among undergraduate students at the University of Pretoria.

Try to describe the context of your study as precisely as you can.

Element 5.4 - The units of analysis:

The units of analysis of a study refer to the entities about which the researcher wishes to draw conclusions (Terre Blance & Durrheim, 2004:37). The units of analysis can, therefore, refer to individuals, families, organisational sub-units, organisations, buyer-seller relationships, regions, countries, cultures, nations or any other "grouping" or entity about which a researcher wishes to draw conclusions.

In most cases, the units of analysis are individuals (e.g., individual consumers or individual employees), but, in other cases, the units of analysis refer to some "grouping" of individuals or to other entities. For example, if we want to compare the levels of anxiety about research methodology of students in different faculties, then we will have to calculate a single "anxiety" score for each faculty based on data obtained from individual students in the faculty. Since our focus is on comparing the faculties and not the individual students, the faculties are our units of analysis. Similarly, if we want to compare the new product development practices of one- and two- versus four- and five-star hotels, the two groupings of hotels – one- and two-star hotels versus four- and five-star hotels – are the units of analysis (see Trochim (2006) for an additional explanation).

One can identify the units of analysis of a study by asking the following question: "About which entity or entities do the researchers want to draw conclusions?"

While in many cases the *units of analysis* and the *sampling units* (i.e., the entities from which data is collected) are the same, this is not necessarily always the case. For example, to evaluate the relationship between employee satisfaction and customer satisfaction in a franchised firm such as Wimpy, one would have to collect data from the individual customers and employees of several Wimpy outlets. The individuals from whom data is collected are the *sampling units* of our study. However, since we wish to draw conclusions about the relationship between employee satisfaction and customer satisfaction across the franchised Wimpy outlets included in the study, these outlets – not the individual respondents – are the *units of analysis* of our study.

As this example illustrates, it is important to clearly identify and, where necessary, distinguish between the *sampling units* and the *units of analysis* of a study. One should also clearly describe the units of analysis of a study in the introduction, either as part of the problem statement or research objectives, or in a separate sentence or paragraph.

Note how the researchers in Example 18 described the units of analysis of their study in a separate sentence:

Example 18:

"In previous studies, the concept shopping value was used to refer to both the value derived from the shopping process itself and the value derived from the products purchased, resulting in a confusion of concepts. In this study, we define shopping value as consumers' evaluations of the shopping process itself, rather than of the products purchased. The object of the evaluation is a retail outlet, such as an individual store, shopping mall or online store. Consequently, the unit of analysis is the retail outlet rather than the products purchased."

Source: Adapted from Shun and Yunjie (2006:274).

- **Element 6:** The introduction should always end by giving the reader an overview of the structure of the rest of the article (see Examples 1-3 above).

- While the introduction appears at the start of an article, it can only be written once you have completed the rest of the article and have a firm view of its structure and content (Bem, 2003:14).

7 LITERATURE REVIEW

The literature review (recommended length: 1 000-1 500 words) represents the theoretical core of an article. In this section, we will discuss the purpose of a literature review. We will also consider how one should go about to find appropriate literature on which to base a literature review and how this information should be managed. Finally, we will answer four questions that first-time researchers often battle with when compiling a literature review. These questions are:

- Which aspects should I include in a literature review?
- How should I go about to synthesise information in a literature review?
- How should I structure a literature review?
- What writing style should I use when compiling a literature review?

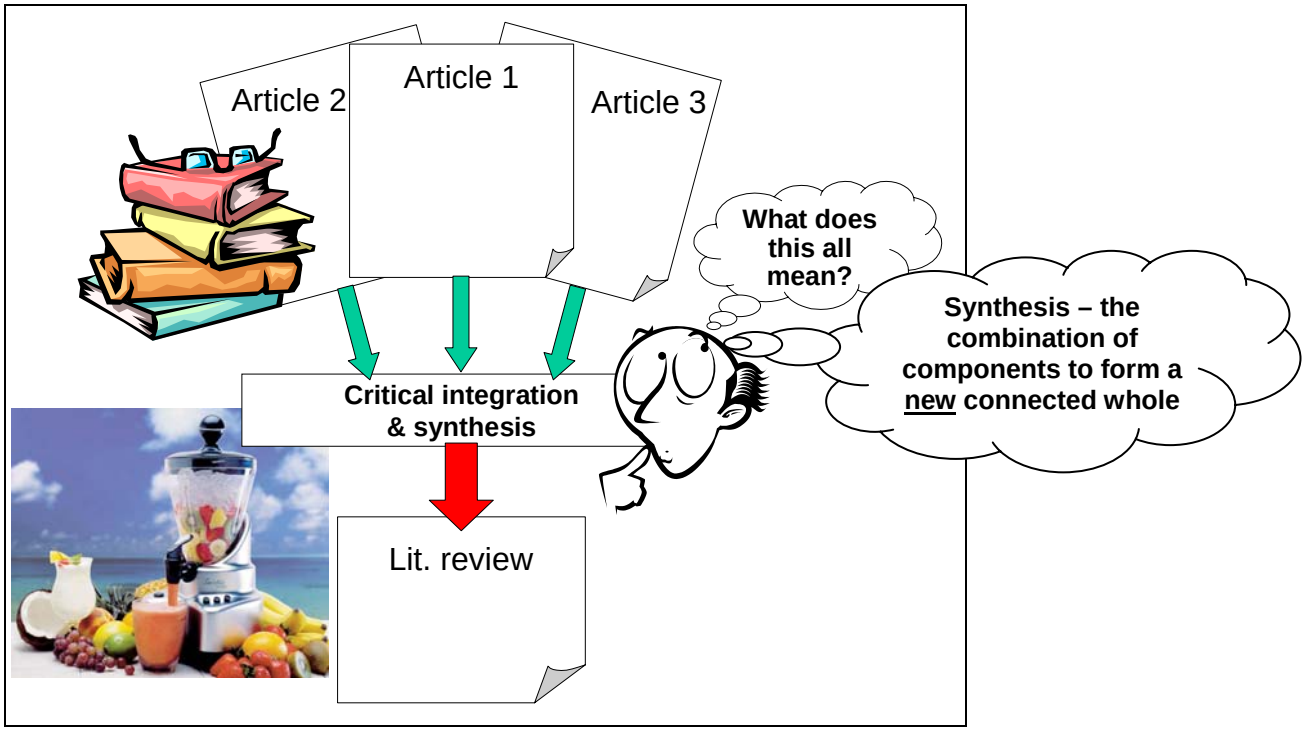
7.1 THE PURPOSE OF A LITERATURE REVIEW

The purpose of a literature review is to "look again" (re + view) at what other researchers have done regarding a specific topic (Leedy & Ormrod, 2005:70). A literature review is a means to and end, namely to provide background to and serve as motivation for the objectives and hypotheses that guide your own research (Perry *et al.,* 2003:660).

A good literature review does not merely summarise relevant previous research. In the literature review, the researcher critically evaluates, re-organises and synthesises the work of others (Leedy & Ormrod, 2005:84). In a sense, compiling a literature review is like making a smoothie or fruit shake: The end product is a condensed mix that differs totally in appearance from the individual ingredients used as inputs.

The key to a successful literature review lies in your ability to "**digest**" information from different sources, critically evaluate it and present your conclusions in a concise, logical and "reader-friendly" manner. This process is illustrated in Figure 1.

Figure 1: Producing an integrated literature review



First-time researchers often naively believe everything they read or are scared to criticise the work of others. However, academic research is all about critical enquiry! It is, therefore, extremely important that you critically evaluate the material that you read. Do you agree with the arguments and conclusions of other researchers? If you disagree, why? Can you identify contradictory arguments or findings? How could one explain these contradictions? Do the findings of previous studies apply in all contexts or are the findings context-specific? What are the criticisms against the conceptual models or measurement approaches discussed in the literature? Which limitations should be considered when interpreting the results of previous research?

You have to carefully read the most recent available literature with a view to identify specific gaps, inconsistencies and/or controversies that may form the basis of your own

research. Always show that you have considered an issue from a number of angles and that you are aware of the arguments for and against a specific point of view. Many researchers in services marketing, for example, use the SERVQUAL measurement scale without considering existing criticisms against it.

To compile a proper literature review, one has to overcome three specific challenges, namely:

- Finding appropriate literature on a specific topic,
- Managing the information, and
- Presenting a logical, synthesised and reader-friendly review of the current knowledge relating to a specific topic.

We will briefly touch on each of these issues below.

7.2 FINDING APPROPRIATE LITERATURE

In order to compile a literature review, you first have to register as a library used (see http://www.ais.up.ac.za/facilities/membership.htm) and then acquaint yourself with the services offered by the Academic Information Service (UP library). Please contact the library staff for training in the use of the following services and information systems:

- The *UP Explore* electronic library catalogue (http://explore.up.ac.za/screens/mainmenu.html),
- The *Tyds@Tuks* electronic journal platforms (http://www.ais.up.ac.za/journals/index.htm)
- The *SABINET* catalogue and *SA ePublications* journal database (http://www.ais.up.ac.za/eco/eresources.htm), and
- The library's *interlending* service (http://www.ais.up.ac.za/interlending/index.htm).

Also see section 8 in the NME 703 study guide.

IMPORTANT: It is NOT the library staff's responsibility to search for relevant literature on your behalf. Please treat the library staff with courtesy and respect.

Use the following steps to search for information on which to base your literature review:

Step 1: Find and read the basis articles listed in the document on research topics, which is available on the Downloads page of the NME 703 course web site.

Step 2: Identify possible search terms (keywords) from these basis articles by listing the main concepts/constructs mentioned in the articles. The main concepts/constructs of a study are normally listed in the title, keywords, abstract and introduction. Use these keywords as search terms in further searches for relevant literature.

It may sometimes be necessary to look for synonyms or broader terms that would include the construct/concept that you want. For example, if you are doing a study on the influence of widow displays on consumer behaviour, you may want to experiment with the following search terms: "window displays", "sales promotions" AND "retailing", "store windows".

Step 3: Once you have identified appropriate search terms, you have a number of options:

- See what academic textbooks have to say about these terms (e.g., see what "Retail Marketing" textbooks have to say about window displays). Use the library catalogue (http://explore.up.ac.za/screens/mainmenu.html) to locate textbooks in the UP library.
- Go to the Tyds@Tuks page at http://www.ais.up.ac.za/journals/journalsplatforms.htm.

  Use the search terms identified in step 3 to search for relevant journal articles in academic as well as industry-related electronic journals and magazines. When searching, it is best to initially limit yourself to articles in academic journals from the last three to five years that are available in full-text. If you cannot find anything relevant, use different search terms, expand the search to include references to articles that are not available in full-text and/or expand the time period of the search.

  Consider the following search strategies:

  - **Option 1: Find articles published in South African academic journals**

  Use the SA ePublications and ISAP databases hosted by SABINET (see link on http://www.ais.up.ac.za/eco/eresources.htm) to find references to articles published in South African academic journals. Most articles in these databases are available in full-text format as .pdf files. You will need Adobe Acrobat Reader to open, read and print these files.

  You should conduct a thorough search of the aforementioned two databases to determine whether there are any relevant South African studies available on your topic.

  - **Option 2: Find articles published in South African industry and financial magazines**

  Use the ISAP database hosted by SABINET (see link on http://www.ais.up.ac.za/eco/eresources.htm) to find references to articles published in South African industry and financial magazines. These articles are normally not available in full-text format. Once you have found a reference to an appropriate article, you will have to locate the relevant magazine in the UP library using the library catalogue (http://explore.up.ac.za/screens/mainmenu.html) or request it from another library through the library's interlending service (http://www.ais.up.ac.za/interlending/index.htm).

  - **Option 3: Find articles published in international academic journals**

  Search the following Tyds@Tuks (http://www.ais.up.ac.za/journals/journalsplatforms.htm) electronic journal platforms for articles related to your topic:

▪ Blackwell Synergy	▪ Proquest
	  ▪ Databasis:
	  o American Business Index (ABI)

▪ EBSCOhost
  ▪ Databases:
  o Business Source Premier
  o Academic Search Premier
	▪ ScienceDirect

▪ Emerald	▪ Taylor & Francis
▪ Infotrac	▪ Wiley Interscience

Although there is some overlap between the abovementioned platforms and databases, it is important to search them all as some (such as Blackwell Synergy, Emerald, ScienceDirect, Taylor & Francis and Wiley Interscience) contain publisher-specific information that are not available elsewhere.

When searching the abovementioned platforms using the "Advanced Search" option, you can specify that the search should be limited to peer reviewed/scholarly (i.e., academic) and/or full-text entries (i.e., articles of which the text is available in .pdf or .html format). You can also specify the time period in which the search should be conducted.

I usually start by specifying that the articles must be "peer reviewed/scholarly" AND "available in full-text". I also specify that I want to search the last three years only. If I then cannot find what I want, I drop the aforementioned restrictions in the following order:

- Increase the time period to the last five and then to the last ten years.
- Drop "full-text" – This widens the search to include references to academic articles that are not available in full-text on the particular database, but that may be available elsewhere or in hard copy format in the UP library.
- Drop "peer reviewed/scholarly" – This widens the search to include non-academic journals and industry magazines.
- Try a different set of search terms.

DO NOT limit yourself to full-text articles only when searching the EBSCOhost, Infotrac and Proquest platforms as you may miss references to other articles that are not electronically available on these platforms, but that may be obtained elsewhere.

Some e-journal platforms (e.g., EBSCOhost and Proquest) allow you to e-mail articles to yourself. This comes in handy when you are searching at home, but want to download the articles at work or on campus. However, make sure that your mailbox is large enough to accommodate the e-mails and that your e-mail provider allows attachments to e-mail messages!

Articles from the electronic journal platforms can normally be downloaded in two formats, namely .pdf and .html:

- A .pdf article is an exact replica of the original article as it appeared in the journal and contains all the tables, figures and page numbers that appear in the original paper-based version. You will need Adobe Acrobat Reader to open, read and print a .pdf file. These .pdf files can sometimes be very large, especially on the Proquest and EBSCOhost databases.
- An .html article is downloaded as a web page and does not include page numbers. These articles are faster to download, but may not include all the graphs or tables included in the original article.

TIPS:

Download articles in .pdf format whenever you can.

Always keep a record of the URL, database from and date on which articles were downloaded, as you will need this information to compile the list of references of your own research article. See "*Referencing in academic documents*" for more information in this regard.

- **Option 4: Find articles published in international industry and financial magazines**

  Search the American Business Index database in Proquest and the Business Source Premier database in EBSCOhost, but do not limit the search to "peer reviewed" (scholarly) publications.

- **Option 5: Find articles published in international academic journals using Google Scholar**

  You can also search for articles in international academic publications by using Google Scholar. It is best to log into Google Scholar via the library's home page (http://www.ais.up.ac.za/). This will enable you to directly download all article from electronic journals to which the library is subscribed.

  Use the "Advanced Scholar Search" link in Google Scholar to limit your search to a material published in a specific time period or to the subject area "Business, Administration, Finance, and Economics".

- If, during your search activities, you stumble across a reference to an article that seems relevant, you can use the search function on the Tyds@Tuks home page (http://www.ais.up.ac.za/journals/index.htm) to determine whether the specific journal is available in electronic format in an electronic journal platform. If you cannot find an electronic version of the journal, use the library catalogue (http://www.ais.up.ac.za/journals/index.htm) to determine whether the journal is available in paper-based format in the library. Finally, you can also request journal articles that are not available locally or electronically from another library through the UP library's interlending service (http://www.ais.up.ac.za/interlending/index.htm).
- Do not forget to consult the latest editions of paper-based journals when searching for information. This is especially important for KOB and TBE students because many of the leading journals in these two disciplines are not available on-line. The paper-based versions of most management journals are located on level 2 of the UP library.
- You can request books and journal articles from other libraries through the UP library's interlending service (http://www.ais.up.ac.za/interlending/index.htm). Approach the library staff for training and assistance in this regard (see section 8 of the NME 703 study guide). You, normally, have to allow at least two to three weeks for the book or journal article to be delivered.

7.3 MANAGING INFORMATION

It can become quite a challenge to manage the information gathered for a literature review. Consider the following tips:

- Initially limit the time period of your searches to the last three years. Increase the time period incrementally if you cannot find any relevant articles.
- Keep a record of the complete reference to a book, journal article or web page (see the guidelines on "Referencing in Academic Documents" on the NME 703 course web site). This will save you the trouble of having to find the source again when you have to compile the list of references of your final proposal or research article.
- Because the contents of the web can change from one day to the next, it is best to print copies of any web pages from which you have taken information. This will

ensure that you have a permanent record of the information which you have consulted. These printouts will also contain the relevant URL and the date on which the information was accessed.

- Diarise the due dates of all library books and inter-library loan items. You will be fined if you return books late and may even be "blacklisted", which means that you will be prevented from borrowing books in future.
- Place all your printed articles together in a box or file so that you do not have to search for a particular article, as this can waste a lot of time. Where possible, save electronic copies to a dedicated folder on your PC using the following file naming convention:

  2002 - Window displays and consumer shopping decisions.pdf

  (Date of publication – Title of the article)

  This saves a lot of time when one has to find a particular article again, especially towards the end of the year.
- How to read an academic journal article:
  - First read the abstract, then the introduction and then the conclusion to determine whether the article will be of value to you.
  - Article titles are sometimes very misleading. Always read the abstract and introduction to determine whether a specific article is relevant to your study.
  - Graham (1998) provides additional guidelines on reading academic articles.

7.4 COMPILING A LITERATURE REVIEW

As was mentioned above, a literature review is not merely a chronological summary of what different authors have said about a specific topic. To compile a good literature review, you have to "**digest**" the available literature and then provide a critical evaluation and synthesised summary of the current knowledge related to your chosen topic.

First time researchers often battle with four main questions when compiling a literature review:

- Which aspects should I include?
- How should I go about to synthesise information?
- How should I structure a literature review?
- What writing style should I use?

