

C **HAPTER 1**

THE STUDY IN PERSPECTIVE

1.1 INTRODUCTION

In today's complex society with the rapid development of technology not only consumers, but also retailers and marketers are confronted with new challenges. Hawkins, Best and Coney (1998: 7) and Schiffman and Kanuk (2000: 12) contend that studying consumer behaviour is the key to understanding and predicting consumer behaviour. This in turn enables the marketer to plan and manage effectively in this continuously changing society so as to ensure satisfied customers.

Consumer behaviour can be seen as a sequence of problem-solving stages which include the development and perception of a want or need, pre-purchase planning, information search and decision-making, the act of purchasing, and post-purchase behaviour (Foxall & Goldsmith, 1994:25). As consumer decision-making is preceded by a series of cognitive processes (Foxall & Goldsmith, 1994: 27), it implies that the consumer uses cognitive structures throughout the decision-making process. Although it is true that for many products and services, purchase decisions are the result of a long, detailed process that may include an extensive information search, brand comparisons and evaluations, and other activities, some purchase decisions are more incidental and may result from little more than seeing a product prominently displayed at a discount price in a store or on the web. Apparel products often fall into the latter category (Du Plessis & Rousseau, 1990:11; Foxall & Goldsmith, 1994:27-31; Churchill & Peter, 1998:142). Marketers should be aware of the fact that in spite of planned purchase activities, product knowledge and experience, consumers also use their cognitive structures (schemata) to simplify the decision-making process. Schemata are based on personal observation and interpretation of specific situations and stored in memory to be used as frame of reference for decision-making (Baron & Byrne, 1997: 76-77; Kaiser, 1998: 252).

Due to the ever-growing global market, a wider variety of products have become available from different sources. One of these is the relatively new experience of purchasing apparel online. Various researchers have predicted that the online purchase of apparel will become increasingly important in the future (Goldsmith & Goldsmith, 2002; Lee & Johnson, 2002; Park & Stoel, 2002). Understanding what creates a satisfying customer experience becomes crucial as more so-called e-retailers promise their customers that online buying experiences will be satisfying. More studies are now emerging where factors, which make consumers (and more specifically, apparel consumers) satisfied with their e-tailing experiences, have been investigated (Szymanski & Hise, 2000: 309; Elliot & Fowell, 2002; Evanschitsky, Iyer, Hesse & Ahlert, 2004).

Consumers of apparel products seem to be more concerned with quality than ever before and are more likely to purchase a product that they perceive as having good quality than one to be lacking in quality (Birtwistle, Clarke & Freathy, 1998; Kadolph, 1998: 12). Different consumers use different dimensions when evaluating quality. Although consumers seem to use textile attributes to determine product quality, very few seem to have a thorough enough knowledge of textiles to make accurate quality judgements at the point of purchase. It can also be said that consumers' perception of apparel quality is multidimensional as they use a variety of informational cues as well as their expectations when assessing quality (Hines & O'Neal, 1995; Swinker & Hines, 2006). Internet purchasing compounds this problem as these consumers don't have the advantage of being able to actually see and feel the textile. They often have to solely rely on photographs and descriptions of fabric properties (Brown & Rice, 1998: 42-46; Kadolph, 1998: 32-35).

In this study the goal/objective is firstly to determine which quality cues adult female consumers use when purchasing apparel for formal day (office) wear and for casual wear. The second objective is to use this information to develop an online guide for apparel consumers. The guide should provide textile information pertinent to consumers when making purchase decisions. As no South African apparel retail website currently supplies more than sizing

and care related information, this study could fill the need for more textile information that could serve as a guide when consumers purchase garments on the Internet.

1.2 THEORETICAL BACKGROUND

1.2.1 The Internet as new shopping environment

Online environments can be as varied as offline environments. The same person operates in different settings, and this brings out different aspects of human potential. “We don’t mutate into new species when we connect to cyberspace, but the psychological factors that affect our behavior in real life play out differently online because the environments we enter are different” (Wallace, 2001). The same could be said about cognitive factors that affect decision-making, as cognition plays a critical role in a person’s capability to construct reality, encode information, and perform behaviours (Pajares, 2002). With regard to this study it means that consumers will use (and probably adapt) their existing apparel purchasing practices to understand and utilise this new shopping environment (Foxall & Goldsmith, 1994: 49 -50; Jacobs, 2003: 28 -29).

No other innovation has received as much attention from retailers, manufacturers, consumers and general public as the Internet, or e-tailing (Grewal, Iyer & Levy, 2004). The past decades have not been without new shopping options. Consumers have been provided with discount stores, supermarkets, warehouse stores, direct sales and home shopping cable networks. The difference between this variety of shopping options and e-tailing (the Internet) is technology. Until the emergence of these new shopping options, relatively few technological innovations have been used in retailing (Burke, 2002; Grewal *et al.*, 2004).

Today the Internet provides consumers with a way of shopping that is affecting the way they search for products and services. The Internet is

becoming increasingly popular and even non-shoppers have indicated that they have used the Internet for information searches that led to purchases in more traditional retail environments (Vijayasarathy & Jones, 2001).

Understanding this new shopping environment and how it impacts on consumer behaviour has become increasingly important for retailers and marketers who have to compete in this fast expanding marketplace (Constantinides, 2004). By adding a link to a consumer guide that provides relevant textile information, retailers could give their websites the necessary “edge” to attract more consumers who are then supplied with more knowledge to help them in their decision-making process.

1.2.2 Internet consumer behaviour and decision-making

The social cognitive theory explains how people acquire and maintain certain behavioural patterns. The environment, people and behaviour are important elements constantly influencing each other (Pajares, 2002). Decision-making is determined by the way people think, process information, and use the processed information that is stored in memory (Foxall & Goldsmith, 1994: 27-28).

Foxall and Goldsmith (1994: 27-28) describe the cognitive consumer as a highly involved consumer whose behaviour and decision-making is preceded by a sequence of mental information processing. These consumers are problem-solvers and seek and use information to solve these problems and facilitate decision-making. Their behaviour is largely determined by the way they think and process information. Consumers are also credited with the capacity to receive and process considerable amounts of information and undertake extensive searches and evaluations. The received information is classified by the individual and transformed, after mental processing, into attitudes and purchase intentions (Foxall & Goldsmith, 1994: 28; Compeau & Higgins, 1999).

Various researchers in the field of clothing have emphasised the importance

of the use of a specific frame of reference to study clothing behaviour (Kaiser, 1998:1-4; Davis & Lennon, 1991, Nagasawa, Hutton & Kaiser, 1991). These frames of reference could also be used to explain the decision-making and buying behaviour of the consumer of apparel. Aspects such as need recognition; information search, processing, evaluation and response are addressed and connected to social cognition (Damhorst, 1991; Kaiser & Damhorst, 1991; Nagasawa, Hutton & Kaiser, 1991). Authors such as Eckman, Damhorst and Kadolph (1990) and De Klerk (1999) have suggested models for decision-making by apparel consumers. According to these models, humans are cognitive beings who strive to make sense of their environment.

Research on the Internet consumer's behaviour and decision-making is on the increase, but basic research done on the traditional consumer is still used by many retailers when planning their web presence. It is therefore important to do more research on online consumers, their specific behaviour, concerns and needs, and how these aspects impact on their decision-making, purchase behaviour and eventual satisfaction (Häubl & Trifts, 2000; Fortin, Dholakia & Dholakia, 2002; Kim & Stoel, 2003; Siddiqui, O' Malley, McColl & Birtwistle, 2003; McKinney, 2004; Rosen & Purinton, 2004).

1.2.3 The online apparel consumer

With the advent of the Internet as new shopping environment, new problems and questions arise for the online consumer, and more specifically, the online apparel consumer. As research on the online apparel consumer's purchasing behaviour is still in its infancy, the unique problems encountered online are only now starting to be investigated (Goldsmith & Flynn, 2004; Ha & Stoel, 2004; Phau & Lo, 2004). As these consumers do not have the advantage of actually seeing and handling the products, their judgement of certain characteristics is limited and this could influence their expectations, choices and eventually satisfaction with online products.

Although research regarding the female Internet user's clothing behaviour and her decision to purchase online is starting to increase, the focus has been mainly on the acceptability, use or preference of the Internet for apparel purchases (Dancausse & Cassill, 2000; Jackson, Kinkade, Giddings & Carrol, 2000; Manikowske & Bastow-Shoop, 2000; Jacobs, 2003). A limited amount of research has been done on consumers who have purchased apparel by mail order (catalogue shoppers) (Shim & Drake, 1990; Kwon, Paek & Arzeni, 1991; Shim & Kotsiopulos, 1992). Some researchers have related the problems and risks relevant to the catalogue shopper, to the problems and risks that the online consumer of apparel products encounters (Duffy, 2004; Keen, Wetzels, De Ruyter & Feinberg, 2004).

Although studies concerning the Internet as new shopping environment and the Internet consumer are on the increase, only a few studies have been specifically aimed at the problems that online apparel consumers encounter regarding the disadvantages of not being able to actually see, touch/ handle or try on the garment before making the decision to buy (Beck, 2002; Fiore & Jin, 2003, Sasaki, Ikeda & Shimizu, 2004).

It is important to view online purchasing behaviour, perceptions, expectations and satisfaction from the consumer's viewpoint (Zeithaml, 1988; Goldsmith & McGregor, 2000). This would also ring true for the online purchaser of apparel. Although more research on the online consumer has been done since the beginning of the new millennium (Elliot & Fowell, 2002; Goldsmith & Goldsmith, 2002; Lee & Johnson, 2002; Park & Stoel, 2002; Evanschitsky *et al.*, 2004), more attention should be given to resolving the problem of the limitations of the Internet and to supply the online apparel consumer with clear visual images and more sensory information of available products (Fiore & Jin, 2003).

A need also exists for empirical research on the South African Internet apparel consumer as, with one exception (Jacobs, 2003), the studies referred to were planned and executed in America, Asia and, to a lesser extent, in a European context. Another contentious issue in the South African context is

that very little textile information is supplied in any retail environment. Consumers often have only a very limited textile knowledge, which is usually based on experience. By developing and implementing a consumer guide, consumers could be educated to demand more accurate and informative textile labelling to help them when making purchase decisions.