Each of these questions will now be considered in more detail.

7.4.1 Which aspects should I include in a literature review?

A good literature review should always include a discussion of the following aspects:

- A brief discussion of where the specific topic under consideration fits into the "**bigger picture**" of the overall academic discipline (e.g., where does nudity appeals fit into the "bigger picture" of advertising appeals).
- **Conceptual definitions** all the key concepts/constructs included in the study (also see p. 37).
- A focussed and synthesised **discussion of relevant previous research findings** involving the constructs/concepts relevant to your study. Previous research may indicate:
  - possible relationships between the chosen constructs (e.g., a correlation between communication satisfaction and job satisfaction),
  - possible mediating (intervening) and/or moderating variables that influence the relationship between the chosen constructs,
  - possible differences between groups on the chosen constructs (e.g., differences between males and females with regard to sensation seeking),
  - the contexts in which the constructs and relationships have previously been tested (e.g., among MBA students or in a specific industry),
  - possible gaps, inconsistencies, controversies and/or unanswered questions in the literature that could form the basis of a new study,
  - the results of previous hypothesis tests involving the selected constructs/concepts or relationships, and
  - possible untested hypotheses or propositions involving the chosen constructs.
- Many of the theoretical constructs in Marketing, Communication and Tourism Management are abstract, complex and multi-dimensional. Think of constructs such as perceived value, perceived service quality, brand loyalty, brand image, perceived risk, variety seeking tendency, corporate reputation, corporate social responsibility, communication satisfaction, and two-way symmetric communication style. A literature review must always provide a **summary of existing approaches to the measurement of the relevant constructs**. In other words, you must explain how other researchers have measured the constructs that you intend to measure.
- Finally, a literature review must provide sufficient **theoretical support for the hypotheses to be tested** in a research project.

As you will see in section 7.4.3, one should NOT use the aforementioned five points as main headings in a literature review. Your study leader will, however, look for all five these elements when evaluating the literature review section of your final article.

7.4.2 How should I go about to synthesise information in a literature review?

A literature review is NOT a chronological summary of what other people have said or found. In other words, it should not be written in the form: "Author A said this, author B said that …" The most difficult challenge in compiling a literature review is to digest or synthesise, not merely summarise, existing knowledge. Novice researchers often copy and paste information without "digesting" the information at all. This is totally unacceptable!

In this section, we will consider how to synthesise three types of information, namely definitions, lists of attributes, factors or criteria and opposing viewpoints on a specific issue.

➢ Synthesising definitions

As you will see in section 7.4.3, you have to clearly define all the constructs/concepts and discipline-specific technical terms used in your study. It is best to define a construct/concept or technical term immediately after it is introduced for the first time in your writing.

MacKenzie (2003:325) points out that a good definition should: "(a) specify the construct's conceptual theme, (b) in unambiguous terms, (c) in a manner that is consistent with prior research, and that (d) clearly distinguishes it from related constructs. A good definition should also specify the extent to which values of the construct are expected to differ across cases, conditions, and time. Also, when the construct is conceptualized as being multidimensional, the relations between the subdimensions and the superordinate construct should be specified".

Defining constructs/concepts and other technical terms generally means borrowing definitions from the literature. Unfortunately, different authors often provide different definitions for the same construct. One should NEVER merely list these different definitions one after the other in a literature review. Rather "dissect" the definitions and then try to answer the following questions:

- What are the main communalities and differences between the existing definitions of a construct? Can existing definitions be grouped or categorised based on these differences?
- Are there distinguishable "schools of thought" on the topic? If so, what do these "schools of thought" have in common and how do they differ?
- Have there been changes over time in the way in which a particular construct is defined?

In the following example, the author analysed available definitions of the construct *impulse buying.* Her analysis lead to the identification of two time-based "schools of thought" on the topic, namely definitions prior to and after 1982. She also clearly identified how the construct *impulse buying* will be defined in her study.

Example 17:

What is impulse buying?

Definitions of impulse buying prior to 1982 focused on the product rather than the consumer as the motivator of impulse purchases. For instance, Stern (1962) provides the foundation for defining impulse buying behaviour, which classifies the act as planned, unplanned, or impulse. According to this scheme, planned buying behaviour involves a time-consuming information search followed by rational decision-making (Piron, 1991; Stern, 1962). Unplanned buying refers to all purchases made without such advance planning and includes impulse buying, which is distinguished by the relative speed with which buying "decisions'' occur.

Subsequent to 1982, when researchers began to re-focus attention on impulse buying behaviour, researchers began to investigate the behavioural dimensions of impulse buying. Most recently, researchers appear to agree that impulse buying involves a hedonic or affective component (Cobb

& Hoyer, 1986; Piron, 1991; Rook, 1987; Rook & Fisher, 1995; Weinberg & Gottwald, 1982). For instance, Rook (1987) reports accounts by consumers who felt the product "calling" them, almost demanding they purchase it. This emphasis on the behavioural elements of impulse buying led to the following definition:

> Impulse buying occurs when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately. The impulse to buy is hedonically complex and may stimulate emotional conflict. Also, impulse buying is prone to occur with diminished regard for its consequences.

Source: Adapted from Hausman (2000:404-405).

It is not always possible to identify different historical approaches or "schools of thought" with regard to the definition of a construct/concept. If you have to list definitions, this should preferably be done chronologically in the form of a table as is shown in the next example.

Example 18:

"The definitions of trust relevant to e-commerce and e-banking are summarised in Table 1.

Table 2: Definitions of trust

Rotter (1967)	Trust is "the belief that a party's word or promise is reliable and a party will fulfil his/her obligations in an exchange relationship".
Morgan & Hunt (1994)	Trust occurs "when one party has confidence in an exchange partner's reliability and integrity".
Mayer *et al*. (1995)	Trust is "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party".
Rousseau *et al*. (1998)	Trust is a "psychological state comprising the intention to accept vulnerability based upon positive expectation of the intentions or behaviour of another".
Gefen (2000)	Trust on an online vendor is the "willingness to make oneself vulnerable to actions taken by the trusted party based on the feeling of confidence and assurance".
Ba & Pavlou (2002)	Trust is "the subjective assessment of one party that another party will perform a particular transaction according to his or her confidant expectation, in an environment characterised by uncertainty".

Following Mayer *et al*. (1995) and Rousseau *et al*. (1998), for the purpose of this research, customer's trust in electronic banking is defined as, "a psychological state which leads to the willingness of customer to perform banking transactions on the Internet, expecting that the bank will fulfil its obligations, irrespective of customer's ability to monitor or control the bank's actions"."

Source: Adapted from Yousafzai, Pallister and Foxall (2003:850).

Make sure that the definitions listed in a table such as the one in Example 18 are indeed definitions and not a discussion of other issues such as lists of attributes, factors or criteria. It is best to list the definitions in a table chronologically based on the date of publication of the sources consulted.

IMPORTANT: Once you have analysed existing definitions (as was done in Example 17) or listed existing definitions in a table (as was done in Example 18), you should clearly indicate how a particular construct/concept is defined in your study (see section 7.4.3).

➢ Synthesising lists of attributes, factors or criteria

Different authors often list different attributes, factors, criteria, elements, characteristics or issues when discussing the same topic. For example, different authors may list different factors that people consider then choosing a holiday destination, different cues that influence customers' satisfaction with the service provided by a salesperson in a retail store, or different criteria that may be used to determine the effectiveness of a sponsorship campaign.

What you definitely should NOT do, is to merely report such lists of attributes, factors or criteria developed by different authors separately one after the other in the literature review. You should rather "digest" the information and provide a synthesised summary in your literature review. Depending on the nature of the information, this can be done in a number of ways.

Consider a situation where you are conducting research on the attributes that people evaluate when judging the "quality" of an e-commerce website. A review of previous research on this topic indicates that different researchers have identified different lists of attributes. Two such lists are provided in Table 3 below.

Table 3: Attributes that are important in the assessment of perceived website quality

Aladwani & Palvia (2002)	Zhang & Von Dran (2001)
Security	Learned new knowledge and/or skills by using the website
Ease of navigation	Use of humour
Broadcast services	Multimedia
Search facilities	Fun to explore
Availability	Assurance that user-entered data is encrypted
Valid links	Users can control order or sequence of information access
Reliability	Users can control how fast to go through the website
Browser sniffing	Users can control difficulty level of information to be accessed
Personalization or customization	Attractive overall colour use
Speed of page loading	Sharp displays
Interactivity	Attractive screen background and pattern
Ease to access the site	Adequate brightness of the screens/pages
Usefulness	Eye catching images or title on the homepage
Completeness	Indication of system loading/responding time
Clarity	Support for different platforms and/or browsers
Currency	Stability of the website availability (can always access the website)
Conciseness	Indication of the user's location within the website
Accuracy	Navigation aids
Finding contact information	Presence of overview, table of contents, and/or summaries/headings
Finding firm's general information	Structure of information presentation is logical
Finding products/services	Reputation of the website owner
Finding customers' policies	Identification of site owners/designers
Finding customer support	Unbiased information

Aladwani & Palvia (2002)	Zhang & Von Dran (2001)
Attractiveness	Absence of gender or racial/ethnic biases and stereotypes
Organization	Information on the website stays for a reasonable period of time before it disappears
Proper use of fonts	Accurate information
Proper use of colours	Appropriate detail level of information
Proper use of multimedia	Up-to-date information
Style consistency	Relevant information
Good labelling	Complete coverage of information
	Content that supports the website's intended purpose
	Novel (new) information

Source: Adapted from Alawadi and Palvia (2002:467-476) and Zhang and Von Dran (2001:1-10).

How should one go about to synthesise lists of information such as the two lists presented in Table 3? Consider the following two options:

- Option 1: Provide a comparative summary in table format to show which aspects in the different lists are the same and which aspects differ (see Examples 19 and 20 below). Note that different authors often use different terms to refer to the same thing. You will have to consider this when compiling a comparative summary.

Example 19:

Table 4: A comparative summary of web quality factors

Aladwani & Palvia	Madu & Madu	Olsina *et al*.	Ranganathan & Ganapathy	Wan	Zeithaml	Palmer	Cox & Dale
Aspects that are comparable							
Tangibles	Tangibles		Tangibles		Tangibles	Tangibles	Tangibles
	Reliability	Reliability	Reliability	Reliability	Reliability		
	Responsiveness			Responsiveness	Responsiveness	Responsiveness	
	Assurance		Assurance		Assurance		
	Empathy			Empathy		Empathy	Empathy
Specific content			Information content	Information			
Aspects that differ							
Content quality	Storage capability	Usability			Fulfilment		Customer confidence
Technical adequacy	Serviceability	Functionality			Compensation		Online resources
	Security and system integrity	Efficiency			Contact		
	Trust						
	Customisation						
	Web policies						

Source: Adapted from Van Iwaardena, van der Wielea, Ball and Millen (2004:951).

Example 20:

Table 5: An overview of image attributes tested in shopping centre studies

	Dennis *et al.*, 2001	Frasquet *et al.*, 2001	Wong *et al.*, 2001	Bell, 1999	Wakefield & Baker, 1998	Finn & Louviere, 1996	Finn & Louviere, 1990	Ahn & Ghosh, 1989	Wee, 1986	Weisbrod *et al.*, 1984	Gautschi, 1981	Nevin & Houston, 1980	Howell & Rogers, 1980	Bellenger *et al.*, 1977
Merchandising														
Size of shopping areas						✓		✓		✓				
Anchors (department, discount, etc.)						✓		✓	✓					✓
Store variety	✓	✓			✓				✓	✓				✓
Merchandise assortment		✓	✓			✓	✓	✓	✓	✓	✓	✓		
Merchandise/ store quality	✓		✓	✓		✓	✓	✓				✓	✓	✓
Merchandise/ store pricing	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓		
Merchandise styling/ fashion		✓				✓	✓						✓	
Accessibility														
Locational convenience	✓		✓	✓		✓		✓				✓	✓	
Ease of access		✓	✓		✓						✓	✓		✓
Parking	✓	✓						✓				✓	✓	
Transportation modes and cost	✓		✓						✓	✓	✓			
Services														
Services	✓	✓	✓	✓		✓	✓	✓	✓			✓	✓	✓
Atmosphere														
Atmospherics		✓	✓	✓	✓	✓			✓			✓	✓	✓
Food														
Food					✓				✓			✓		✓
Entertainment														
Entertainment		✓			✓							✓		✓
Safety														
Safety		✓							✓					✓
Segmentation of respondents	Yes	Yes	No	No	No	No	Yes	No	No	No	No	No	No	Quasi
Basis of segment formation	Image attributes	Demographics sets	No	No	No	No	Consideration	No	No	No	No	No	No	Image attributes psycho-demographics

Source: Sit, Merrilees and Birch (2003:82).

- Option 2: You can also try to group the individual attributes, factors or criteria into higher-level dimensions to form groups of individual elements that together measure some underlying higher-level construct. In the following example, the authors grouped individual web site attributes (listed under the heading *Indicators*) together as higher level constructs (listed under the heading *Constructs*). They also provided a description of each construct.

Example 21:

Table 6: Dimensions of web quality factors

Constructs	Description of constructs	Indicators	Literature sources
Functional fit-to-task	The extent to which users believe that the Web site meets their needs.	The information on the Web site is pretty much what I need to carry out my tasks. The Web site adequately meets my information needs. The information on the Web site is effective.	Davis, 1989; Doll & Torkzadeh, 1988; Franz & Robey, 1984; Goodhue & Thompson, 1995; Harry, 1998; Ives, *et al.*, 1983; Todd & Benbasat, 1992; Su*, et al.*, 1998.
Tailored communications	Communications can be tailored to meet the user's needs.	The Web site allows me to interact with it to receive tailored information. The Web site has interactive features, which help me accomplish my task. I can interact with the Web site in order to get information tailored to my specific needs.	Blattberg & Deighton, 1991; Emerick, 1995; Ghose & Dou, 1998; Hoffman *et al.*, 1995; Marrelli, 1996; Parasuraman, *et al.*, 1991; Philport & Arbittier, 1997; Steuer, 1992; Xie, *et al.*, 1998.
Trust	Secure communication and observance of information privacy.	I feel safe in my transactions with the Web site. I trust the Web site to keep my personal information safe. I trust the Web site administrators will not misuse my personal information.	Doney & Cannon, 1997; Gruman, 1999; Hoffman *et al.*, 1999.
Response time	Time to get a response after a request or an interaction with a Web site.	When I use the Web site there is very little waiting time between my actions and the Web site's response. The Web site loads quickly. The Web site takes long to load.	Machlis, 1999; Seybold, 1998; Shand, 1999.

Source: Loiacono and Watson (Undated:19).

➢ Synthesising opposing viewpoints on a specific issue

Different authors often have conflicting points of view on the same issue. These opposing perspectives can be compared as a point of discussion in a literature review. When comparing opposing points of view, it is important to clearly explain the nature of and differences between the opposing perspectives. Where appropriate, one should also indicate which specific perspective you support and motivate why. Consider the following two examples:

Example 22:

Two competing perspectives offer explanations for how peer influence affects adolescents' behaviour. On the one hand, much research has focused on the role of peer pressure in various detrimental and negative teenage behaviours, such as smoking and drug and alcohol use (cf. Brown, Clasen & Eicher, 1986; Halebsky, 1987; Melby *et al.*, 1993). In marketing, peer effects have been studied in relation to adolescent shoplifting and consumption of harmful products (cf. Cox, Cox & Moschis, 1990; Rose, Bearden & Teel, 1992).

An alternative view casts the role of peer influence on teenagers in a more positive light. Indeed, one of the primary developmental tasks of adolescence is to establish an identity separate from parents (cf. Gecas, 1981; Gecas & Seff, 1990; Youniss & Smollar, 1985). Because peer groups are voluntary in nature and peers are not directly responsible for monitoring teens' actions, peers may provide an early forum in which teens can try out various aspects of the social self (Gecas & Seff, 1990; Youniss & Smollar, 1985). As such, peers may be one of the earliest groups by which individuals learn to deal with the world outside the family. Indeed, early sociologists pointed to the primary nature of peer groups in socialising individuals, in addition to the important role played by the family (cf. Cooley, 1909). And one of the most important peer groups is friends.

Source: Adapted from Mangleburg, Doney and Bristol (2004:102).

Example 23:

Popular perspectives on business' role in society

Table 7 shows a spectrum of opinions regarding the appropriate role of business in society. At one end are those who say business only has an economic responsibility to make a profit while obeying the law (the pure profit-making view or economic CSR). In the middle are people who simply want corporate management to be more sensitive to the societal impact of their decisions, especially regarding potential harm to stakeholders (the socially aware view or ethical CSR). At the other end of the spectrum are those who want to see corporations actively involved in programs which can ameliorate various social ills, such as by providing employment opportunities for everyone, improving the environment, and promoting worldwide justice, even if it costs the shareholders money (the community service view or altruistic CSR). At one end of the spectrum the basic concern is with economic values, such as productivity and efficiency, while avoiding social involvement. At the other end of the spectrum the primary concern is societal welfare even at the expense of profits (Miller & Ahrens, 1993).

Table 7: Differing viewpoints on the role of business in society

Author	Position on business' role in society
Albert Carr	Pure profit-making view - economic CSR: Business has lower standards of ethics than society and no social responsibility other than obedience to the law.
Milton Friedman	Constrained profit-making view - economic CSR: Business should maximize shareholder wealth, obey the law, and be ethical.
R. Edward Freeman	Socially aware view - ethical CSR: Business should be sensitive to potential harms of its actions on various stakeholder groups.
Archie Carroll	Community service view/corporate social performance perspective - altruistic CSR: Business must use its vast resources for social good.

Source: Lantos (2001:602).

In this section, we considered different approaches for synthesising information in a literature review. In the next section, we discuss ways in which to structure a literature review to ensure a logical flow of ideas.