1.2.3.1 The apparel consumer's assessment of quality and specific problems encountered by online apparel consumers

Different consumers use different cues to assess the quality of apparel products, and it seems that they are not always sure how to assess the quality of textiles and apparel (Brown & Rice, 1998: 42, 44-5; Hines & Swinker, 2001). Consumer knowledge of the combination of materials used in a garment or the process used to make the garment is usually very limited (Kadolph, 1998:34). The result is that the consumer's perception of quality at the point of purchase is a strongly subjective phenomenon (Brown & Rice, 1998: 44; Kadolph, 1998:23). Another complicating fact is that quality, in this case, apparel textile quality, is a multi-dimensional construct that cannot be measured by a single cue or attribute (Zeithaml, 1988; Fiore & Damhorst, 1992; Abraham-Murali & Littrell, 1995b). Consumers often judge quality of products based on a variety of informational cues. Some of these cues are intrinsic (fibre, colour, fabric hand) while others are extrinsic (price, brand name, place of purchase) (Brown & Rice, 1998: 44; Kadolph, 1998: 23; Schiffman & Kanuk, 2000: 155-6, Lubbe, 2003: 118). Consumers rarely possess complete information about a product at the point of purchase and often have little knowledge of the materials combined in the product or the processes used to make the product. They therefore tend to rely on prices, brand names or advertising when making purchase decisions (Kadolph, 1998: 23; Schiffman & Kanuk, 2000: 156) or use their own ways of assessing certain properties, for example, scrunching the fabric to assess crease resistance (Jacobs, 2003:138). All these aspects serve to indicate how complicated the assessment of quality can be. This can eventually result in unsatisfied consumers when quality is judged after purchasing and during

use. This in turn can lead to the need to exchange items, which is influenced by the specific exchange policy and ease of exchange. All these aspects play a role to make decision-making for the online apparel consumer more complicated. In the long run this could also be problematic for the retailer who could lose customers as a result.

One can conclude that if the assessment of the quality of apparel products were complicated in the traditional retail environment, it would be even more daunting for the online consumer. Understanding the needs and problems of the online apparel consumer is important to ensure a positive shopping experience and eventually satisfaction. Research that specifically investigates the problems encountered by online apparel consumers would therefore be of value to both consumers and e-tailers.

1.2.4 The interactivity of the Internet and the importance of online interactive decision aids

In the recent past the Internet has emerged as a dynamic means for channelling transactions between customers and firms in a virtual marketplace. The rapid growth of this new marketplace poses intriguing questions for academic research, not only regarding the role of the Web as information and communications medium, but also the issues related to shopping on the Internet (Swaminathan, Lepkowska-White & Rao, 1999). Growing online competition and maturation of Internet technology have also had a positive influence on website factors, beyond extensive product offerings, customer convenience, ease of navigation, and security, that all affect online marketing success (Vijayasarathy & Jones, 2000; Fiore & Jin, 2003). Fiore and Jin (2003) refer to the interactivity of the net and the use of new technology to customise presented information, facilitate communication, and entertain the consumer. Examples of this interactivity include “24/7” customer service representatives via e-mail, active server pages that permit customers to customise information that appears on the web page, 3-D virtual tours, contests and games. These aspects have been embraced by

online marketers to entice consumers to visit their websites, purchase online, and be satisfied enough to become a repeat visitor (Mathwick, Malhotra & Rigdon, 2001; Li, Daugherty & Biocca, 2002 & 2003; Fiore & Jin, 2003).

These new technological innovations open up a range of possibilities for the online apparel retailer. To overcome the lack of sensory or aesthetic features of online textile products, an increasing number of apparel websites are incorporating image interactivity to provide this information, but have not yet been sufficiently tested to gauge the impact on the online apparel consumer's shopping experience (Fiore & Jin, 2003). It is therefore implied that after having developed the consumer guide, it should be thoroughly tested to ascertain if it supplies sufficient textile specific information to make it easier for the online South African consumer to purchase garments for office and casual wear from the Internet.

1.2.5 The expected significance of the study

It is important that e-tailers and marketers are aware of the problems confronting the online apparel consumer, as well as how the newness of the Internet as shopping environment, and its interactive possibilities can influence the consumer's online decision-making behaviour. Effective strategies have to be developed to utilise the benefits of Internet shopping and limit the risks and uncertainties experienced by consumers (Watchravesringkan & Shim, 2003).

Jang and Burns (2004) also emphasise the importance of effective strategies used by e-tailers to differentiate themselves from competitors while providing a satisfactory online experience for the consumer. An important observation is that this satisfactory online experience is not based on what information is available, but on how the information is provided. Goldsmith and Flynn (2004) as well as Ha and Stoel (2004) agree that it is important to study consumers' online behaviour and perceptions, but point out that e-commerce apparel managers should focus more effort on wooing Internet innovators (innovative

information searchers) than fashion innovators. Internet innovators are active information seekers and are attracted by new information - their interest could be raised by attractively presented textile information, which in turn could help them during the decision-making process and lead to repeat visits to the site (Gaal & Burns, 2001; Fiore & Jin, 2003; Sasaki *et al.*, 2004). As textiles play a very important role in the decision making process of garment purchases, retailers with an understanding of these factors, as well as an understanding of the value of online decision making aids, can contribute to satisfying the needs of these consumers and facilitate a positive online experience (Brown & Rice, 1998: 38; Sasaki, *et al.*, 2004).

Research focusing on online apparel consumer behaviour and decision-making, can also make a valuable contribution to the development of theory and frameworks for the studying of online apparel consumers' behaviour. Research planned and executed in a South African context, regarding the use and effectiveness of interactive information aids for the purchase of apparel, should be of value to different role players. The importance of textile information should be emphasised here, as textiles determine both the physical features of the garment as well as the performance features. The physical features (type of fibre, yarn, fabric and finish) will influence the type of design as well as the construction of the garment. The performance features will influence the garment's utility in terms of durability, comfort, and care procedure and all-over serviceability. Last, but not least, the sensory aesthetic aspects, how the textile feels and how it looks, are also determined by the choice of the textile (Brown & Rice, 1998: 42 – 46; Fiore & Kimle, 1997: 39, Fiore, 2002). All these aspects play a very important role in determining the satisfaction with the purchased garment. It is therefore very important to compile a guide with enough relevant textile information so that consumers can make more informed decisions when purchasing garments on the Internet and eventually be more satisfied as a result.

1.3 THE CONCEPTUAL FRAMEWORK, PROBLEM STATEMENT, AND OBJECTIVES

1.3.1 The conceptual framework

The first step in developing the conceptual framework was to look at the dimensions of the quality of textile products. As already mentioned, perceived quality of apparel can include both intrinsic and extrinsic attributes.

- The conceptual framework indicates that in this study the focus is on the formal intrinsic aspects of textiles that are used by consumers to help them assess the quality of apparel textiles when making purchase decisions
- The framework also indicates that formal aspects of textiles are related to their functional performance aspects
- Although the focus is not on the aesthetic aspects of textile products, these aspects are also linked to both the formal and performance aspects as comfort includes fit and other sensory aspects, which in turn influence the aesthetic appearance
- The focus was also not on extrinsic aspects, but as some consumers equate price with quality, the link is also indicated

From the conceptual framework it is clear that the physical and performance features used by consumers as quality indicators will be used to develop a consumer guide that supplies textile information regarding garments for formal day and casual wear.

The conceptual framework also indicates how the quality assessment guide is intended to help the online apparel consumer in the information search, evaluation of alternatives and eventual purchase decision.

The development of a textile quality assessment guide that addresses these problems could assist online consumers in their decision-making process.

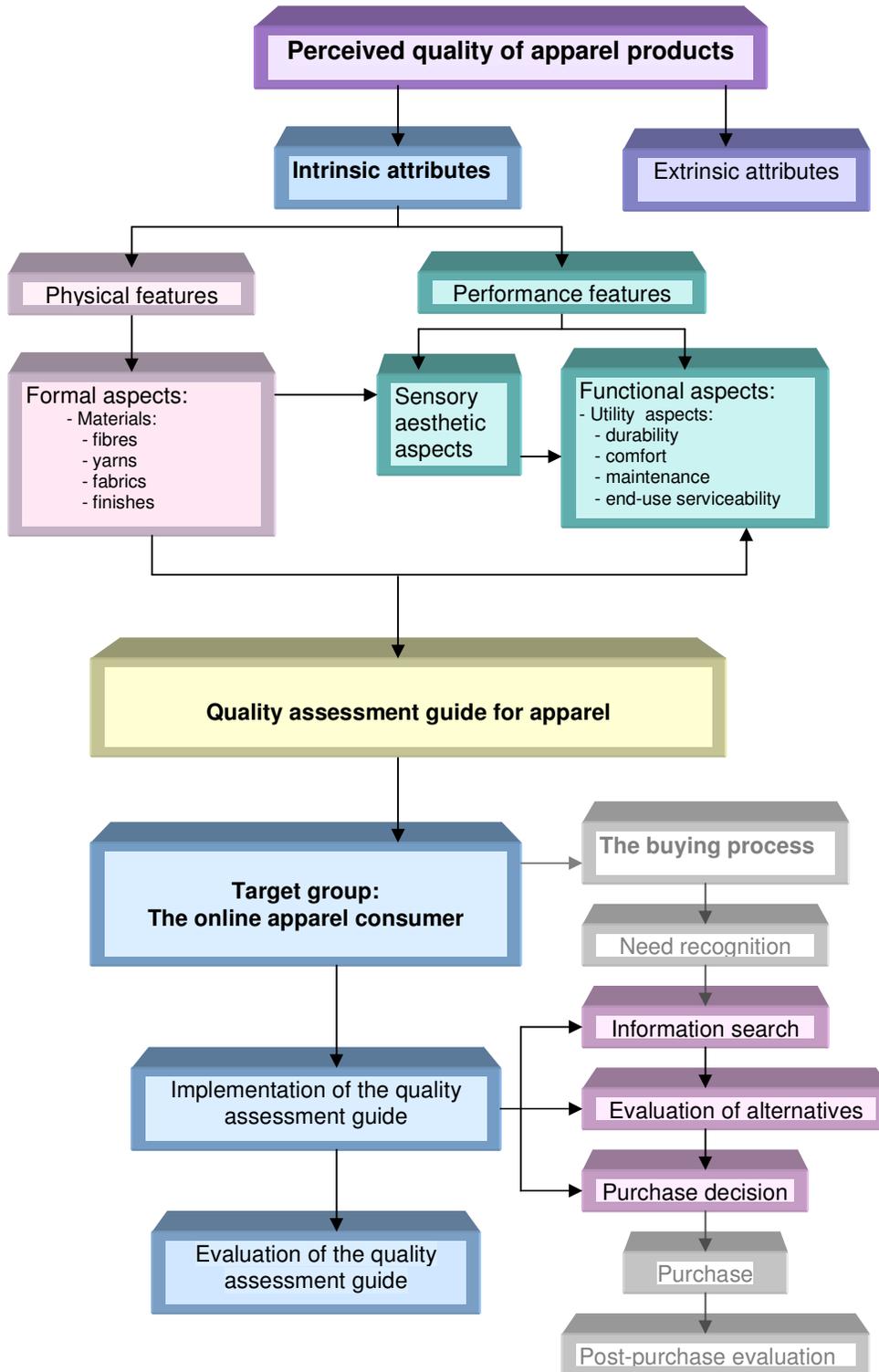


FIGURE 1: SCHEMATIC CONCEPTUAL FRAMEWORK FOR THIS STUDY

1.3.2 The problem statement

In view of the problems encountered by online consumers to assess quality of apparel textiles, the following problem was stated for this study:

Which textile related attributes should be incorporated in a quality assessment guide to facilitate the online decision-making process of adult career women when purchasing apparel for formal and casual daywear¹?