7.4.3 How should I structure a literature review?

A good literature review will always have a logical structure. This means that the different sections and sub-sections of the literature review are logically linked to one another. In other words, the one section naturally flows into the next.

In this section, we will touch on four issues that are important in terms of structuring a literature review, namely:

- General guidelines on structuring a literature review,
- The use of diagrams,
- Defining core constructs, and
- Providing motivation for hypotheses.

➢ General guidelines on structuring a literature review

A literature review is primarily structured through the use of headings, sub-headings and sub-subheadings. Consider the following principles when developing the headings of your literature review:

- It is best to use a "funnel approach" when structuring a literature review. Start the review by placing the specific topic being discussed into an appropriate broader context and then focus your discussion on more specific issues.
- Take time to carefully plan the headings and sub-headings that you will be using in order to ensure a logical flow of information. Mind-maps come in handing during this planning phase[3].

[3] There are several Web-resources available on mind mapping.
Visit http://www.jcu.edu.au/studying/services/studyskills/mindmap/howto.html or use a search engine, such as Google, to find additional Web-resources on mind mapping.

- Headings should be descriptive and informative, that is, they should tell the reader exactly what is to be covered in the section to follow (Perry *et al.*, 2003:659). Avoid headings that consist of a single word.
- Make sure that the information you place under each heading are, in fact, related to and reflected in the heading.
- Also ensure that you comply with the technical requirements regarding headings outlined in the document templates on the NME 703 web site.

The following is an example of the headings used in a well-structured literature review on consumers' reactions to nudity appeals in print advertisements:

Example 24:

2. LITERATURE REVIEW

2.1 AN OVERVIEW OF ADVERTISING APPEALS
2.2 NUDITY APPEALS IN PRINT ADVERTISING
  2.2.1 Nudity appeals defined
  2.2.2 The difference between nudity and sexual appeals
  2.2.3 Examples of different nudity appeal types
  2.2.4 Trends in the use of nudity appeals in print advertising in the last 30 years
2.3 CONSUMER ATTITUDES TOWARDS NUDITY IN ADVERTISING
  2.3.1 Attitudes towards nudity defined
  2.3.2 Measuring consumer attitudes towards nudity in advertising
  2.3.3 Differences in consumer attitudes towards nudity in advertising
    - Gender differences
    - Age differences
    - Cultural and religious differences
    - The influence of product congruency on consumer attitudes towards nudity in advertising
2.4 THE CONSEQUENCES OF NUDITY APPEALS IN ADVERTISEMENTS
  2.3.1 The influence of nudity appeals on advertisement recall
  2.3.2 The influence of nudity appeals on brand recall
  2.3.3 The influence of nudity appeals on brand image perceptions

Note the following:

- The authors used a "funnel" approach in this study. They started off by providing an overview of advertising appeals in general (i.e., the broad context) and then focused attention more narrowly on nudity appeals and on the consequences thereof.
- The wording of the headings are brief, but detailed enough to give the reader a good idea of what to expect under each heading. The authors did not use headings consisting of single words.
- The headings reflect a logical "story line". In a sense, the heading structure clearly summarises the contents of the literature review. The logical linkages between the different sections and sub-sections are also clearly reflected in the heading structure.

Also consider the heading structure from another study on the relationship between perceived retail crowding and shopping satisfaction:

Example 25:

2. LITERATURE REVIEW

2.1 AN OVERVIEW OF THE SHOPPING SATISFACTION CONSTRUCT
- 2.1.1 Shopping satisfaction defined
- 2.1.2 The importance of shopping satisfaction in Retail Marketing
- 2.1.2 Measuring shopping satisfaction

2.2 PERCEIVED RETAIL CROWDING AS AN ANTECEDENT OF SHOPPING SATISFACTION
- 2.2.1 Perceived retail crowding defined
- 2.2.2 The relationship between perceived retail crowding and shopping satisfaction
- 2.2.3 Measuring perceived crowding

2.3 EMOTIONS AS MEDIATORS OF THE RELATIONSHIP BETWEEN PERCEIVED CROWDING AND SHOPPING SATISFACTION
- 2.3.1 Emotions defined
- 2.3.2 How emotions mediate the relationship between perceived crowding and shopping satisfaction
- 2.3.3 Measuring consumer emotions

2.4 POTENTIAL MODERATORS OF THE PERCEIVED CROWDING - SHOPPING SATISFACTION RELATIONSHIP
- 2.4.1 Tolerance for crowding as a moderator
- 2.4.2 Time pressure as a moderator
- 2.4.3 Store familiarity as a moderator
- 2.4.4 Store type as a moderator
- 2.4.5 Gender as a moderator
- 2.4.6 Age as a moderator

By looking at this heading structure, one can easily follow the author's train of thought. The headings, therefore, serve as an important "roadmap" for the reader. As you will see in the next section, diagrams can also be used to summarise information and guide the reader.

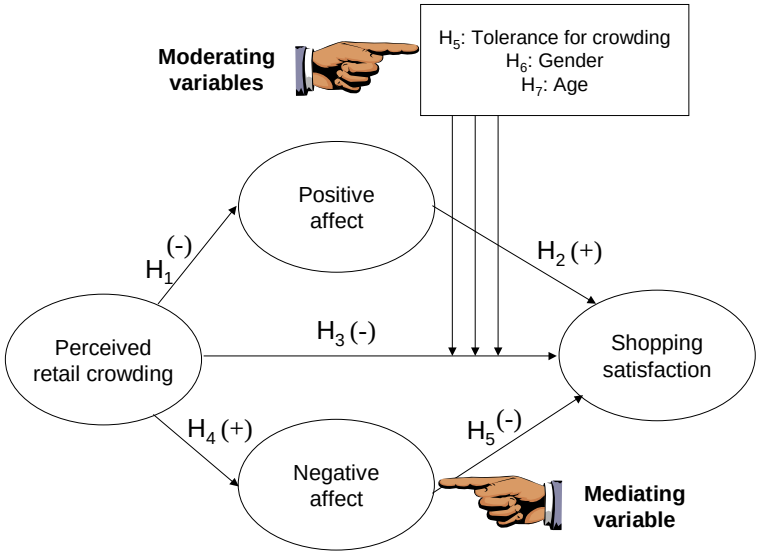
➢ Using diagrams to structure your literature review

Let's assume that your study involves testing the relationship (correlation) between a large number of constructs. To complicate matters even further, you are also interested in determining the influence of several mediating and moderating variables on the selected relationships. Your head spins because there are so many relationships, mediators and moderators to discuss. The solution to this confusing situation is actually quite simple: Use a diagram!

A diagram comes in handy whenever you have to discuss the relationship between a large number of constructs (see the example in Figure 2 below). It can be used to summarise the main constructs and hypothesised relationships in your study and to indicate the

mediators and moderators that you will be investigating. A well-designed diagram, such as Figure 2 below, also serves as a "road map" to orientate the reader to the contents of the literature review.

Figure 2: Influencers of the relationship between perceived retail crowding and shopping satisfaction



Source: Adapted from Machleit, Eroglu and Powell Mantel (2000:29-43).

You may even build your entire literature review around a diagram of hypothesised relationships. Perry *et al.* (2002:77), for example, used this approach. Their literature review starts off as follows:

> "The foundation for this research was the extant [i.e. existing] literature on relationships in industrial networks, especially business-to-business networks. There are seven core relationship bonds in this literature … and **a general model of their possible interrelationships is shown in Figure [X]**. This model will be explained next, starting with the five social aspects of a relationship like trust and commitment, before moving on to the two technical bonds of competence and investment" [own emphasis].

Your discussion of a diagram should logically follow the components thereof from left to right or from top to bottom. Note how the authors labelled the arrows in Figure 2 with the relevant hypothesis number as well as with an indication (+/-) of the direction of the hypothesised relationship. This will help the reader to follow your arguments more carefully and also provides you with a safeguard to ensure that you have covered all the hypothesised relationships in the discussion (Feldman, 2004:3).

While a literature review is primarily structured through the use of appropriate headings, aided by diagrams, clear definitions of abstract constructs and technical terms also help to ensure a logical flow of ideas. This issue will now be addressed.

➢ Defining core constructs

People can only communicate effectively if they use a shared language. Jargon (i.e., the specialised vocabulary of an academic discipline), unfamiliar terms, the inconsistent use of terminology, and the assumption that "the reader should know what a word means" all

hamper effective academic communication. To prevent misunderstanding, you should always provide very clear conceptual definitions for the abstract constructs/concepts in a study (also see the discussion on p. 37).

Consider the following guidelines on defining constructs/concepts:

- You should provide formal conceptual definitions for **all** abstract constructs/concepts and discipline-specific technical terms used in your study. Abstract constructs and technical terms should be defined the first time they are introduced in your writing (Bem, 2003:20). It is not necessary to define a term that is generally used in everyday conversation (such as gender) and that has a single, well-accepted meaning.

  Example 26:

  "Self-service technologies (SSTs) are technological interfaces that enable customers to produce a service independent of direct employee involvement." (Meuter, *et al*., 2000:50-51.)

  "In this research, a product placement (PPL) is defined as the placement of a brand or a firm in a movie or in a television programme by different means and for promotional purposes."

- A good definition should: "(a) specify the construct's conceptual theme, (b) in unambiguous terms, (c) in a manner that is consistent with prior research, and that (d) clearly distinguishes it from related constructs. A good definition should also specify the extent to which values of the construct are expected to differ across cases, conditions, and time. Also, when the construct is conceptualized as being multidimensional, the relations between the subdimensions and the superordinate construct should be specified" (MacKenzie, 2003:325).

- Where possible, use examples to illustrate the practical manifestations of an abstract construct.

  Example 27:

  "Examples of SSTs include automatic teller machines (ATMs), automated hotel checkout systems, banking by telephone and services over the Internet." (Meuter, *et al*., 2000:50-51.)

  "When an individual holds two beliefs that are inconsistent with one another, he/she may feel uncomfortable. For example, a person who knows that he or she enjoys smoking, but believes it to be unhealthy may experience discomfort arising from the inconsistency or disharmony between these two thoughts. This feeling of discomfort is called *cognitive dissonance*." (Bem, 2003:5.)

- When defining an abstract construct, it may sometimes be necessary to clearly distinguish it from conceptually different, but closely related constructs. For example, when defining *domain specific innovativeness*, it may be necessary to clearly distinguish it from *general innovativeness* and *market mavenism*. Similarly, when conducting a study on service quality, it will be necessary to clearly distinguish between *perceived service quality* and *customer satisfaction*, as well as between transaction specific and overall satisfaction.

- Be consistent in how you use constructs and terminology within and across the different sections of an article. Do not use different words or synonyms for the same concept interchangeably, as this may confuse the reader. Consistency in language use contributes greatly to effective communication.

- Many abstract constructs are multi-dimensional. This means that the construct is made of different sub-dimensions or components. You need to clearly point out that a construct is multi-dimensional and define each of its dimensions or components

separately based on the principles discussed above. Consider the following example:

Example 28:

"Perceived crowding [is] a multidimensional construct consisting of two dimensions: spatial and social crowding … The number of non-human elements in an environment and their relationship to each other all help define the extent of **spatial** crowding perceived by individuals. Within the retailing context, for example, the amount of merchandise and fixtures as well as their configuration within the store could enhance or suppress perceived crowding associated with physical stimuli. The **social** (or human) dimension of crowding, on the other hand, concerns the number of individuals as well as the rate and extent of social interaction among people in a given environmental setting. High social density may lead to undesirable outcomes such as a lack of privacy …" (Machleit *et al.*, 2000:30).

The way in which one should provide motivation for hypotheses is a final issue that relates to the structuring of a literature review.

➢ Providing motivation for hypotheses

A hypothesis is a **theory-based** expectation about some characteristic of a target population (or of population sub-groups) that may or may not be true and that has been formulated for statistical testing. As the word "*theory-based*" indicates, a hypothesis must be grounded in existing theory, previous research findings or the results of exploratory research (also see Annexure F of the NME 703 study guide).

One, therefore, has to present adequate theory or previous research findings to motivate each hypothesis that you intend to test in a study. Such theory or research findings are provided **inside the literature review** section of an academic article and precede the wording of each **alternative hypothesis** that you intend to test in your study. It is extremely important that an alternative hypothesis should logically and directly follow from the motivation provided. In other words, the reader should be able to clearly see how the hypothesis follows from the preceding theory (Varadarajan, 1996:5).

Use the following basic approach to ensure this:

- First, discuss appropriate theory, previous research findings or the results of exploratory research that will serve as motivation for the hypothesis to follow. Make sure that there is a direct and logical link between the motivation provided and the wording of the hypothesis that you intend to test.
- Next, build a bridge to the hypothesis by using phrases such as:
  - "Based on the aforementioned discussion, it is hypothesised that:"
  - "This leads to the following hypothesis:"
  - "It is, therefore, hypothesised that:"
  - "It is, therefore, posited that:"
  - "The following hypothesis is thus stated:"
- Finally, state the wording of the **alternative** hypothesis in the following format (Note font size and indentation):

H_5: For discount-type stores perceived human crowding will not be correlated with shopping satisfaction, whereas perceived spatial crowding will be negatively correlated with shopping satisfaction. For other store types, there will be a negative correlation between both dimensions of perceived crowding and shopping satisfaction.

Tip: Do the following to type the subscripted number of a hypothesis (e.g., H_2):

- Type the number in normal font.
- Highlight the number by holding in the left-hand mouse button and dragging the mouse over the number. Release the left-hand mouse button. The number should now be highlighted in black.
- Choose Format, Font from the top menu bar in MS Word. The Font dialogue box will appear.
- Tick the tick box to the left of the "Subscript" option in the "Effects" option group. Click the OK button.
- The highlighted letter will now be subscripted.

Hypotheses should be stated directly after the paragraph(s) that justify them, rather than in a separate section at the end of the literature review (Feldman, 2004:3). Consider the following examples:

Example 29:

Although research on the relationship between personality traits and crowding perceptions is scant, there is evidence that an individual's tolerance for crowding might be a potential moderator of the crowding-satisfaction relationship (Cozby, 1973; Dooley, 1974). It is proposed that some people may actually enjoy shopping in (and even seek) crowded retail environments, whereas others might have a very low tolerance for crowds. Krohne, Hock and Kohlmann (1992) presented a personality model of coping and noted that individuals vary habitually in their ability to tolerate both uncertainty and emotional arousal. Their suggestion of a personality characteristic of "Intolerance of Emotional Arousal" parallels our proposition that there exists a personality characteristic of "Intolerance for Crowding". Thus, it seems reasonable that tolerance for crowding should moderate the influence of crowding on satisfaction. The following two hypotheses are thus stated:

H_3: Individuals vary in their ability to tolerate human density levels.

H_4: For individuals with a high tolerance for crowding, there should be little or no relationship between perceived crowding and shopping satisfaction; conversely, for individuals with a low tolerance for crowding, perceived crowding will be negatively related to shopping satisfaction.

Source: Adapted from Machleit, Eroglu and Powell Mantel (2000:29-43).

Example 30:

As consumers get older, their information-processing abilities decline, and consequently they are more likely to experience difficulties in understanding and responding to marketing stimuli. According to Moschis (1987), with increasing age, consumers are less able to integrate information, less sensitive to external stimuli (e.g., light, colours), and less able to make distinctions between stimuli. Zaltman, Srivastava and Deshpande (1978) found that as age increases, consumers' awareness of unfair (and possibly irritating) marketing practices (e.g., being pressured to buy a product or advertised items not in the store) and propensity to complain decrease. Thus, it is hypothesised that:

H_2: The degree of perceived irritation induced by displeasing aspects of the shopping environment is negatively related to the age of consumers.

Source: Adapted from D'Astrous (2000:151).

IMPORTANT: Make sure that the wording of the alternative hypotheses included in the literature review correspond 100% to the wording of the same hypotheses used elsewhere in the article.

The general writing style that you should use when compiling a literature review is discussed in the next section.

7.4.4 What writing style should I use when compiling a literature review?

A good literature review will be easy to read and to understand. You can improve the "reader-friendliness" of your literature review by considering the following general principles:

➢ **General principles on writing style**

- An academic article should be written in such a way that it is accessible to an intelligent layperson (i.e., a non-academic person with no expertise in the particular discipline of field of study). In this regard, Bem (2003:3) points out that good writing is good teaching. Direct your writing to the students in the Marketing, Communication or Tourism Management 100 class, to your colleagues in the Accounting Department, and to your grandmother. No matter how technical your article is, an intelligent layperson with no expertise in the specific discipline and with no knowledge of statistics should be able to follow the broad outlines of what you did and why.
- Do not try to impress the reader by using difficult and unfamiliar words. Remember that you are conversing with the reader. Use familiar terms and always define unfamiliar constructs/constructs or technical terms clearly when they are introduced for the first time.
- While an academic article should be written in clear, accessible language, one should also bear in mind that many readers – especially your study leader and the external examiner – will be sceptical about what you write. It helps to think of your study leader and the external examiner as two judges of the Supreme Court and of yourself as an advocate who has to argue a case before the court. Your study leader and the external examiner will continuously be asking the following questions as they read your work:
  - What evidence do you have for this claim or factual statement?
  - On which arguments do you base this conclusion?
  - How do you know that this choice or decision is appropriate and scientifically sound?

  You need to provide the necessary "evidence" in your arguments to answer the aforementioned questions. In academic writing, the "evidence" usually comes in the form of in-text references to sources that support your statements, conclusions or methodological choices.
- Use full sentences when writing. A sentence must always contain a verb!
- You should, as far as possible, paraphrase and explain things in your own words (but remember to acknowledge the source!). Use direct quotations very sparingly. Frequent direct quotations indicate that the writer is too lazy to understand the

underlying ideas and integrate them into his/her own writing (Perry *et al.*, 2003:661-662).

- Be careful not to repeat the same information or arguments in different paragraphs or sections of the article.
- Make sure that you comply with **all** the technical care requirements listed in the document templates on the NME 703 course web site.

In addition to these general principles, you should also consider two specific issues related to writing style, namely:

- Providing overviews and building bridges, and
- Keeping it short.

➢ Providing overviews and building bridges

Always provide the reader with an overview of the contents to follow at the start of each major section in your literature review. End each major section off with a short summary. Also ensure that you link the different sections and sub-sections in your article together into a coherent whole by building bridges to help the reader make a transition from one section to the next. Consider the following example:

Example 31:

> "To conclude, brand personality is a brand that reflects a certain identity by being associated with a specific set of characteristics. The link between brand personality, human characteristics and the resulting influence on consumer behaviour will be discussed in more detail in the next section.
>
> **2.1.2 The interaction between brand personality and consumer behaviour**
>
> In the previous section, the terms "brand" and "personality" were investigated. In this section, the focus is placed on brand personality as a whole and its relationship with consumer behaviour. The following three issues will be discussed: …"

➢ Keeping it short

Carefully study the following quotation from Bem (2003:17):

"Virtually all experienced writers agree that any written expression that deserves to be called *vigorous writing*, whether it is a short story, an article for a professional journal, or a complete book, *is* characterized by the attribute of being succinct, *concise*, and to the point. *A sentence* - no matter where in the writing it occurs - *should contain no unnecessary* or superfluous *words*, words that stand in the way of the writer's direct expression of his or her meaning and purpose. In a very similar fashion, *a paragraph* - the basic unit of organization in English prose - should contain *no unnecessary* or superfluous *sentences*; sentences that introduce peripheral content into the writing or stray from its basic narrative line. It is in this sense that a writer is like an artist executing a drawing, and it is in this sense that a writer is like an engineer designing a machine. Good writing should be economical *for the same reason that a drawing should have no unnecessary lines, and* good writing should be streamlined in the same way that *a machine* is designed to have *no unnecessary parts*, parts that contribute little or nothing to its intended function. *This* prescription to be succinct and concise is often misunderstood and *requires* judicious application. It certainly does

not imply *that the writer* must *make all* of his or her *sentences short* and choppy *or* leave out all adjectives, adverbs, and qualifiers. Nor does it mean that he or she must *avoid* or eliminate *all detail* from the writing *and treat* his or her *subjects only in* the barest skeleton or *outline* form. *But* the requirement does imply *that every word* committed to paper should *tell* something new to the reader and contribute in a significant and non-redundant way to the message that the writer is trying to convey."

You have just read a 304-word essay on the virtues of being concise. It is not a bad first attempt, but a good writer would take its message to heart and, by crossing out all the non-italicised words, cut its length by 81%. Here is the result:

"Vigorous writing is concise. A sentence should contain no unnecessary words, a paragraph no unnecessary sentences, for the same reason that a drawing should have no unnecessary lines and a machine no unnecessary parts. This requires not that the writer makes all sentences short or avoids all detail and treat subjects only in outline, but that every word tell. [59 words]"

A concise writing style is especially important in the case of an academic article. Remember: Journal space is limited! Therefore, once you have written a first draft of your article, you need to work through it again … and again … and again to clear away the underbrush that clutters your discussion (Bem, 2003:17). This presents a very difficult challenge. Consider the following guidelines:

- Keep your sentences short. Sentences longer than three lines are often difficult to read and understand.
- Beware of sentences containing the word "and". Such sentences can often be split into shorter ones.
- Practice weeding out unnecessary words by editing other people's work. Hone your skills in this way, as it will assist you to shorten your own writing.
- After you have written your first draft, put the article aside for a day or two. You will be surprised at the errors and unnecessary words you discover once you have given yourself a "writer's break".
- Read your article aloud! If you have to gasp for air while reading, the sentence or paragraph is definitely too long.
- While reading, constantly ask yourself the following:
    - Have I clearly defined this concept/construct?
    - Am I making logical sense here?
    - Am I repeating myself?
    - How can I shorten this?
- Ask your research partner <u>and</u> an intelligent layperson (a parent, friend or family member who is not a subject-specialist) to read the article. Have them point out errors and, especially, aspects that are unclear. Do not argue with them if they point out things that are confusing. If they don't understand you, your study leader will most probably also be confused (Bem, 2003:16).

Once you have written, edited and polished the literature review, your next challenge is to describe the methodology used in your study.

8 METHODOLOGY

The methodology or methods section (recommended length: 500-1000 words) describes the steps followed in the execution of the study and also provides a brief justification for the research methods used (Perry *et al.*, 2003:661). It should contain enough detail to enable the reader to evaluate the appropriateness of your methods and the reliability and validity of your findings. Furthermore, the information should enable experienced researchers to replicate your study (American Psychological Association, 2001:17).

The methodology section typically has the following sub-sections:

- Sampling
  - Description of target population, research context and units of analysis
  - Sampling
  - Respondent profile
- Data collection
  - Data collection methods
- Measures (Alternatively: Measurement)

It is extremely important that you describe your methodological choices in all the sub-sections in enough detail so that a reader who is not involved in your study will know exactly what you did and why. You should also motivate and justify ("regverdig") your methodological choices so that the reader can see that your choices are appropriate and scientifically sound.

One could justify methodological choices in several ways:

- Explain that the choices made are the most practical / feasible given the study's objectives, the nature of the target population and available resources, BUT do not use resource constraints as your only motivation.
- Indicate that other leading researchers have used a similar approach (i.e., cite other articles to justify your choices).
- Indicate that the methodological choices are appropriate and scientifically sound given the "best practice" guidelines or requirements that apply to the specific research approaches (e.g., qualitative research, survey research, experimental research, etc.) used in your study. Cite sources to support your arguments in this regard. WARNING! Do not try to apply the "best practice" guidelines that apply to survey research to other forms of research, such as qualitative research!

Each of the sub-sections of the *Methodology* section will now be considered in more detail.

8.1 SAMPLING

You should discuss the following issues in the sub-section on sampling:

- Element 1: Clearly describe the target population(-s) of and context(-s) in which the study was conducted. Also remind the reader about the units of analysis of the study.

- Element 2: Describe the sampling method used in detail. This description should, where possible, include:
  - A **description** of and **motivation** for the specific sampling method used,
  - An indication of any disadvantages associated with the use of the specific sampling method (e.g., disadvantages in term of the generalisability of the findings),
  - A description of the sampling frame used (if applicable),
  - A description of how sampling units were selected, and
  - An indication of:
    - the target sample size,
    - how this was determined,
    - the realised sample size (i.e., how many questionnaires were received back),
    - the response rate (i.e., realised sample size ÷ the number of questionnaires handed out or respondents approached), and
    - the number of usable questionnaires that were analysed (realised sample size - any questionnaires excluded from data analysis because of a high incidence missing responses).
- Element 3: Provide a demographic and/or behavioural profile of the respondents who participated in the study. This profile can also be included at the start of the results section. If possible and applicable, present evidence that the sample size is sufficiently large and that the respondents are representative of the target population.

If you have followed a two-stage design, you should discuss and motivate the sampling approaches used in the different stages separately. You may use bulleted 4th level headings to structure your discussion.

Also consider the following additional guidelines:

Guidelines regarding Element 1:

- If your study involved more than one target population, context and/or unit of analysis (e.g., foreign visitors to game lodges in South Africa AND the marketing managers of these game lodges), this should be clearly indicated under Element 1.
- You should always motivate why it is academically valuable, necessary and/or appropriate to investigate your topic among the members of your chosen target population(s) and in the context(s) specified for your study. Such a motivation can be contained in the introduction or as part of Element 1 of the section on sampling.
- The fact that a study was conducted solely among students, in most cases, represents a major limitation. You should justify the use of a student population and student samples by motivating that students are an important market segment given the topic of your study and/or that a study among students can be scientifically justified. This motivation should be included under Element 1. The following two articles may help you in this regard:

  Wells, W. & Mithun, R. 2003. The importance of external validity. *Marketing Research*, 15(2):45-45. [Online] Available from: Business Source Premier database: http://0-

search.epnet.com.innopac.up.ac.za:80/login.aspx?direct=true&db=buh&an=10164867 [Accessed: 2006-05-24].

Malhotra, N., & King, T. 2003. Don't negotiate the whole field. *Marketing Research*, 15(2):43-44. [Online] Available from: Business Source Premier database: http://0-search.epnet.com.innopac.up.ac.za:80/login.aspx?direct=true&db=buh&an=10164856 [Accessed: 2006-05-24].

Guidelines regarding Element 2:

- If you have followed a two-stage design, you should discuss the components of Element 2 separately for the two different stages of your study. You may use bulleted 4th level headings to structure your discussion.
- Students doing qualitative research should show that the sampling method and target sample size proposed for their study are scientifically justifiable from the perspective of the specific qualitative research approach(-es) used. Cite relevant sources to support your arguments in this regard.
- Where possible, the minimum required sample size for a quantitative study should be calculated on statistical grounds (see any introductory Statistics textbook for guidelines in this regard). However, as we are not going to use a statistical approach for calculating sample size in this course, you may adapt the following phrase for use in this section:

  "This study aimed to achieve a minimum sample size of 200 respondents. The sample size is in line with the requirements set for an Honours study (University of Pretoria, 2006:16)."
- One should always acknowledge the use of a non-probability sampling approach as a limitation of a quantitative study and highlight the negative consequences of the use of such an approach. One of the most important negative consequences is the fact that the findings of a study based on a non-probability sample cannot be generalised to a larger population.

Your discussion of sampling should be in the form of normal paragraphs; not in the form of a bulleted list. Do not include a "textbook" discussion of sampling theory in this section. Limit yourself to a concise description of the specific sampling approach used in your study and a motivation of why this approach is appropriate. You can motivate your decisions regarding a sampling method and sample size by:

- indicating that these are the only feasible options given the unique circumstances of your study; and/or
- showing that other experienced researchers have used a similar approach in studies on the same or a related topic (cite relevant sources to support your arguments in this regard).

Consider the following examples:

Example 32:

[Element 1] The target population for this study consisted of American leisure travellers who had taken a vacation on board a cruise liner during 2000 or 2001. The unit of analysis was the individual passenger. **[Element 2]** A computer-generated random list of 1500 cruise vacationers was purchased from a well-known US mailing list company that specialises in the collection of addresses for research purposes. This list served as the sampling frame. To account for the impact of the low response rate normally associated with mail surveys, a mail-survey questionnaire (see Annexure A) was sent to all 1500 respondents on the sampling frame. This was done in order to realise a large enough sample for the use of structural equation modelling based on the

recommendations by Tabachnick and Fidell (1996), and Kline (1998). The final realised sample included a total of 392 usable questionnaires, representing a 26% response rate. All 392 questionnaires were analysed.

[Element 3] Table 8 provides a socio-demographic profile of the respondents who participated in the study. The sample was slightly dominated by female respondents (54%) and the majority of the respondents fell in the 36–55 age group. Approximately 80% of the respondents had at least some college education, with 56% having earned a college degree. Twenty-six percent of the respondents reported an annual household income between $40,000 and $79,000.

Table 8: A socio-demographic profile of respondents

	n	**%**
Gender:		
Female	207	53.6
Male	165	41.2
Total	372	94.8
Age:		
18-35 years	45	10.7
36-45 years	97	23.3
46-55 years	127	32.1
56-65 years	47	12.6
66 years or older	69	18.6
Total	385	97.3
Income:		
Less than $40,000	57	13.8
$40,000-$79,999	105	25.7
$80,000-$119,999	84	21.7
$120,000-$159,999	34	9.3
$160,000-$199,999	24	5.7
$200,000 or over	20	5.0
Total	324	81.2
Education:		
High school	56	14.3
Vocational/technical	17	4.3
Some college	99	24.3
College	126	31.7
Graduate	91	24.3
Total	389	98.9

Note: The total percentages do not add to 100% because of missing responses.

To examine whether or not the sample was representative of typical cruise participants, the traveler profile of the respondents was compared to descriptions provided by Cruise Lines International Association. Overall, the traveller profile in this study matched well with the overall United States cruise market in terms of duration and season of the cruise, group characteristics, ship size and cruise line representation.

Source: Adapted from Duman and Mattila (2005:317).

Example 33:

[Element 1] The population for this study consisted of franchisors across all franchised industries in Australia. The unit of analysis was the franchisor-franchisee relationship.

[Element 2] The sampling frame was a list of all Australian franchisors maintained over ten years by Mr. Col McCosker that has been used in many previous surveys of franchisors. There is no alternative sampling frame available because there is no required registration of all franchisors in Australia. A mail survey (see Annexure A) was sent to the complete list of 693 franchisors in 1998. Fully 175 franchisors replied, giving a satisfactory response rate of 25% for this type of survey of business people where response rates below 15% become questionable (Malhotra, 1993). Only 113 of the 174 respondents were able to answer the questions about investment in information technology, because the others had not invested. This figure of 113 respondents who had invested in information technology is within the normal bounds of 100 to 200 for structural equation modelling (Hair *et al.,* 1995). The resulting sample can be described as a convenience sample.

[Element 3] The respondents provided a reasonably representative profile of all Australian franchisors. Replies were obtained from all states, with franchises starting between 1967 and 1996, and with turnovers ranging from $17,000 to $9,000,000. Moreover, the respondents provided a picture of information technology emerging as an important issue in franchise systems. Of the 174 respondents, 28.9% saw no need for information technology linking franchisor and franchisees, but others had started to do this and fully 19.1% had complete information technology links between franchisor and franchisees. Indeed, as many as 53.7% had implementation and use of franchise-wide information technology systems written into contracts for new franchisees and in renewals of existing franchises. The franchisors were split 60.6% between services and 39.4% retail, with 50.4% of the services using or contemplating information technology for their franchise system, and 43.1% of retail.

Source: Adapted from Perry, Cavaye and Coote (2002:81-82).

Once you have described and motivated the sampling approach used in your study, the focus shifts to a description of how your data was collected.

8.2 DATA COLLECTION

You should discuss the following issues in the sub-section on data collection:

- Element 1: Briefly describe how you pre-tested the data collection instrument(-s) used in your study and mention the specific pre-testing method(-s) used (see Cooper & Schindler, 2006:384-385; 396-398).
- Element 2: Describe how the data was collected. This description should include:
  - A clear **description** of and **motivation** for the data collection method used,
  - A cross-reference to the final data collection instrument (e.g., survey questionnaire or discussion schedule) included as an annexure to the article,
  - A description of how the data were collected (i.e. of the data collection process),
  - An indication of whether incentives were used to encourage respondent participation,
  - An indication of the time period during which the data were collected.

Students following a **two-stage design** should discuss the data collection methods used in the different stages separately. You may use bulleted 4th level headings to structure your discussion.

You can motivate your decisions regarding a data collection method by:

- explaining that the chosen method is the only feasible option given the unique circumstances of your study; and/or
- showing that other experienced researchers have used a similar approach in studies on the same or a related topic (cite relevant sources to support your arguments in this regard).

Consider the following two examples:

Example 34:

[Element 1] The initial questionnaire was pre-tested with a convenience sample of 26 cruise vacationers using the collaborative participant pre-testing method described by Cooper and Schindler (2006:396). **[Element 2]** Data for the main study was collected during June to August 2002 with a mail survey (see Annexure A) following a modified version of Dillman's (1978) five-step model. Mail surveys have been used previously in studies on perceived value (cf. Yi & Jeon, 2003:229-240; Zaichkovsky, 2000:320-351). Two weeks after the initial mailing, a postcard was sent to respondents reminding them to complete the questionnaire. Follow-up surveys were sent to those respondents who had not returned their surveys within a one-month period. No incentives were provided to respondents to complete the questionnaire.

Source: Adapted from Duman and Mattila (2005:315).

Example 35:

[Element 1] The questionnaire (see Annexure A) was pre-tested using a convenience sample of approximately 50 female students and shoppers in Seoul, South Korea. Cooper and Schindler's (2006:396) collaborative participant pre-testing method was used. **[Element 2]** Data for the main study was collected over a two-month period during October and November 2002 via mall intercept surveys conducted at discount stores to obtain information directly from individual discount store shoppers. Before conducting surveys, each store manager's permission was obtained. To avoid the potential bias owing to the use of non-probability sampling, intercept surveys were conducted at various times of the day, two days of the week and one day on the weekend at each store. Trained interviewers approached individual shoppers who had finished their shopping tasks, either in a food court or at the entrance of the store and asked them to complete a questionnaire. A package of paper napkins worth about $1 was given to the participants as an incentive for participation.

Source: Adapted from Jin and Kim (2003:404-405).

Once you have discussed sampling and data collection, you need to describe the measures used in your study.

8.3 MEASURES

The sub-section on measures describes the measurement scales and questions used in the questionnaire. You may also use the heading "*Measurement*" for this section.

It is important to describe the measures in a systematic order. Feldman (2004:4) suggests that the best order is to first discuss the independent variables and then the dependent, moderating or mediating and control variables. This suggestion specifically applies to studies in which "causal" models have been tested. Alternatively, the measures should be discussed in the order in which they appear in the questionnaire.