To be able to compile a useful textile quality assessment guide, the study was divided into three different phases.

The first phase:

The aim of the first phase of the study was to determine which textile quality cues career women use when purchasing garments for formal day (office) and casual wear. (In other words, the first phase of the study addressed the question: *Which textile related attributes should be incorporated in a quality assessment guide?*). The emphasis was on intrinsic attributes, which include the formal physical and functional performance aspects, as well as the sensory aesthetic aspects of touch and feel.

Development of the guide:

The next step was to develop an online quality assessment guide for textiles by using the information obtained in the first part of the study.

The intrinsic quality attributes identified in the first phase of the study were used in the development of the online guide for textile quality assessment.

Final investigation:

The final step was to test the guide and answer the following question:

Does the textile information included in the textile quality assessment guide facilitate decision-making by adult career women about fabric quality when purchasing apparel for formal and casual daywear online?

¹ For this study formal daywear would be the outer garments worn to the office/work by career women, while casual daywear refers to garments worn at home or to informal occasions.

Here the aim was to determine if the guide facilitated the decision-making process while making an online purchase. A social-cognitive approach was used in the study.

1.3.3 Objectives and sub-objectives for the study

In view of the problem and review of the relevant literature, the following objectives were set for this study:

1.3.3.1 Objective 1: To obtain specific information about intrinsic textile related aspects that career women use in their decision-making when assessing the quality of apparel products.

- **Sub-objective 1:** To determine if adult female consumers use formal, physical features of textiles (i.e. fibre, yarn, fabric structure and finish) in their assessment of the quality of apparel textiles.

- **Sub-objective 1.1:** To determine if adult female consumers relate the formal, physical features of textiles to performance when assessing quality during the decision making process.

The aspects covered included the following:

- 1.1.1 Do consumers relate the formal features of textiles to the functional performance aspect of durability?
- 1.1.2 Do consumers relate the formal features of textiles to the functional performance aspect of comfort (including sensual appeal)?
- 1.1.3 Do consumers relate the formal features of textiles to the functional performance aspect of maintenance?
- 1.1.4 Do consumers relate the formal features of textiles to the functional performance aspect of end-use serviceability?

- **Sub-objective 1.2:** To determine the importance of label information

- 1.2.1 Do consumers use label information to assist them when making purchase decisions?

1.2.2 Do consumers use a specific type of label information to assist them in their decision-making?

1.3.3.2 Objective 2: To develop a guide for assessing textile quality online using the data obtained in the first phase of the study.

1.3.3.3 Objective 3: To test the guide to determine if it facilitates decisions concerning the assessment of fabric quality when purchasing apparel products online.

1.4 THE PRESENTATION AND OUTLINE OF THE STUDY²

The written report of the research indicates how the research was developed and carried out. The second and ensuing chapters will include the following:

1.4.1 Chapter 2: The theoretical background: The Internet, Internet consumer and interactive possibilities of the Internet in the field of apparel textiles

Internet and Internet consumer, online apparel consumers and the perception and assessment of textile quality, as well as the value of online interactive aids are discussed against the background of a social-cognitive theory. This formed the background for the conceptualisation, operationalisation, research design, and research methodology.

1.4.2 Chapter 3: Research methodology for the first phase of the study

This chapter consists of the description and justification of the research design, the problem statement, the objectives and sub-objectives, the choice of respondents, quantitative data-collecting techniques and procedures, data sources and data analysis.

² Referencing method used in this study: Adapted Harvard method as compiled by Information Services of the University of Pretoria
Language used in study: Oxford English and English (UK) spelling and grammar check

The development of the questionnaire for phase 1 is discussed.

Objectivity and reliability are discussed as well as measures to ensure/improve the quality of the data and to eliminate research mistakes.

1.4.3 Chapter 4: Data analysis, presentation, discussion and interpretation of results of the first phase of the study

Chapter 4 is used for the data analysis, presentation, discussion and interpretation of the results of phase 1.

In this chapter the results of each sub-objective of phase 1 are presented in tables and discussed. These results are also interpreted and possible explanations are discussed.

1.4.4 Chapter 5: Research methodology for the second and third phases of the study

In this chapter a justification is given for the inclusion of specific items in the quality assessment guide, as well as how this information was used to develop a mock website with links to specific textile information (the on-line guide) regarding the products on offer.

The development of the questionnaire for phase 3 is discussed as well as how the guide was presented and tested.

Objectivity and reliability are discussed as well as measures to ensure/improve the quality of the data and to eliminate research mistakes.

1.4.5 Chapter 6: Data analysis, presentation, discussion and interpretation of results of the final phase of the study

In chapter 6 the results of the final phase of the study are analysed, presented, discussed and interpreted, and possible explanations for these results are discussed.

1.4.6 Chapter 7: Conclusions and recommendations

In the final chapter the study is evaluated objectively regarding its strong points and possible weaknesses. Recommendations are made for future similar studies, as well as recommendations for retailers with an online presence.