Consider the following guidelines when compiling the section on measurement:

- Limit your description to the scales used to measure the **main** constructs/concepts in your study. The main constructs/concepts are usually those included in the hypotheses that you have stated.
- You do not have to describe the scales or questions used to measure demographic and basic grouping variables in detail. Simply list the demographic and grouping variables that you have measured.
- Where applicable, your description of a measurement scale should include the following information (for each measurement scale used):
    - A clear indication of the basic scale design used (e.g., a Likert, semantic differential or multiple-choice single response scale),
    - The number of scale items and scale points in a multiple item rating scale,
    - An indication of how scale points or response options were labelled/worded,
    - The number of sub-dimensions in a multiple-item rating scale and the aspects being measured by each sub-dimension,
    - An indication of what a high or low score on the particular scale means in terms of the construct being measured,
    - A cross-reference to the relevant question number(s) in the questionnaire,
    - A reference to the literature source from which the scale was taken or adapted,
    - An indication of how an existing scale, taken from the literature, was changed,
    - An indication of which items in a scale were reverse scored,
    - An indication of the method (i.e., averaging or summing) used to calculate composite (summated / total) scale scores,
    - An indication of the internal consistency reliability (i.e., Cronbach's alpha) of multiple item rating scales. Include and interpret the reliability analysis output tables generated by SPSS in an annexure to your article. Remember to include a cross-reference to this annexure in the text, and
    - A comparison of the Cronbach's alpha values obtain in your study with those obtained in previous studies in which the same measurement scale was used (if such comparative values are available).
- If you have developed multiple item measures for your study, you need to describe the process followed and, as a minimum, indicate that your scale has face and content validity (Cooper & Schindler, 2006:318-319). You also need to convince the reader that you have used a scientific scale development process, such as the process recommendations by Churchill (1979:64-79).

Carefully study the following examples from previous Honours research articles:

Example 36:

3.3 MEASURES

3.3.1 Brand sensitivity

Kapferer and Laurent's (1983:202-225) uni-dimensional brand sensitivity scale was used to assess respondents' brand sensitivity (see Annexure A, question 3). The first seven items of the scale (items 3.1 to 3.7) are five-point Likert scale statements. All the scale points of these seven items were labelled ranging from 1 ("Strongly disagree") to 5 ("Strongly agree"). The last item (item 3.8) required respondents to rank order five attributes – fabric, print, brand, price and colour – that consumers normally consider when purchasing a clothing item in terms of their importance. These five attributes had to be ranked from 1 ("Most important") to 5 ("Least important"). Items 3.3, 3.4 and 3.8 were reverse scored.

A reliability analysis of the eight-item brand sensitivity scale indicated that item 3.7 had to be removed as it had a low item-to-total correlation compared to the other items and decreased the Cronbach alpha value of the scale (see Table 23 in Annexure B). The Cronbach alpha coefficient for the remaining seven items is 0.89, which indicates acceptable internal consistency reliability. The Cronbach's alpha value of 0.89 is slightly higher than the value of 0.87 reported by Kapferer and Laurent (1983:223). The responses given by each respondent to the remaining seven items were averaged to provide an overall brand sensitivity score. A higher overall score indicates a higher level of brand sensitivity on the part of the respondent.

3.3.2 Peer influence

Bearden, Netemeyer and Teel's (1989:69-75) susceptibility to reference group influence scale was used to measure peers' influence on adolescents. This 12-item, seven-point Likert scale (see Annexure A, question 4) measures two dimensions of reference group influence, namely normative (items 4.1 to 4.8) and informational influence (items 4.9 to 4.12). All scale points were labelled ranging from 1 ("Strongly disagree") to 7 ("Strongly agree"). Following the approach used by Bearden *et al.* (1989:110), the responses given by each respondent were summed to provide an overall susceptibility to peer influence score ranging from 12 to 84. No scale items were reverse-scored. A higher overall score indicates a higher susceptibility to reference group influence. The Cronbach's alpha coefficient for the scale is 0.86, which indicates acceptable internal consistency reliability (see Annexure C). This alpha value is comparable to that reported in previous studies (cf. Bearden, *et al.,* 1989:111).

3.3.3 Parental influence

The influence of parents as socialisation agents was assessed through two separate single-item, five-point itemised rating scales developed specifically for this study (see Annexure A, question 5). All the scale points were numbered ranging from 1 ("Strongly disagree") to 5 ("Strongly agree"). A higher score on these scales indicate a higher level of parental influence. Since these are single-item scales, the internal consistency reliability could not be assessed.

3.3.4 Television viewing

The total number of hours that an adolescent watches television during the week (including weekends) was used as a proxy measure for the influence of television as a socialisation agent. This was measured through an open-ended question (Annexure A, question 6).

3.3.5 Demographic variables

The questionnaire also contained questions to determine a respondent's age, gender and school grade (see Annexure A, questions 7, 8 and 9).

Source: Adapted from Lachance, Beaudion and Robitaille (2003:48-49).

Note how the authors used numbered third-level headings to structure their description of the measures used in their study. You should use the same approach.

Example 37:

In some cases, a lengthy measurement scale measures many different sub-dimensions of an overall construct. In such a case, it is not necessary to describe each sub-dimension separately in detail. One should rather use a more concise approach as is illustrated below.

3.3 MEASURES

3.3.1 Sources of shopping enjoyment

A multi-dimensional measure based on the scales reported by Cox *et al*. (2005:253) and Arnold and Reynolds (2003:79-80) was used to determine the extent to which respondents were motivated by each of the eight sources of shopping enjoyment discussed earlier (see Annexure A, question 2). This measure included 32 Likert scale statements of which the scale points were labelled as follows: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly agree. The items were randomised in the questionnaire to minimise the impact of order bias.

Table 9 indicates which items measured each source of shopping enjoyment. It also identifies the items that were reverse-scored during reliability analysis and indicates the Cronbach's alpha reliability coefficient of each of the eight sub-dimensions in the scale.

Table 9: A description of the measurement scale used to measure the eight sources of shopping enjoyment

Sub-dimension	Items	Cronbach's alpha
Shopping to socialise	1.1, 1.9, 1.17, 1.26 and 1.30	0.85
Shopping for bargains	1.2, 1.13, 1.19 and 1.31	0.76
Shopping for gratification	1.3, 1.21, 1.23 and 1.29	0.72
Shopping for entertainment	1.4, 1.14 and 1.32	0.47
Shopping for others	1.5, 1.11, 1.24 and 1.28	0.71
Shopping to browse	1.6, 1.15 and 1.20	0.73
Shopping for exercise	1.7 and 1.12	0.77
Shopping for sensory stimulation	1.8, 1.16, 1.18, 1.25(r) and 1.27	0.80

Note:

(r) - Item 1.25 was reverse scored.

Items 1.10 and 1.22 were excluded because reliability analyses indicated that these two items detracted from the internal consistency reliability of their respective sub-scales.

A composite score was calculated for each of the eight sub-dimensions by averaging respondents' answers across the items in each sub-dimension. The higher a respondent's composite score on a particular sub-dimension, the more he/she is influenced by that particular source of shopping enjoyment. Since this measure of shopping enjoyment was developed by combining the existing scales reported by Cox *et al*. (2005:253) and Arnold and Reynolds (2003:79-80), the Cronbach alpha values obtained in this study could not be compared to previous research.

3.3.2 Demographic variables

The demographic variables that were measured include gender, race and age (see questions 4, 5 and 6 in Appendix A).

Once you have discussed the methodology used in your study, the focus shifts to reporting your results.

9 RESULTS

The results section (recommended length: 1000 - 1500 words) summarises the data collected for a study in the form of descriptive statistics and also reports the results of relevant inferential statistical analyses (e.g., hypothesis tests) conducted on the data. (American Psychological Association, 2001:20). In short articles or reports of single empirical studies, the results and discussion sections are sometimes combined (Bem, 2003:10).

You need to report the results in sufficient detail so that the reader can see which statistical analyses were conducted and why, and to justify your conclusions. Mention all relevant results, including those that are at odds with the stated hypotheses (American Psychological Association, 2001:20).

There is no fixed recipe for presenting the findings of a study. We will, therefore, first consider general guidelines and then turn our attention to options for reporting descriptive statistics and the results of hypothesis tests.

9.1 GENERAL GUIDELINES FOR REPORTING RESEARCH RESULTS

- You should present your findings as **concisely** as possible and still provide enough detail to properly justify your conclusions, as well as enable the reader to understand exactly what you did in terms of data analysis and why.
- You may assume that the reader has a working knowledge of basic statistics (i.e., typically the contents covered in a 1st year statistics course). It is, therefore, not necessary to discuss basic statistical procedures in detail. You may, however, have to explain advanced multivariate statistical methods (e.g., repeated measures ANOVA, two- or n-way ANOVA, multiple regression analysis and factor analysis) in non-technical terms.
- Figures and tables often allow one to present findings in a clear and concise manner. However, consider the following:
    - Stick to the following “golden rule” when using tables and figures: If you can say it in a sentence or paragraph, do so. Use tables to present detailed findings. Reserve figures for the really important stuff that has to be portrayed visually. **DO NOT repeat the same information in a table and a figure**.
    - You should ideally not have more than 3 – 5 tables and 1 – 2 figures in the body text of your article.

- Figures take up valuable space in a research article and should only be used when it is essential to report the most important findings in a graphical format.
- A reader should not have to look at a table or figure to follow the discussion of the results in the text. The information in a table or figure merely corroborates or supplements the discussion (Perry, *et al*., 2003:661). Information presented in a table of figure should, therefore, always be summarised and discussed in the text (Varadarajan, 1996:5).
- Always provide clear cross-references to tables and figures in the text. These cross-references should always precede the specific table or figure (also see the technical care guidelines on working with tables and figures in the document templates on the NME 703 course web site).
- You should, in the text, guide the reader through a figure or table by pointing out the results of interest: "As shown in the first column of Table 2, men produced more tears (2.33 cc) than women (1.89 cc). Of particular interest is the volume of tears produced when both a mother and father watched the same scene (rows 3 and 4) …" (Bem, 2003:12).
- While it is important to walk the reader through a table or figure in the text in order to point out important results, a table/figure should also stand on its own with a caption at the top and notes at the bottom to allow the reader to understand its purpose and contents without having to read the text (Perry, *et al.*, 2003:661).
- Make sure that your tables and figures are properly formatted in accordance with the technical care guidelines on working with tables and figures contained in the document templates on the NME 703 course web site.

- You should always interpret all research findings for the reader. Do not leave it to the reader to try and figure out what the numbers in a table or figure mean (Bem, 2003:12). Varadarajan (1996:5), however, warns that findings are often susceptible to alternative interpretations. You, therefore, need to carefully consider all the possible ways in which your results can be interpreted.
- To save space, you may use accepted statistical abbreviations, such as those listed in Table 10, in tables, figures and in brackets in the text when reporting statistical findings. All statistical abbreviations that are not Greek letters are italicised (American Psychological Association, 2001:101). If you are concerned that readers may misunderstand a specific abbreviation, use the complete term the first time with the abbreviation in brackets or add a note to the bottom of a table or figure to explain the abbreviations used.

Table 10: Common statistical abbreviations and symbols recommended by the American Psychological Association

Abbreviation / symbol	Definition
ANOVA	Analysis of variance
df	Degrees of freedom
f	Frequency
f_e	Expected frequency
H_0 or $H_{1(null)}$	Null hypothesis

Abbreviation / symbol	Definition
H_1 or $H_{1(alt.)}$	Alternative hypothesis (where the number 1 can be changed to the number of the specific hypothesis (e.g., H_2 or $H_{2(alt.)}$; H_3 or $H_{3(alt.)}$)
M	Mean (average)
Mdn	Median
n	Sample size or sub-sample sizes
N	Population size
p	Probability or *p*-value generated by a significance test
P	Percentile
r	Pearson's product moment correlation coefficient
r^2	Pearson's product moment correlation squared, coefficient of determination
r_s	Spearman's rank order correlation coefficient
R^2	Coefficient of multiple determination (in regression analysis)
SD	Standard deviation
t	Computed value of the test statistic of a *t*-test
α	Cronbach's alpha coefficient or the significance level against which the *p*-value of a significance test is judged
χ^2	Computed value of the test statistic of the chi-square test

Source: Adapted from American Psychological Association (2001:141-144).

These general principles apply whenever you report descriptive or inferential statistics. The next section focuses on reporting descriptive statistics.

9.2 REPORTING DESCRIPTIVE STATISTICS

The descriptive statistics that you have to report will, primarily, be determined by your research objectives, the level of measurement of the variables involved and by the requirements of your study leader. Consider the following guidelines:

- You have to report and interpret appropriate univariate descriptive statistics for **all** the questions, scales and scale items, as well as for all composite (total) scale scores used in your study.
- Univariate descriptive statistics should be presented in the same order as that of the questions in your data collection instrument on which they are based.
- Make sure that the specific univariate descriptive statistics you report are appropriate given your research objectives and the nature (i.e., level of measurement) of your data (see Annexure G of the NME 703 study guide; Diamantopoulos & Schlegelmilch, 2000:Chapter 7).
- You have to be selective when choosing which specific univariate descriptive statistics to report for data at a given level of measurement. SPSS, for example, routinely calculates 12 different descriptive measures for data at an interval or ratio level of measurement in its "Explore" function. DO NOT report all 12 the available options! Choose those that are most appropriate and that you are best able to interpret.

- Whenever you report a mean (average), it should be accompanied by the associated standard deviation.
- If the focus of your research objectives is on the composite (total) scale scores derived from multiple item measures, then you should first report relevant univariate descriptive statistics for the composite scores before reporting univariate descriptive statistics for the individual scale items involved. In other words, first describe the forest before you describe the individual trees. You may decide to only show univariate descriptive statistics for the composite (total) scores in the body text of your article and report univariate descriptive statistics for the individual items in an appendix.
- If the focus of your research objectives is on comparing the scores of different sample sub-groups (e.g., the mean scores of males compared to the mean score of females), then you may show univariate descriptive statistics for each of the sub-groups along with the descriptive statistics for the overall sample in a single table.
- **Never paste the output tables generated by SPSS directly into an article.** These tables first have to be edited to remove unnecessary entries. Never use shortened variable names (e.g. TOTSAT) in a table or figure, as these labels mean nothing to the reader. Rather use more descriptive labels (e.g., Total satisfaction) or the wording of specific question items.
- You do not have to report univariate descriptive statistics for screening questions (i.e., questions used to determine whether a respondent qualifies for participation in a study) if the responses to such questions were not used in any subsequent analyses.
- Where appropriate, relate mean (average) scores back to the original rating scale. For example, remind us that a mean score of 3.41 on a five-point rating scale of verbal aggression lies between “slightly aggressive” and “moderately aggressive”.
- Where appropriate, comment on the managerial implications of your descriptive findings. However, when doing so, you should use a speculative tone as you can only make definitive pronouncements if you have tested for statistical significance. For example:

  Wrong: Descriptive statistics indicate that restaurant patrons prefer pecan pie (*M* = 3.45, *SD* = 1.11) over cherry pie (*M* = 3.00, *SD* = 0.80). The implication for management is …

  Correct: Descriptive statistics suggest that restaurant patrons prefer pecan pie (*M* = 3.45, *SD* = 1.11) over cherry pie (*M* = 3.00, *SD* = 0.80). The implication for management is …
- In cases where scale items were reverse-scored, the univariate descriptive statistics should be based on the reverse-scored data, not on the original data.
- Items that were deleted during reliability analyses should be excluded from all descriptive statistics.

We will now consider different options for presenting descriptive statistics.

9.2.1 Univariate descriptive statistics for variables at a nominal or ordinal level of measurement

Univariate descriptive statistics refer to descriptive statistics that are reported for single variables in a dataset. For example, if we prepare a frequency count on the *gender*

variable to determine the number of males and females in a sample, the frequency count represents a univariate descriptive statistic for the *gender* variable. Similarly, if we calculate the mean (average) response to a single statement in a Likert scale, this mean represents a descriptive statistic for the variable representing the specific statement. Univariate descriptive statistics, therefore, deal with one variable at a time.

Univariate descriptive statistics for variables measured at a nominal and ordinal level of measurement can easily be presented in a table. Nominal and ordinal variables normally refer to variables measured on dichotomous, multiple-choice single response, multiple-choice multiple response, constant sum or paired comparison scales (see Cooper & Schindler, 2006:337-338; 368-373). In most cases, frequency counts are the only univariate descriptive statistics required for such variables (also see Annexure G of the NME 703 study guide). In some cases, one may, however, also want to report the mode and/or median or present descriptive findings in the form of a pie- or bar-chart.

Consider the following examples:

Example 38:

This example shows univariate descriptive statistics for variables measured at a nominal and ordinal level of measurement. The statistics are reported for the total sample.

Table 11 provides a profile of the respondents in terms of selected cruise experience and travel behaviour variables. The results indicate that 28.8% of respondents are seasoned cruise liner travellers who have experienced five or more cruise vacations. However, 21.7% of respondents have only had one previous cruise vacation experience. Most cruise vacations are taken during the period January to March (9.8%) and October to December (10.2%). Nearly 70% of respondents travelled in groups of 1-5 people. These groups mainly consisted of couples/families (55.2%) and friends (38.6%). Forty percent of cruise vacations were aboard ships that carry 1200 – 1999 passengers, while nearly 80% of respondents reported that their most recent cruise vacation lasted 1 to 7 days. The most frequently used cruise lines were Royal Caribbean (16.4%), Carnival (15%) and Norwegian (13.8%). Together, these three cruise lines capture 45.2% of the cruise vacation market.

Table 11: Traveller profile of respondents

Cruise experience variables	*n*	%
Total cruise vacations experienced		
Once	83	21.7
Twice	74	18.6
Three times	66	15.7
Four times	59	15.2
Five times or more	110	28.8
Total	392	100.0
The month most recent cruise vacation was taken		
January-March	130	9.8
April-June	95	8.3
July-September	67	6.2
October-December	95	10.2
Total	387	98.6

Cruise experience variables	*n*	%
Number of people travelled with		
1-5	267	68.8
6-10	52	12.4
11-15	12	2.9
16-20	12	3.1
21-25	7	1.7
26 and more	42	5.7
Total	392	94.5
Group composition		
Single	21	5.2
Couple-family	219	55.2
Interest group-friends	148	38.6
Total	388	99.0
Size of the ship		
0-199	12	3.1
200-499	16	4.0
500-1199	83	21.0
1200-1999	155	40.2
2000 and more	119	29.8
Total	385	98.1
Days most recent cruise vacation lasted		
1-7	305	77.8
8-15	78	20.0
16 and more	5	1.2
Total	388	99.0
Cruise line travelled with		
Carnival	58	15.0
Celebrity	18	5.0
Disney	9	2.4
Holland America	38	9.3
Norwegian	56	13.8
Princess	40	11.2
Royal Caribbean	63	16.4
Other	42	10.2
Total	324	83.3

Note: The total percentages do not add up to 100% because of missing responses.

The high number of missing observations on the last question regarding the cruise line respondents travelled with was due to confusion caused by the term “cruise company” in the questionnaire. A number of respondents left the question blank because of confusion between the cruise line and the travel agency from whom they had purchased their vacation.

Source: Adapted from Duman and Mattila (2005:317).

Example 39:

This example also shows univariate descriptive statistics for variables measured at a nominal and ordinal level of measurement. In this case, descriptive statistics are reported for two sample sub-groups (males and females) as well as for the total sample guided by the following research objective:

- To determine whether there are differences in the size of the tips left by male and female customers in restaurants and coffee shops.

Table 12 below shows a cross-tabulation between gender and how much the respondent tipped (expressed as a percentage of the bill size). The results, for example, indicate that 27.8% of the male respondents have left the customary 10% tip compared to 37.5% of the female respondents. Males apparently are more inclined to leave large tips than females. 47.0% of the male respondents indicated that they have left an 11%-15% tip compared to 41.7% of the female respondents. Similarly, 14.8% of the male respondents indicated that they have left a tip of more than 15% compared to 8.3% of the female respondents.

Table 12: A cross-tabulation of gender with percentage tipped (*n* = 163)

		Male	**Female**	**Total**
How much did you tip?	Less than 10%	12 10.4%	6 12.5%	18 11.0%
	10%	32 27.8%	18 37.5%	50 30.7%
	11%-15%	54 47.0%	20 41.7%	74 45.4%
	More than 15%	17 14.8%	4 8.3%	21 12.9%
Total		115 100%	48 100%	163 100%

9.2.2 Univariate descriptive statistics for rating scales

Depending on the research objectives of a particular study, it may in some cases be necessary to report descriptive statistics on the individual items in a multiple-item rating scale (such as a Likert or semantic differential scale), while in other cases it may only be necessary to report descriptive statistics on the composite (total) scores of constructs measured with multiple-item rating scales. Consider the following two examples:

Example 40: Descriptive statistics on individual items in a rating scale

The mean (*M*) irritability ratings of the uncovered environment-based shopping irritants are presented in Table 13 below. The highest irritation is associated with “high-pressure selling” (*M* = 4.07, *SD* = 1.10) and the lowest irritation is associated with “finding his/her way in a large shopping centre” (*M* = 2.23, *SD* = 1.21). On average, social factors and ambient factors are perceived as most irritating (overall *M* = 3.40 and 3.37 respectively) followed by design factors (overall *M* = 2.87).

Table 13: Perceived irritability of components of the shopping environment (*n* = 281)

Shopping Irritants	*M*	*SD*
Ambient	3.37	1.25
Store is not clean	3.54	1.33
Too hot inside the store or the shopping centre	3.38	1.08
Music inside the store is too loud	3.29	1.30
Bad smell in the store	3.27	1.28
Design	2.87	1.16
No mirror in the dressing room	3.49	1.27
Unable to find what one needs	3.32	1.06
Directions within the store are inadequate	2.98	1.08
Arrangement of store items has been changed	2.60	1.14
Store is too small	2.52	1.19
Finding his/her way in a large shopping centre	2.23	1.21
Social	3.40	1.18
High-pressure selling	4.07	1.10
Being deceived by a salesperson	3.80	1.38
Negative attitude of sales personnel	3.61	1.26
Crowding	3.43	1.04
Unavailability of sales personnel	3.38	1.07
Sales personnel not listening to client's needs	3.35	1.17
Indifference of sales personnel	2.86	1.28
Turbulent kids around	2.71	1.14

Notes: Scale values range from 1 ("No irritation") to 5 ("High irritation"); the lower a mean score, the higher the level of irritation associated with that particular aspect.

M = mean, *SD* = standard deviation

Assuming that these irritants are representative of the environmental aspects that displease shoppers in general, one can conclude that retailers' primary efforts should be directed at eliminating the irritations caused by ambient and social factors, while adjustments with regard to design factors should be of lesser concern. These are obviously general conclusions that do not preclude the possibility of orienting the efforts on the most irritating and easiest-to-improve aspects of the shopping environment (e.g., the sales personnel). However, the generalisability of these conclusions across different shopper characteristics needs to be verified.

Source: Adapted from D'Astrous (2000:152).

There are several noteworthy features in the preceding example:

- The authors included an indication of the effective sample size (*n*) on which the statistics are based in the table caption. The fact that the effective sample size is included in the caption suggests that the same sample size applies to all the statements in the scale. In cases where the effective sample size differs from item to item (or from sub-dimension to sub-dimension) because of missing values, this should be indicated in a separate column.
- Note that the authors provided means (i.e., averages) and standard deviations for each of the individual items in the scale, as well as means and standard deviations

for the composite (total) scale scores of each of the three scale sub-dimensions (i.e., ambient, design and social). When reporting a mean, one should always report its corresponding standard deviation.

- The authors first reported the relevant univariate descriptive statistics based on the composite (total) score of a particular scale sub-dimension and then the same statistics for each of the individual items in the sub-dimension. In other words, they first described the forest before zooming in on the individual trees.
- In order to improve the interpretability of their findings, the authors sorted the statements in each sub-dimensions in descending order (i.e., from large to small) based on their mean scores. This allows the reader to easily see which item obtained the highest and which the lowest mean score in a particular sub-dimension.
- The authors further facilitated the interpretation of their findings by using the exact statement wording that was used in their questionnaire. In cases where the statements are very long, appropriate abbreviated wording may be used. It is, however, not correct to merely use question numbers when presenting the results of analyses conducted on the items in a rating scale.
- The author included a footnote after the table on the scale labels and values used to assist the reader in interpreting the meaning of a high or low mean score. Note that, in this case, the higher the mean score, the higher the level of irritation associated with a particular aspect. It is best to construct measurement scales or reverse-score responses in such a way that a high mean score indicates a high level on the specific construct being measured.
- The author also discussed the managerial conclusions of the descriptive findings.

Example 41: Descriptive statistics on summated scores

Where the focus of a study is on the relationship (i.e., correlation) between a number of constructs, a researcher will focus on descriptive statistics based on the composite (total) scores representing constructs that were measured on multiple item ratings scales; not on the descriptive statistics for the individual items measuring each construct. Feldman (2004:3) recommends that, in this situation, one should always include a correlation matrix with the means, standard deviations and Cronbach's alphas of all the constructs (including all independent, dependent, moderating, mediating and control variables). Consider the following example:

Table 14 contains the means, standard deviations, correlations and Cronbach's alpha reliability coefficients of the constructs measured in this study.

Table 14: Means, standard deviations, correlations and reliability coefficients (n = 200)

Variable	Mean	Std. Deviation	Satisfaction	Value attainment	Positive mood	Loyalty
Satisfaction	7.3	1.5	(0.92)	0.14*	0.43**	0.69**
Value attainment	93.1	31.7		(0.93)	0.45**	0.31**
Positive mood	65.7	12.7			(0.89)	0.56**
Loyalty	35.0	7.4				(0.84)

Notes: Reliability coefficients in parenthesis; * $p < 0.05$, ** $p < 0.01$

Source: Adapted from de Ruyter and Bloemer (1999:329).

As Table 14 indicates, the Cronbach's alpha of the satisfaction construct is 0.92, while the correlation coefficient of the correlation between satisfaction and loyalty is 0.69. The two asterisks next to the value of 0.69 indicate that this correlation is significant at a 1% level of significance (in other words, $p < 0.01$). The other values in the table can be interpreted in a similar manner.

9.2.3 Univariate descriptive statistics for ratio-scaled variables

One should report the following univariate descriptive statistics for numeric variables measured on ratio scales: sample size, minimum, maximum, mean (average) and standard deviation. If the specific ratio-scaled variable is an important variable in a study, one could also consider reporting a histogram showing the spread of responses received on this variable. Consider the following example:

Example 42: Univariate descriptive statistics for ratio-scaled variables

Two Honours students included the following question in the questionnaire of their study on the tipping behaviour of customers at Wimpy outlets:

Q8. During **this visit** to Wimpy, approximately what was the bill size? R _____

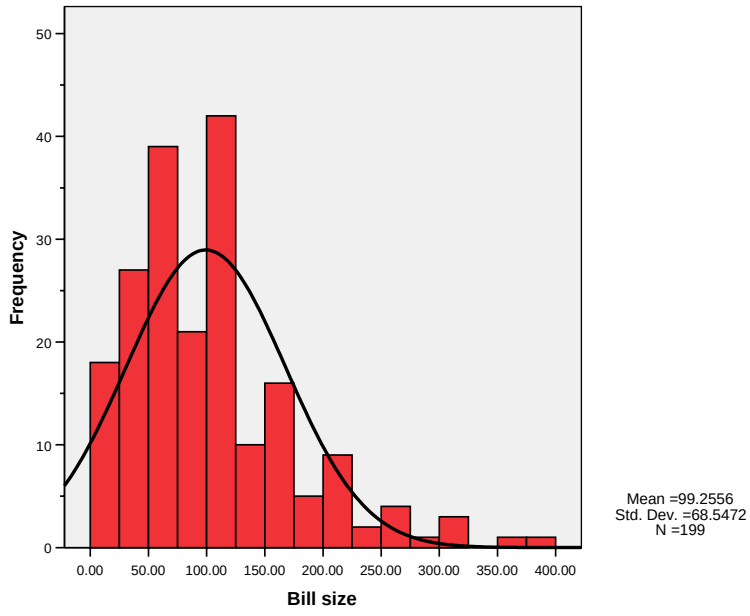
Since this was an important question, the students reported the following univariate descriptive statistics:

"Table 15 below shows univariate descriptive statistics for the responses to question 8. This question focussed on the size of the bill respondents received during their last visit to a Wimpy outlet. The average bill size was R98.85. Figure 3 below shows the spread of responses to this question.

Table 15: Univariate descriptive statistics for question 8 (*n* = 200)

	Minimum	Maximum	*M*	*SD*
Bill size (Rands)	8.00	385.20	98.85	68.62

Figure 3: A histogram showing the spread of answers to question 8 (n = 200)



9.2.4 Other descriptive statistics

Depending on the nature of your study and research objectives, you may also want to report additional descriptive statistics, such as comparative descriptive statistics for sample sub-groups, cross-tabulations or graphs. Consider the general principles mentioned earlier (see section 9.1) and the following examples:

Example 43: Descriptive statistics for sample sub-groups only

The participants were 46 male and 44 female undergraduate university students. Table 16 presents descriptive statistics on the participants' high school and university grade point average (GPA) scores by gender. The means and standard deviations of male and female high school GPA scores are similar. However, on average, women have higher university GPAs than men.

Table 16: Grade point averages and standard deviations of male and female participants

	Male (n = 46)		Female (n = 44)	
	M	*SD*	*M*	*SD*
High school GPA	2.53	0.92	2.55	0.82
University GPA	2.25	0.40	2.73	0.37

Source: Green, Salkind and Akey (1999:133).

Note that the authors did not provide means and standard deviations for the total sample in Table 16. Since the main objective of their study was on comparing male and female participants, they only focused on comparing the results of the two gender sub-groups.

Where necessary, one can, however, include descriptive statistics for the total sample in a table along with descriptive statistics for sample sub-groups. Consider the following example:

Example 44: Descriptive statistics for sample sub-groups and for the whole sample in one table

"Table 17 below shows the means and standard deviations of the "under 55" and "55 and older" age groups on questions 7 to 15. The means and standard deviations for the total sample are also shown for each question. As the results indicate, the mean scores of the two age sub-groups differ most for question …"

Table 17: Means and standard deviations of responses to questions 7 to 15 for the "under 55" and "55 and older" sub-groups as well as for the total sample

	Under 55			**55 and older**			**Total sample**		
	n	***M***	***SD***	***n***	***M***	***SD***	***n***	***M***	***SD***
7. I expect to be able to select my primary care doctor from a large number of choices.	259	1.54	0.69	266	1.51	0.66	525	1.52	0.68
8. I expect to see a doctor rather than a physician's assistant during my visit.	258	1.46	0.69	267	1.44	0.68	525	1.45	0.69

	Under 55			55 and older			Total sample		
	n	***M***	***SD***	***n***	***M***	***SD***	***n***	***M***	***SD***
9. I expect to see the same doctor every visit.	258	1.48	0.65	269	1.48	0.63	527	1.48	0.64
10. I expect to know my doctor's background (education, training, etc.) before my first visit.	257	1.79	0.79	269	1.84	0.81	526	1.81	0.80
11. I expect my doctor to be board certified in his/her specialty.	259	1.29	0.49	269	1.38	0.61	528	1.33	0.56
12. It is important that my doctor listen carefully to me.	258	1.18	0.39	269	1.25	0.47	527	1.22	0.43
13. It is important that my doctor answer all my questions in terms that I can understand.	259	1.19	0.43	269	1.25	0.46	528	1.22	0.45
14. I expect my doctor to call me at home after my office appointment to follow up on treatment.	255	2.38	1.01	261	2.49	1.00	516	2.43	1.01
15. If my doctor left the health plan that I currently belong to, I would try to follow him/her.	241	2.72	1.11	238	2.58	1.07	479	2.65	1.09

Example 45: Cross-tabulations

Table 18 shows a cross-tabulation between gender and smoking behaviour. The row percentages indicate that 17.9% of males and 20.6% of females smoke.

Table 18: Cross-tabulation of gender and smoking behaviour (*n* = 436)

		Smokers	**Non-smokers**	**Total**
Male	Frequency Row percentage	33 17.9%	151 82.1%	184 100%
Female	Frequency Row percentage	52 20.6%	200 79.4%	252 100%
Total	Frequency Row percentage	85 19.5%	351 80.5%	436 100%

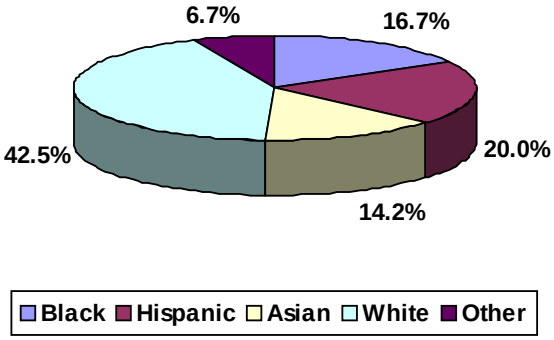
Source: Pallant (2001:258-259).

When reporting a cross-tabulation, you have to clearly indicate the type of percentages (i.e., row percentages, column percentages or percentages based on the total sample size) being displayed. Also interpret the percentages so that the reader is clear on how the percentages should be understood (see Cooper & Schindler, 2006:482-486).

Example 46: Graphs

The sample consisted of 120 respondents, approximately half of whom were women (*n* = 62), while the rest were men (*n* = 58). Figure 4 below shows the percentages of respondents in each ethnic group. Nearly 43% of the sample was White and the rest of the respondents were relatively evenly distributed across Blacks (17%), Hispanics (20%), Asians (14%) and others (7%).

Figure 4: Percentage of respondents in each ethnic group (n = 120)



Make sure that all graphs and figures are properly designed in accordance with the technical care requirements outlined in the document templates on the NME 703 course web page.

Once you have reported appropriate descriptive statistics, the focus shifts to hypothesis testing.

9.3 REPORTING THE RESULTS OF HYPOTHESIS TESTS

The results of a basic hypothesis test (such as an independent samples *t*-test) are often reported very concisely in an academic article. Consider the following example:

Example 47: Independent samples *t*-test

An independent samples *t*-test was conducted to test the hypothesis that students talk more under high-stress conditions (i.e., when anticipating questions from a panel of subject specialists) as opposed to low-stress conditions (i.e., when anticipating taking a multiple choice test). The test was significant ($t(28) = 2.43$, $p = 0.022$), but the results were counter to the research hypothesis. Contrary to what was expected, students in high stress conditions on average talked less ($M = 22.07$, $SD = 27.14$) than those in low stress conditions ($M = 45.20$, $SD = 24.97$).

Source: Green, Salkind and Akey (1999:154).

We recommend a more detailed approach for reporting the results of hypothesis tests in an article that has to be submitted for academic evaluation[4]. In terms of this approach, your discussion of hypothesis test results should always include the following nine elements:

[4] All Honours students in the Department of Marketing and Communication Management, as well as the Department of Tourism Management must use the more detailed approach discussed here. Also see the handout of the 2nd Data Analysis Workshop.

Element 1: An introductory paragraph in which the reader is reminded about the core issue tested in the specific hypothesis. The paragraph should also introduce the formal formulation of the null and alternative hypotheses involved.

Element 2: A correct formulation of the null and alternative hypotheses you have tested and an indication of the level of significance at which the hypothesis was tested.

Element 3: Relevant descriptive statistics or graphs (where appropriate) (NB: see Table 7 in Annexure L of the NME 703 study guide). You should interpret the descriptive statistics and clearly indicate whether these statistics are in line or at odds with the expectations contained in the stated hypothesis.

Element 4: An indication of the parametric and/or non-parametric significance tests that you have considered. Include an in-text reference to a source that supports your choice of appropriate tests.

Element 5: An indication of the assumptions of the specific significance tests that you have considered and a discussion of the process you followed to test the assumptions as well as the conclusions you have reached in this regard. Include and interpret the relevant SPSS output tables and graphs in an appendix to your article. Also include in-text references to support your discussion of the assumptions and of the tests used to evaluate them.

Element 6: A clear indication of your final choice of an appropriate statistical significance test.