C HAPTER 2

THE INTERNET, INTERNET CONSUMER AND INTERACTIVE POSSIBILITIES OF THE INTERNET

2.1 INTRODUCTION

The retail and consumer services sector has rarely been faced with a challenge of such significant complexity and uncertainty, which has grown as rapidly as e-Commerce (Reynolds, 2000). This so-called “new” economy is still changing continuously, and whilst many of the old “rules of the game” still remain intact for retailers and consumers, a number have completely changed and new strategies have had to be developed to suit this new environment (Reynolds, 2000; Fortin *et al.*, 2002).

According to Fortin *et al.* (2002) the future development of the web as an e-commerce platform will increasingly depend on understanding the process by which people will use this new communication technology. Some argue that the new electronic environment is just a different context for existing theories, while others are convinced that the new environment requires a new set of theories adapted to a radically changed marketplace (Peterson, Balasubramanian & Bronnenberg, 1997; Mundorf & Bryant, 2002).

Pajares (2002) describes human functioning as a product of a dynamic interplay of personal, behavioural and environmental influences. He emphasises that cognition plays a critical role in people’s capability to construct reality, encode information, and perform behaviours (for instance, make decisions). In this Chapter the Internet as new shopping environment, Internet consumers in general, and Internet apparel consumers in particular, as well as consumer perception of quality is discussed against this background.

2.2 THE INTERNET AS NEW SHOPPING ENVIRONMENT

E-tailing is the newest retail format in use. The technology characteristics and potential worldwide reach, creates additional markets (Grewal *et al.*, 2004; Shiu & Dawson, 2004).

It is becoming more important to integrate the Internet into retailer's competitive marketing strategy with the market environment that has evolved to include the electronic marketplaces. There is a new emphasis on providing product-related information to customers, new ways of communicating with customers, ways to promote products, conduct transactions, distributing digital or digitisable products, and trial and sampling possibilities of the available products (Varadarajan & Yadav, 2002).

Retailers have historically relied on theoretical and decision-making frameworks to plan their retail strategies. The so-called four Ps (product, pricing, placement and promotion) do not always apply in the same way to the Internet (Constantinides, 2002a & 2002b). Internet-unique capabilities are significantly changing marketing thought and practice in each area of the marketing mix. While research has shown that opinion leaders and market leaders play an important role in the diffusion of innovations, the ease with which their evaluations can be communicated by the Internet, may influence their role in ways difficult to predict (Citrin, Sprott, Silverman & Stem, 2000; Cowles, Kiecker & Little, 2002; Constantinides, 2004). Cowles *et al.* (2002) contend that, although the Internet is first and most importantly a communications medium, its wide ranging capabilities across all areas of the marketing mix complicate the application of traditional theoretical perspectives to retailing in this evolving medium. These unique characteristics have no counterpart in conventional retailing. This makes it necessary to construct specialised theories that would be applicable to the Internet (Peterson, 1995; Cowles *et al.*, 2002).

Fortin *et al.* (2002) compare the evolution of Internet to the evolution of other communication technology, such as the radio, broadcast television, cable TV, and cellular phones. Some similarities like the initial high cost of the new technology is pointed out as well as the eventual lowering in price of the hardware and certain free services that come with the purchase of the computer. The differences are also pointed out, the main difference being the interactive nature of the new medium. Power is transferred back to the consumer, which in turn changes the foundations of business – there is a return to a more balanced power relationship between buyers and sellers. It is suggested that self-service technologies, such as the Web, empower consumers to do repeated transactions, which then eventually lead to better levels of satisfaction (Fortin *et al.*, 2002). This implies that the availability of an online quality assessment guide for textiles supplies the consumer with a tool that enables her to make more informed decisions even though she cannot touch and feel the products available online. This could empower her to do repeated transactions with a greater level of confidence, and could eventually ensure a greater satisfaction with the purchased products.

Jang and Burns (2004) and Gray (2005a), found that the Internet offers apparel shoppers convenience and good shopping information. Liu (2001) indicates certain emerging patterns in the ever-increasing number of online buyers. He contends that the same consumer who buys in stores is now buying online, and their demands are the same as for in-store buying – they expect the same merchandise selection, product quality and brands, as well as shopping experience. Jacobs's (2003:186) findings regarding the South African consumers confirm this statement. Online consumers expect to find information about products, pricing, ordering, delivery and post-purchase support (Levenburg, 2005). Liu (2001) also emphasises that consumers, who have become more familiar and trusting with their online buying options, will push companies to make their online technology work the way the users want it to work. They therefore expect, for instance, that when buying apparel they would be able to make the same type of decisions as in store. An online textile quality assessment guide could help to satisfy this expectation.

An advantage of technological improvement is that technology provides a new experience to consumers. They learn about products through direct experience such as inspection or trial, and indirect experience such as advertising or word of mouth. A new type of mediated experience, virtual experience, is also made possible through technological advances (Kulviwat, Guo & Engchanil, 2004). This new technology can be utilised in an online textile quality assessment guide to give the consumer a better idea of the structure and properties of textiles. This could make up for the inability to touch and feel the product.

Internet capabilities and characteristics challenge traditional frameworks for decision-making. In the first place, the Internet can play a role at every level of these traditional frameworks – it can gain attention, create interest, persuade consumers, ask for the sale, carry out the transaction, and provide a means of feedback. In the second place, the Internet can be used effectively and efficiently for both mass and one-to-one communication. Sender and receiver roles can easily be traded between retailers and their customers (power is transferred back to the consumer) – this often places new demands on e-retailers to be responsive to customer communications. All these characteristics should be carefully considered when planning a web-presence so that optimal levels of satisfaction are insured for all parties concerned (Cowles *et al.*, 2002; Fortin *et al.*, 2002).