Element 7: An edited copy of the output table generated in SPSS for the chosen significance test with a clear indication of the relevant *p*-value. This output should be included in the main body of the article.

Element 8: Your interpretation of the test results based on the format recommended by the American Psychological Association (see Green, Salkind & Akey (1999), Green & Salkind (2003) or Green & Salkind (2005) for examples).

Element 9: A discussion of the managerial implications of your findings (where appropriate).

Consider the following example:

Example 48:

Hypothesis 2

[Element 1] The second hypothesis (H_2) focused on differences in the degree of "old school" sport orientation between the genders. The null and alternative hypotheses of H_2 are stated below:

[Element 2]

H_0: There is no difference in the "old school" sports orientation of men and women.
H_2: Women have a stronger "old school" sports orientation than men.

This one-tailed (directional) hypothesis was tested at a 5% level of significance (i.e., $\alpha = 0.05$).

[Comment: Note that the authors specifically identified this as a one-tailed (directional) hypothesis. They also clearly specified the level of significance in percentage and decimal terms. Use the Insert, Symbol function in MS Word to insert the α symbol. You will find this symbol under the standard 'Symbol' font.]

[Element 3] The descriptive statistics in Table 19 indicate a small difference (6.53 – 6.42 = 0.11) in the mean old school sports orientation scores of the male (M = 6.53, SD = 0.97) and female (M = 6.42, SD = 1.01) sub-samples. Since a higher score on the "old school" sports scale indicates a stronger "old school" sports orientation, these descriptive statistics suggest that, contrary to the expectation in hypothesis H_2, men seem to have a slightly stronger "old school" sports orientation than women.

Table 19: Descriptive statistics for the male and female sub-samples on the overall "Old School" sports orientation scale

Gender	*n*	*M*	*SD*
Men	185	6.53	0.97
Women	84	6.42	1.01

[Element 4] Since overall "old school" sports orientation was measured at an interval level of measurement, the appropriate parametric significance test is the independent samples *t*-test. If its assumptions cannot be satisfied, the Mann-Whitney *U* test can be used as a non-parametric alternative (Pallant, 2001:260).

[Comment: Note the reference to the source that backs up the statement that the Mann-Whitney U test is the appropriate non-parametric alternative to the independent samples t-test.]

[Element 5] The independent samples t-test has two assumptions: First, it assumes that the variable on which the two groups are compared has a normal distribution in both populations. Second, it assumes that the variable on which the two groups are being compared has an equal variance in both groups (Pallant, 2001:260).

The assumption of normality was assessed through the Kolmogorov-Smirnov test for normality, as well as through a visual inspection of histograms and normal probability plots (Pallant, 2001:261). These tests indicate slight departures from normality in both sub-samples (see Annexure C, Tables 47-48 and Figures 11-12).

[Comment: Note the in-text references to the source by Pallant (2001) to support the description of the assumptions and the choice of test through which to test the assumptions.

You must include and <u>interpret</u> the relevant SPSS output tables and graphs in an <u>appendix</u> to your article. Remember to include a cross-reference to the specific tables and figures in the relevant annexure in the text.]

[Element 6] Since the independent samples *t*-test is robust for mild departures from normality with large samples (Pallant, 2001:172), it was used to test H_2. The results of the *t*-test are presented in Table 20 below.

[Comment: Note the reference to the source that backs up the statement that the t-test is robust.]

[Element 7]

Table 20: Results of an independent samples t-test for differences in the mean scores of the male and female sub-samples on the overall "Old School" sports orientation scale

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	1.12	0.29	-0.85	267	0.396	-0.11	0.13	-0.37	0.15
Equal variances not assumed			-0.84	154.73	0.404	-0.11	0.13	-0.37	0.15

[Element 8] As is indicated in columns 2 and 3 of Table 20, the results of Levene's test for equality of variances (p = 0.29) indicate that the *t*-test <u>assuming equal variances</u> should be interpreted.

These results appear in the first row of Table 20 labelled “equal variances assumed”. The results of the *t*-test assuming equal variances ($t(267) = -0.85$, $p=0.396$) indicate that there is no significant two-tailed difference in the means scores of the male and female sub-samples on the overall “Old School” sports orientation scale.

[Comment: All p-values produced by SPSS represent two-tailed tests unless otherwise noted.]

Since H_2 is a directional (one-tailed) hypothesis and since the descriptive statistics in Table 20 suggest that the findings are at odds with the expectation formulated in H_2, the **one-tailed** *p*-value of the independent samples *t*-test was calculated as follows:
one-tailed *p*-value = 1-(two-tailed p-value / 2)
one-tailed *p*-value = 1-(0.396 / 2)
one-tailed *p*-value = 0.802

The one-tailed *p*-value of 0.802 is larger than the significance level of 0.05. H_2 can, therefore, not be accepted.

[Comment: One can also say: “$H_{2(null)}$ can, therefore, not be rejected in favour of the stated alternative hypothesis, $H_{2(alt)}$.” You can, however, never “accept” the null hypothesis as it is always assumed to be true unless the test results indicate otherwise. A null hypotheses can only be “rejected” if $p<0.05$ or it “cannot be rejected” if $p\geq0.05$.]

These findings, therefore, indicate that women do not have a stronger “old school” sports orientation than men. In fact, there is no significant difference in the “old school” sports orientation scores of males and females in the population examined in this study.

[Element 9] This suggests that advertisers of sport products can use the same general communication themes regarding sports orientation when communicating with male and female audiences.

Consider the following when reporting the results of a hypothesis test:

- Element 2: Make sure that the null and alternative hypotheses are formulated (i.e., worded) correctly.
- Element 3: See Annexure L of the NME 703 study guide for guidance on which descriptive statistics to report.
- Element 4: See Annexure L of the NME 703 study guide for guidance on choosing appropriate parametric and/or non-parametric significance tests.
- Element 5: You have to include the relevant SPSS output tables and graphs as an appendix to your article. Make sure that you clearly interpret the results presented in this appendix. Do not leave it to the reader to interpret the output tables and graphs in the appendix on your behalf. Also remember to include a cross-reference to the specific tables and figures in the appendix in the text.
- Element 6: You should include an in-text reference to an appropriate source to substantiate your choice of a particular significance test.
- Element 7: You should edit the SPSS output table to:
    - Add leading zeros to decimal values smaller than one (e.g., 0.29 instead of .26).
    - Standardise the number of decimals shown. All decimal values, except *p*-values, should be rounded off to two decimal places. Round *p*-values to three decimal places.

- SPSS sometimes displays a *p*-value as .000. This actually implies that the true p-value is smaller than 0.001 as only three decimals are shown. In this situation, you may report $p < 0.001$ in the text.
- Change abbreviated variable names/labels in the SPSS output table to more descriptive labels (e.g., TOT_OS to "Overall Old School Orientation score").

- Element 8 presents the results of the hypothesis test in the format recommended by the American Psychological Association (APA). All the information necessary to use the APA style appears in the SPSS output table reported as Element 7. The specific format of Element 8 will depend on the hypothesis test used. Consider the following examples:

Example 49:

- Chi-square test of independence

  General format: χ^2(degrees of freedom, *n* = number of cases) = value of χ^2 statistic, *p* = *p*-value (rounded to 3 decimals)

  The results of a chi-square test for independence with Yates' correction for continuity, however, indicate that there is no relationship between gender and smoking behaviour, $\chi^2(1, n = 436) = 0.34$, $p = 0.562$.

- *t*-tests

  General format: *t*(degrees of freedom) = value of *t*-statistic, *p* = *p*-value (rounded to 3 decimals)

  One-sample *t*-test: Honours students taking Research Methodology reported studying more hours for tests ($M = 121$, $SD = 14.2$) than did Honours students in general, $t(33) = 2.10$, $p = 0.034$.

  Paired-samples *t*-test: The results indicate that French chefs have a significant preference for pecan pie ($M = 3.45$, $SD = 1.11$) over cherry pie ($M = 3.00$, $SD = 0.80$), $t(15) = 4.00$, $p < 0.001$.

  Independent samples *t*-test: UP students taking Research Methodology 703 had higher IQ scores ($M = 121$, $SD = 14.2$) than those taking Research Methodology 702 ($M = 121$, $SD = 14.2$), $t(44) = 1.23$, $p = 0.090$.

- One-way ANOVA

  General format: *F*(Between groups degrees of freedom, Within groups degrees of freedom) = value of *F* statistic, *p* = *p*-value (rounded to 3 decimals)

  A one-way ANOVA was conducted to explore the impact of age on levels of optimism, as measured by the Life Orientation (LO) scale. Respondents were divided into three groups according to their age (group 1: 29 or younger; group 2: 30-44; group 3: 45 and older). There was a significant difference in the LO scores for the three age groups, $F(2, 432) = 4.6$, $p = 0.01$. Post hoc comparisons using the Tukey HSD test indicate that the mean score for group 1 ($M = 21.36$, $SD = 4.55$) was significantly different from that of group 3 ($M = 22.96$, $SD = 4.49$). Group 2 ($M = 22.20$, $SD = 4.15$) did not differ significantly from either group 1 or 3.

- Correlations

  General format: r or r_s (degrees of freedom, i.e. n – 2) = value of correlation coefficient, p = p-value

  A medium strength positive correlations was found between friendships and general self-concept, $r(78) = 0.55$, $p < 0.001$.

  If several correlations were tested, the results can be presented in the form of a correlation matrix such as the one in Table 21.

Table 21: Pearson's product moment correlations among the five self-concept scales (*n* = 80)

	Scholarly knowledge	Everyday knowledge	Friendships	Intimate relationships
Everyday knowledge	0.40 *			
Friendships	0.24	0.46 *		
Intimate relationships	0.22	0.35 *	0.55 *	
General	0.26	0.52 *	0.55 *	0.39 *

* $p < .001$

Refer to Green *et al.* (1999), Green and Salkind (2003) or Green and Salkind (2005) for examples of how to present the results of other significance tests in the APA format.

- Element 9: Make sure that you discuss the managerial implications of your findings or include a cross-reference to the discussion section where the managerial implications will be discussed.

The aforementioned approach is practical when one has a small number (3-4) of hypotheses to report on. But what should one do if you have a large number of hypotheses of the same type involving the same statistical tests? Consider the solution suggested in Example 50.

Example 50:

Two Honours students stated the following six alternative hypotheses in the literature review of a study on hockey players' motives for participating in the sport:

$H_{1\ (alt.)}$: Male hockey players participate more for the competitiveness motive than females.

$H_{2\ (alt.)}$: Male hockey players participate more for the exhibitionism motive than females.

$H_{3\ (alt.)}$: Female hockey players participate more for the sociability motive than males.

$H_{4\ (alt.)}$: Formal hockey players participate more for the competitiveness motive than informal players.

$H_{5\ (alt.)}$: Formal hockey players participate more for the exhibitionism motive than informal hockey players.

$H_{6\ (alt.)}$: Informal hockey players participate more for the sociability motive than formal players.

Since these are all hypotheses concerning the difference between two groups (i.e., males versus females and formal versus informal hockey players), one can present the findings regarding these hypotheses in a more condensed format. When doing so, one should, however, group the hypotheses dealing with the same sample sub-groups together. We will, therefore, group the first three hypotheses (H_1 to H_3) together. Thereafter, one can use the same approach to report the findings for the last three (H_4 to H_6).

[Element 1]

Hypotheses H_1 to H_3 focussed on differences in the extent to which male and female hockey players are motivated by the competitiveness, exhibitionism and sociability motives respectively. The null and alternative hypotheses of H_1 to H_3 are stated below:

[Element 2]

$H_{1\ (null)}$: There is no difference in the extent to which male and female hockey players are motivated by the competitiveness motive.

$H_{1\ (alt.)}$: Male hockey players participate more for the competitiveness motive than females.

$H_{2\ (null)}$: There is no difference in the extent to which male and female hockey players are motivated by the exhibitionism motive.

$H_{2\ (alt.)}$: Male hockey players participate more for the exhibitionism motive than females.

$H_{3\ (null)}$: There is no difference in the extent to which male and female hockey players are motivated by the sociability motive.

$H_{3\ (alt.)}$: Female hockey players participate more for the sociability motive than males.

All three these one-tailed (directional) hypotheses were tested at a 5% level of significance (i.e., $\alpha = 0.05$).

[Element 4] Since the three motives for participation – competitiveness, exhibitionism and sociability – were measured at an interval level of measurement, the appropriate parametric significance test is the independent samples *t*-test. If its assumptions cannot be satisfied, the Mann-Whitney *U* test can be used as a non-parametric alternative (Pallant, 2001:260).

[Element 5] The independent samples *t*-test has two assumptions: First, it assumes that the variable on which the two groups are compared has a normal distribution in both populations. Second, it assumes that the variable on which the two groups are being compared has an equal variance in both populations (Pallant, 2001:260).

The assumption of normality was assessed through the Kolmogorov-Smirnov test for normality, as well as through a visual inspection of histograms and normal probability plots (Pallant, 2001:261). These tests indicate substantial departures from normality in both sub-samples for all three the test variables (see Annexure C, Tables 49-54 and Figures 13-16).

[Element 6] Since the data violated the normality assumption of the independent samples *t*-test, the non-parametric Mann-Whitney *U* test was used to test the three hypotheses.

[Element 4 & 7] Table 22 below provides relevant descriptive statistics and also summarises the results of the Mann-Whitney *U* tests conducted to test hypotheses H_1 to H_3

Table 22: Descriptive statistics and results of the Mann-Whitney U tests conducted to test hypotheses H_1 to H_3

Hyp.	Motive	Gender	*n*	*M*	*SD*	Results: Mann-Whitney *U* Test
H_1	Competitiveness	Male	100	4.07	0.70	Test statistic: 4217.50 1-tailed *p*-value: 0.025 Conclusion: Significant difference, $H_{1(alt.)}$ accepted
		Female	100	3.87	0.75	
H_2	Exhibitionism	Male	100	3.26	0.94	Test statistic: 3109.50 1-tailed *p*-value: 0.001 Conclusion: Significant difference, $H_{2(alt.)}$ accepted
		Female	100	2.63	0.89	
H_3	Sociability	Male	100	4.25	0.51	Test statistic: 3959.50 1-tailed *p*-value: 0.005 Conclusion: Significant difference, $H_{3(alt.)}$ accepted
		Female	100	4.43	0.47	

[Element 8] As the results in the last column of Table 22 shows, males and females differ significantly in the extent to which they are motivated by all three the motives. In all three cases, the stated null hypothesis is rejected in favour of the stated alternative hypothesis.

Since the descriptive statistics in all three cases indicate that the sub-group mean differences are in line with the expectations formulated in H_1 to H_3, the one-tailed *p*-values were calculated as follows: one-tailed *p*-value = two-tailed *p*-value ÷ 2

These findings, therefore, indicate that male and female hockey players differ significantly in the extent to which they are motivated by competitiveness, exhibitionism and sociability. More specifically, the results indicate that males are motivated more by the competitiveness and exhibitionism motives, while females are motivated more by the sociability motive.

[Element 8] These results suggest that hockey teams should accentuate sociability when recruiting female players and opportunities for competition and exhibitionism when recruiting male players.

One would use the same general approach and the same nine elements to report the results of any other hypothesis test. Once you have reported the results of your statistical analyses, the focus shifts to a discussion of the overall findings, implications and conclusions of your study.

10 DISCUSSION

In many ways, the discussion section (recommended length: 1000 – 1500 words) is the most important section in an article (Feldman, 2004:4). Because it is the last thing a reader sees, it can have a major impact on the reader's perceptions of the article and of the research conducted (Summers, 2001:411).

Different authors take different approaches when writing the discussion section. According to Feldman (2004:5), Perry *et al.* (2003:658) and Summers (2001:411-412), the discussion section should:

- restate the study's main purpose [Element 1]
- reaffirm the importance of the study by restating its main contributions [Element 2]
- summarise the results in relation to each stated research objective or hypothesis without introducing new material [Element 3]
- relate the findings back to the literature and to the results reported by other researchers [Element 4]
- provide possible explanations for unexpected or non-significant findings [Element 5]
- discuss the managerial implications of the study [Element 6]
- highlight the main limitations of the study that could influence its internal and external validity [Element 7]
- discuss insightful (i.e., non-obvious) directions or opportunities for future research on the topic [Element 8]

The aforementioned eight elements are often mixed in a *Discussion section*; in other words, they do not always appear in a strict sequence. You may use 3rd level headings to structure the *Discussion* section.

The discussion section should not merely restate the findings reported in the results section or report additional findings that have not been discussed earlier in the article. The focus should rather be on highlighting the broader implications of the study's findings and relating these back to previous research. Make sure that the conclusions you reach follow logically from and are substantiated by the evidence presented in your study (Varadarajan, 1996:5).

IMPORTANT: You should give careful attention to elements 3-8 as it is primarily through these elements that one demonstrates your insight into the topic being studied as well as the real value of the study that was conducted. Make sure that your discussion of elements 7 and 8 are specific, clear and properly motivated. Use appropriate in-text references to support your arguments and recommendations.

There are several factors that one could highlight as possible limitations of a study as part of Element 7. Some of the most common limitations include the following:

- If a non-probability sampling approach was used, the results of a study cannot be generalised to a larger population on statistical grounds;
- The fact that a study focussed exclusively on a student sample is often an important limitation (see the discussion on p. 45);
- The results of a study conducted in a single context (e.g., a single industry or geographic market) can not necessarily be generalised to other contexts;
- In same cases, the measurement scales used in a study may have low internal consistency reliability (i.e., Cronbach's alpha < 0.7) that cannot be improved by deleting items. When such scales are used, the researcher should acknowledge this as an important limitation of the study and recommend that the measures be improved in future research;
- A researcher should also acknowledge any errors (e.g., forms of survey error), omissions or other special circumstances (e.g., specific natural/social events that

could have influenced respondents' responses) that could have influenced the nature and quality of the data collected.