To identify the impact of the Internet as new retail environment, consumer behaviour research relating to this new environment is needed to give a more accurate representation of how consumers will make choices relative to the Internet. According to Keen *et al.* (2004) consumer behaviour literature should be re-examined as well as more recent literature on acceptance of technology and applied to this relatively new consumer decision-making process. Some researchers have used the distributed cognitive approach to explain the interactions among humans and technological devices for a given activity. In the distributed cognitive framework the same aspects relative to cognitive theories are used, but are extended. This enables one to focus not only on the individual, but also on the individual in interaction with a set of

tools (Hollan, Hutchins & Kirsch, 2000). As technology increases the alternatives for consumers, it is important to understand what motivates consumers to shop using a specific retail format. Although researchers have examined a number of variables and constructs in an attempt to understand retail format selection and non-store purchasing behaviour, more research is necessary for theory building (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer & Wood, 1997; Vijayasathy & Jones, 2000; Cowles *et al.*, 2002; Burke, 2002; Goldsmith & Flynn, 2004; Ha & Stoel, 2004; Keen, *et al.*, 2004; Kulviwat *et al.*, 2004; Rohm & Swaminathan, 2004; Hsieh, Chiu & Chiang, 2005).

It is further necessary to investigate under which circumstances and conditions different consumers will accept electronic commerce. The emergence of the electronic marketplace has been associated with a number of developments. These developments include greater information richness, lower information search costs for buyers, less information asymmetry between buyers and sellers, electronic spatial proximity of buyers and sellers, and a greater elapse in time between time of purchase and possession of physical products purchased in the electronic marketplace (Varadarajan & Yadav, 2002). The contextual relevance of factors such as industry structure characteristics, product characteristics, and the buying environment for competing in the electronic marketplace have also been explored in recent research (Burke, 2002; Hoffman & Novak, 1996; Alba *et al.*, 1997). In spite of all the research being done, the apparel shopper is still at a greater disadvantage than shoppers of other online products. Although apparel websites are improving as evidenced by the steady increase in online apparel shoppers (Gray, 2005b), there is still a lack of research to address the problem of online consumers who are unable to judge the feel and other sensory properties (textural information) of textiles (Fiore & Jin, 2003).

Essentially an electronic marketplace performs the same set of functions as a physical marketplace – they both bring buyers and sellers together. They do, however have certain distinguishing characteristics, the most obvious being that the enabling structure is electronic rather than physical. This leads to a

number of other differences. Interacting with other marketplace participants may involve activities such as a buyer accessing information about product quality and price of competing brands from an entity other than a seller (a so-called intermediary), and engaging in a conversation about product quality and price of competing brand offerings with past or prospective buyers in an electronic chat room. More of these additional characteristics may evolve as the electronic marketplace evolves (Varadarajan & Yadav, 2002). Some progress has been made by certain e-tailers by making provision for live chat lines or chat rooms that allows shoppers to ask questions about merchandise or to converse with a friend and a company sales representative at the same time (Jang & Burns, 2004). This could also be something to keep in mind when developing (or expanding and improving) an online textile quality assessment guide.

Another aspect that is crucial to understand is the concept of interactivity of current buyer-seller activities in the electronic marketplace. Hoffman and Novak (1996) distinguish between unmediated interactivity (face-to-face) and mediated interactivity (between two individuals facilitated by a device). In the context of the Internet environment, interactivity would refer to a user's ability to alter the environment experienced via a computer (Hoffman & Novak, 1996). Varadarajan and Yadav (2002) envisage even higher levels of interactivity in the future. Understanding the evolution of different forms of media technologies can provide clues about how buyers and sellers may embrace (or resist) higher levels of interactivity in the electronic marketplace. In recent research on apparel websites a greater level of interactivity has been proposed, for instance the use of a virtual figure (that can be scaled to represent different sizes) to give a better idea of garment fit (Li *et al.*, 2002; Lee, 2002; Fiore & Jin, 2003). The same type of technology could, in future, be used to demonstrate textile features. The possibilities to explore these new technologies are numerous.

In this confusing new shopping environment, some aspects of buying are enhanced and made easier and more convenient for the consumer, but other aspects make decision-making more complicated. Product tangibility,

especially relating to textile products (e.g. fabric texture), that require tactile feedback may be difficult to communicate in electronic settings. On the other hand, tangible attributes that have some degree of standardisation (e.g. neck size of men's shirts) can be evaluated with relative ease (Alba *et al.*, 1997; Varadarajan & Yadav, 2002). The greater information search capabilities of the Internet would benefit buyers even for products that need large amounts of information to facilitate evaluation, acquisition, and use (Varadarajan & Yadav, 2002). These aspects will be addressed in the discussion of the influence and the value of interactive electronic aids in the Internet shopping environment.

2.3 THE INTERNET SHOPPER: EXPECTATIONS, CONCERNS, BEHAVIOUR, AND DECISION-MAKING

2.3.1 Internet consumers' expectations and concerns

In the late 1990s a variety of studies were done to determine which factors can be considered important influences on the growth of Internet shopping, and included store / site attributes, product type, and consumer experience of Internet shopping (Hoffman & Novak, 1996; Alba *et al.*, 1997). Elliot and Fowell (2002) contend that these aspects should be inter-related as the experience of customers is not independent of the nature of the Web shopping site or the range and type of products available. These studies provide a useful point of departure for further research. It was evident from these studies (Lohse & Spiller, 1998; Spiller & Lohse, 1998) that Internet consumers expect to be able to choose from a larger range of products. They also expect certain general levels of service and are satisfied with the capability of "buying anytime, from anywhere".