Carefully consider the following two examples:

Example 51:

5. DISCUSSION

[Element 1] This study investigated the potential role of a retailer's relationship efforts – in the form of direct mail, preferential treatment and tangible rewards – in influencing consumer attitudes and behaviour. **[Element 2]** To our knowledge, it is the first study that demonstrates the effect of relationship efforts on trust in a retail setting.

5.1 SUMMARY OF FINDINGS

[Element 3] In both samples, the results indicate that retailers can influence consumer trust by rewarding consumers for their patronage. **[Element 4]** This is in line with previous studies in a channel context postulating that rewarding exchange partners with favourable economic outcomes increases the channel member's trust in the partner (Ganesan, 1994; Geyskens, 1998; Scheer & Stern, 1992).

[Element 3] The results are less clear with respect to the influence of direct mail and preferential treatment efforts, as these efforts are significantly related to trust in one sample only. **[Element 5]** The fact that direct mail was not found to be significant in the Belgian sample might be attributed to the higher direct mail pressure on Belgian consumers. In 1997, Dutch consumers only received an average of 81.7 pieces of addressed direct mail, while Belgian consumers found an average of 110.1 pieces of addressed mail in their mailboxes (FEDMA, 1998). The natural appeal of direct mail can be assumed to decrease if more retailers start using it. As the use of direct mail becomes more widespread, its absence may disappoint consumers, whereas its presence would not necessarily boost consumer trust.

[Element 5] With respect to preferential treatment, the absence of a significant relationship with trust in the Dutch sample might be explained by the fact that Belgian consumers have a higher tolerance for power distance than Dutch consumers do (Hofstede, 1980). Consumers with a higher tolerance for power distance are expected to be more respectful towards other consumers who are more ''powerful'' than they are and, consequently, might more readily accept a better treatment of these more ''powerful'' consumers. As a result, Belgian consumers might be more positively oriented towards a preferential treatment of loyal consumers than Dutch consumers.

[Element 3] In general, our results indicate that relationship efforts play an important role in affecting consumer trust. Relationship efforts explained 37% (Belgium) and 29% (the Netherlands) of the variance in trust. This makes clear that, apart from product and service efforts, relationship efforts additionally contribute to consumer trust.

[Element 2] Moreover, our study empirically validated the relationship from trust to relationship commitment in a business-to-consumer context. Previous empirical research on trust and relationship commitment was primarily conducted in industrial and channel literature (Andaleeb, 1996; Baker *et al.*, 1999; Doney & Cannon, 1997; Ganesan, 1994; Geyskens *et al.*, 1996; Kumar *et al.*, 1995). Apart from some notable exceptions (Crosby *et al.*, 1990; Macintosh & Lockshin, 1997; Tax *et al.*, 1998), the roles of trust and relationship commitment have not yet been investigated in consumer relationships.

[Element 3] Our results clearly reveal a significant relationship between trust and commitment in both samples, indicating that trust is important in consumer situations, as consumers will only be committed to a relationship with a retailer when they have trust in this retailer. Nevertheless, the

percentage of variance in relationship commitment explained by trust is significantly lower in the Belgian (7%) than in the Dutch sample (49%).

[Element 5] Although we did not explicitly measure country differences other than the variables included in the model, a potential explanation might be that Belgian consumers are more masculine than Dutch consumers. In a feminine country, such as the Netherlands, relationships are generally put before money and achievement (Hofstede, 1980), which might explain the stronger path from trust to commitment in the Netherlands, while this path is weaker in the Belgian sample.

[Element 3] Finally, our study empirically validated the relationship from relationship commitment to behavioural loyalty. We observed that relationship commitment and behavioural loyalty were significantly and positively related in both samples. Our results reveal that 18% (Dutch) and 8% (Belgian) of the variation in behavioural loyalty was explained by relationship commitment.

Consequently, researchers should be aware of the fact that, while relationship commitment is often regarded as the ultimate relationship outcome, it is only able to explain a relatively small share of the variance in behavioural loyalty. It, therefore, appears that a much wider range of variables influence behavioural loyalty. Examples of such variables are situational cues such as familiarity with a particular retailer, the distance to a retailer and competing retailers, or the existence of a monopoly. As a result, high levels of behavioural loyalty can accompany low levels of relationship commitment and low levels of behavioural loyalty can accompany high levels of relationship commitment, providing support for Dick and Basu's (1994) loyalty framework.

5.2 MANAGERIAL IMPLICATIONS

[Element 6] Our study indicates that relationship efforts are important drivers of customer value. As today's retailers increasingly offer comparable merchandise, copy competitors' price promotions, share common distribution systems, and treat customers well in terms of services offered, they increasingly have difficulties differentiating themselves (Berry & Gresham, 1986; Davis, 1997; Ellis, 1995; Ghosh, 1994).

Consequently, retailers should direct more of their attention at developing and implementing relationship efforts. Our study suggests that customer loyalty strategies can be built around these relationship efforts. Managers and employees of retail companies need to be trained, motivated, and rewarded for making relationship efforts to regular customers.

In addition, several scholars warn that tangible rewards generally do not lead to sustainable competitive advantages. They refer to the reality that price is the most easily imitated element of the marketing mix, that some customers may react opportunistically, and that already-loyal customers can be 'unnecessarily' rewarded (Berry, 1995; Christy *et al.*, 1996; Dowling & Uncles, 1997; O'Brien & Jones, 1995). Nevertheless, O'Brien and Jones (1995) advocated that rewarding strategies can lead to sustainable competitive advantages if such strategies are planned and implemented as part of a larger loyalty management strategy.

This study provides strong empirical support for the potential competitive advantage resulting from the practice of rewarding consumers for their patronage.

5.3 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

[Element 7] Some limitations might be related to collecting our data and interpreting our results. A first limitation might be the omission of important variables. For example, additional tangible elements in the retail mix, such as pricing and promotion, product quality and assortment, and service quality could be added as additional antecedents of trust or commitment.

Another potential shortcoming in the study is common method bias. We used one single questionnaire to measure all constructs included, so perhaps the strength of the relationships between these constructs may be somewhat inflated.

A third potential limitation is related to the measurement of behavioural loyalty. The true meaning of behavioural loyalty may only be partially captured given that its measure was based on self-reports. Database information could be used as input for measuring actual purchasing behaviour. **[Element 8]** The confidence in our results could be strengthened with access to behavioural data on customer purchase histories that are not subject to potential recall loss. It would then be possible to look at longer strings of purchases and to perhaps incorporate contextual information. These recognised shortcomings could inspire researchers to define their future research agendas.

Source: Adapted from De Wulf and Odekerken-Schröder (2003:104-106), 1 206 words.

Example 52:

5. DISCUSSION

The shift toward the so-called “experience economy” (Pine *et al*., 1999) has forced marketers to pay attention to the entire consumption experience. Providing high quality products or services is no longer sufficient; satisfying customers’ affective needs has become increasingly important in the emerging competitive environment.

[Element 1] This study tested the relationship between three affective factors (novelty, control and hedonics) and consumers’ satisfaction, value perceptions and behavioural intentions in the context of a vacation experience aboard a cruise liner.

[Element 2] This research contributes to tourism literature by demonstrating the importance of affective factors in the context of experiential services such as cruise vacations. Most previous perceived value models were developed and tested using tangible goods or functional services. A notable exception was Petrick’s (2003) investigation with cruise vacationers. However, his measure for emotions was restricted to “feeling good” type of items, whereas our measures covered a more varied spectrum of consumers’ affective responses.

5.1 SUMMARY OF FINDINGS

[Element 3 & 4] Consistent with recent research advocating the importance of affect in understanding value (Babin *et al*., 1994; Hightower *et al.*, 2002; Oliver, 1999; Petrick, 2003; Sweeney & Soutar, 2001), our findings indicate that hedonics, or the pleasurable aspects of the consumption experience, are strongly linked to perceived value. The dominance of hedonics is not surprising given that most human behaviour is intrinsically pleasure seeking (Holbrook & Hirschman, 1982). Moreover, hedonic behaviour is an integral part of leisure experiences (Mannell & Kleiber, 1997). As the context of consumption becomes more emotionally oriented (e.g., experiential services), hedonics become an increasingly important factor in determining consumers’ value perceptions. The strong relationship between hedonics and value also supports Babin *et al*.’s (1994:645) notion of “experiential value” that is strongly linked to the consumer’s hedonic responses.

Our findings are also congruent with Oliver’s (1999:47) argument that “hedonic consumption is pursued by consumers and one must assume that the resulting effects and more distinct emotions provide a sense of value to these individuals”. In addition, hedonics emerged as a predictor of future behaviour, thus further emphasising the role of pleasure in customer responses to experiential services.

The impact of pleasure on behavioural intentions is consistent with previous work in various consumption settings (Bateson & Hui, 1992; Donovan & Rossiter, 1982; Hui & Bateson, 1991; Mattila & Wirtz, 2000).

The results of this study also highlight the crucial role of satisfaction in mediating the relationship between affect and value. Satisfaction with experiential services such as leisure travel is driven by perceptions of fun, enjoyment and pleasure (Lounsbury & Hoopes, 1985; Otto & Ritchie, 1996; Mannell & Kleiber, 1997).

However, our findings indicate that affective factors have a differential impact on value and satisfaction. All three aspects of the emotional experience (hedonics, novelty and control) were positively related to satisfaction, whereas their relationship with perceived value varied across the affect spectrum. Specifically, novelty had a negative impact on perceived value.

[Element 5] This inconsistency might be explained by the differential nature of the two constructs. Adventure or escape from boredom is likely to induce positive emotions, thus enhancing satisfaction. At the same time, the impact of novelty might become negative with more cognitive evaluations such as value for money spent. Prior work in retail environments has shown that arousal (i.e., novelty) has a positive impact on satisfaction (e.g., Wirtz *et al.*, 2001), whereas the relationship between arousal and value remains untested. In addition, the nature of the sample might shed some light on the negative relationship between novelty and value. Approximately 80% of the respondents in this study had taken at least two cruise vacations, thus suggesting that they were experienced cruise vacationers. It thus seems plausible that these experienced customers were seeking pleasurable experiences rather than novelty.

[Element 3] In a separate analysis, we compared those cruise vacationers with one previous cruise experience with the ones that had more than one previous cruise experience on 10 novelty items and found significant differences with respect to items X1 ($p = 0.07$), X4 ($p = 0.09$), X7 ($p = 0.03$) and X8 ($p = 0.00$). Therefore, these findings suggested that inexperienced cruise vacationers agreed more strongly that their experiences were new and different.

[Element 3] The tests of H_3, H_6 and H_7 showed that hedonics is driven by control and novelty, while novelty acts as a partial mediator in the control–hedonics relationship. **[Element 4]** These results are consistent with Otto's (1997) findings.

[Element 3] Furthermore, our results indicate that control does not have a direct effect on value, but its effect on value goes through novelty, hedonics, and satisfaction. **[Element 4]** This finding is consistent with recent studies in retailing showing that the dominance factor in Mehrabian and Russells (1974) pleasure–arousal–dominance (PAD) typology should be viewed as a precursor to the other dimensions (Bateson & Hoffman, 1999). For novelty, hedonics, and satisfaction, control had direct influence, whereas for value, the effects were secondary.

[Element 3] As expected, satisfaction and value were highly significant predictors of behavioural intentions, **[Element 4]** supporting previous findings in satisfaction and value research (Cronin *et al.*, 2000).

[Element 3] Furthermore, in addition to satisfaction and value, data revealed hedonics as another significant predictor of behavioural intentions. **[Element 5]** The role of hedonics in predicting behavioural intentions along with satisfaction and value seems to be a result of the nature of leisure travel products. In other words, the amount of good time a vacationer had, by itself, might be a good indication of what his/her future behaviours might be.

5.2 MANAGERIAL IMPLICATIONS

[Element 6] Today, managers as well as academics recognise the importance of value in driving consumers' product evaluations and future purchase decisions (Barlow & Maul, 2000; Gale, 1994; Weinstein & Johnson, 1999; Woodruff & Gardial, 1996). To meet the demand of increasingly value-

conscious customers, managers need to understand what defines value in their customers' minds. This study sheds some light into customers' value perceptions of experiential services, such as leisure travel products and services.

The results of this research suggest that cruise vacationers' value perceptions are not only dependent on service quality and cost related features, but also on affective evaluations. Cruise industry managers are, therefore, advised to continue promotions emphasising value in terms of fun for children and family, relaxation, and escape from daily problems (Cruise Lines International Association (CLIA), 2003). It is important to highlight such affective benefits, as these become an important determinant of perceived value, thus influencing future vacation choices.

In this study, hedonics or pleasure was the most important factor in determining satisfaction, value and behavioural intentions of cruise vacationers. Creating a consumption experience that is fun, pleasurable and conducive to social interactions is likely to induce positive customer reactions. Zeroing in on the fun aspect, Carnival Cruise Lines uses the term ''Fun Ships'' for describing their products.

Similarly, experiential service providers should be careful in that their services are perceived as boring and ordinary. Package tour organizers (e.g., cruise vacation designers) should try to minimize the possible problems during package travel, such as baggage handling, waiting in lines in customs and other areas and transfers (Wang, Hsieh, & Huan 2000). Dissatisfactory aspects of package travel decrease the probability that the vacation is perceived as pleasurable and fun, which in turn affects satisfaction, value and future behavioural intentions.

As with other costly purchases, cruise vacationers are likely to engage in a number of comparisons when forming value perceptions. They might compare the benefits received with potential benefits obtained from a comparable non-cruise vacation or another cruise vacation. In these comparisons, affective benefits seem to play a significant role. Hence, cruise ship marketers should zero in on the superior affective benefits provided by a cruise vacation.

Our findings also indicate that control plays an important role in the evaluation process. Giving a customer options to choose from is an effective way of increasing an individual's sense of control and thus satisfaction with the experience. Customers are seeking an environment in which they have options to choose from and where they perceive having a sense of control.

The following quote from Norwegian Cruise Line's web site exemplifies this strategy: "Our goal is to provide you with freedom of choice. Whether you're dining, enriching your mind or body, or just plain relaxing, NCL has created a world of options for you. Choose Italian or Asian cuisine, resort or formal wear, dine early or late, with old friends or new - we'll leave it up to you" (Norwegian Cruise Line (NCL), 2002).

Finally, the impact of novelty on overall satisfaction and value seems to vary based on respondent characteristics. Segmenting the customer base can help identify the specific needs of the various customer groups. For example, experienced customers may expect a different experience than novice cruise vacationers. Instead of offering the same cruise experience to all vacationers, different cruises can be designed for different target segments (i.e., experienced and new vacationers). Specific vacations for specific vacationer groups is good way to increase value perceptions where cruise vacationers will more strongly believe that they received for what they have spent for.

5.3 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

[Element 7] Design issues present one of the main limitations of this study. The causal relationships were tested with a single study, while a true test of the causality would measure constructs in different time periods. Also, we did not test for reversal causal effects, which might have influenced the mediation effects between the constructs (Kenny, Kashy & Bolger, 1998).

Although the sample size was deemed acceptable, a larger sample would have allowed us to run more powerful analyses. Due to our sample constraints, we could not measure non-response bias, a potential threat to the validity of our results. In addition, we failed to measure an individual's need for novelty.

[Element 8] This personality trait might interfere with customer perceptions of experiential services, and therefore future studies should incorporate this individual level factor in the study design. Also, future work should control for weather, mechanical problems and other factors that might influence customer perceptions.

The current research was limited to three aspects of the affective experience (i.e., novelty, control and hedonics). Future work should examine other potential factors that might influence cruise vacationers' value perceptions. In particular, the relationship between price-related benefits and value offer fruitful avenues for future research.

Source: Adapted from Duman and Matilla (2005: 320-321), 1 708 words.

The last section of an article consists of a list of references to sources cited in the text.

11 THE LIST OF REFERENCES OF AN ARTICLE

The list of references must comply with ALL the general requirements and specific guidelines contained in the document "*Referencing in academic documents: official guidelines of the Department of Marketing and Communication Management*". This document is available on the NME 703 course web site.

The next section concludes our discussion with a few remarks on writing the different draft versions of an academic article.

12 WRITING THE ARTICLE

An article is usually written in the form of multiple drafts that are refined after each round of writing. Perry *et al.* (2003:662) suggest that up two four "… increasingly 'nit-picky' …" drafts may be necessary to produce a "polished" article:

- The first draft should ideally be written quickly without worrying too much about the details of referencing and style. The idea is to get your ideas down on paper.
- The second draft is about structure or getting the flow right. During this stage, sections and sub-sections are moved around to ensure a logical flow of ideas. The focus is also on linking the different sections; in other words, on building bridges and providing overviews (see section 7.4.3).
- The focus of the third draft is on style or "getting it to read right". This may require intensive editing to shorten the article and improve its readability (see section 7.4.4).
- The fourth and final draft is the most detailed and focuses on technical issues such as referencing, headings, the numbering of tables and figures, ensuring that all the references listed in the text are included in the list of references and a final check of spelling and grammar. It is often helpful to ask a colleague, friend or family member who was not involved in the study to proofread the final draft before it is submitted.

Make sure that your final article complies with all the technical care requirements outlined in the document template for the final research article.

13 CONCLUSION

Writing an academic article is a challenging, but very fulfilling, endeavour. Hopefully the guidelines presented here will enable you to write your first academic article with relative ease. Students, however, often underestimate the time required to produce a “polished” first effort. You cannot write a proper research article in a weekend or even in a week. It is, therefore, extremely important to allow yourself enough time – at least three to four weeks – to work on the successive drafts mentioned in section 12.

You can further streamline the process by using the guidelines mentioned above when compiling a research proposal or thesis. If done properly, one can cut and paste large sections from your proposal or thesis to the final research article. The keyword is: Be proactive!

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