According to Larry Freed, an online satisfaction expert (Kuchinskias, 2005), price is seldom a very significant factor in whether people like an e-commerce site. According to Freed customer satisfaction issues are accelerated online. If the customer is not getting what he/she needs on one site, it only takes a click to go

to a competing e-tailer. When physically at one brick-and-mortar store, it is more of an effort to go to a competitor. Overall, there was a lack of understanding of consumer's expectations also concerning privacy policies, return policies, and delivery time and cost. Convenience and ease of use were regarded as the main benefits of online purchasing and lower prices were not cited as an advantage, indicating that consumers were looking for other benefits from the online experience (Siddiqui *et al.*, 2003). An apparel website that adds value (i.e. more textile related information) would more likely ensure a satisfying shopping experience.

Perceived advantages and expectations of online consumers therefore include amount of product information, ease of use, speed, and convenience. Online consumers are concerned about credibility and security (and some even expect to have problems). According to a Forrester Research Report done in 2000 (Forrester Report, 2003) scepticism about the need to touch, feel and try on a product, lack of comparison-shopping and the desire to speak to a store clerk (via e-mail or telephone) before making a purchase, were some of the concerns. More information regarding textile properties and quality could help consumers to form a clearer impression of a product that cannot be touched or handled (Fiore & Jin, 2003) – something that could be achieved with an online textile quality assessment guide.

2.3.2 Internet consumer behaviour, decision-making and identified shopping orientations

Several theoretical perspectives fall under the umbrella term “social cognition” and create a useful framework in which to organise and analyse research. Detailed models from cognitive psychology are important because they precisely describe mechanisms of learning and thinking that apply to a wide variety of areas. As these models apply to a variety of areas, and because cognitive processes presumably influence social behaviour to a large degree, it makes sense to adapt the cognitive theory to explain consumer decision-making and buying behaviour (Fiske & Taylor, 1991:2).

A cognitive model views the human as an active agent who receives, uses, manipulates, and transforms information. Humans mentally manipulate images, symbols, and ideas. They think, plan, solve problems, and make decisions. According to this model humans are cognitive beings who strive to make sense of the environment.

For the purpose of this study the basic assumptions on which a social-cognitive perspective rests, are relevant. From this it is concluded that the key to understanding human behaviour lies in the understanding of how people perceive and process external stimuli (Baron & Byrne, 1997: 78-9; Lennon & Davis, 1989a; Kaiser & Damhorst, 1991; Nagasawa, Hutton & Kaiser, 1991; Roach, 1994). In the context of this study this would refer to the way Internet apparel consumers access and process the information supplied on different apparel websites. The context within which information is presented and the way people search for information can have a pronounced effect on how information is interpreted, coded, and processed (Lennon & Davis, 1989b; Fiske & Taylor, 1991:348-350). Cognitive information processing is concerned with observable behaviours and how these behaviours are used to make inferences about underlying mental processes – mainly how individuals perceive and remember information (Perry, 2004). Barkhi (2002) contends that cognitive style explains how individuals prefer to receive information and what methods they use to process that information. He found that cognitive style and the mode of communication have interaction effects. Therefore, if the information for online apparel consumers is presented attractively, with various garment options that are easy to access (at the click of a button) as well as with additional applicable textile information, this could leave the shopper with a positive frame of mind, which would in turn facilitate decision-making. All this could contribute to a satisfactory online shopping experience.

The actual processing of information is the next major stage of social cognition. One of several factors that can come into play during this processing is the use of cognitive schemata. Consumers use internal mechanisms (cognitive structures) to receive, organise and make sense out of

the masses of information when processing external stimuli. From a social-cognitive perspective individuals try to explain and understand the social and commercial worlds with which they interact, and develop and use cognitive structures to do so (Fiske & Taylor, 1991: 98; Baron & Byrne, 1997:76-77). These cognitive structures (schemata) enable consumers to react to stimuli in the marketplace, to organise their thoughts and to simplify the decision-making process (Hawkins *et al.*, 1998: 348-349; Kaiser, 1998: 252). A social-cognitive perspective explains consumer behaviour and focuses on the activities involved in perceiving, thinking, reflecting and understanding. Consumers pay attention to stimuli relevant to their needs, wants and attitudes and store the information in memory to use as a reference framework to reinforce and enhance their decision-making (Foxall & Goldsmith, 1994: 49-50).

Cognitive structures (schemata) are created through experience with people, objects and events that are repeatedly encountered. The individual starts to generalise these experiences to develop an abstracted, generic set of expectations. Existing schemata can be modified when more information or experience is acquired (DeLong, Minshall & Larntz, 1986; Kaiser, 1998: 253; Erasmus, Boshoff & Rousseau, 2002). Schemata become filing systems which consist of organised prior knowledge extracted from experience, which guide the processing of new information, and facilitate retrieval, usage and integration of stored information (Baron & Byrne, 1997: 95; Lennon & Davis, 1989b; Ogle & Fiore, 2000). Foxall and Goldsmith (1994:75) refer to a special type of schemata, so-called scripts (event schemata) that can be seen as a stereotyped event sequence that consumers use in a purchasing situation. According to Jacobs (2003: 32 - 33) a well-known consumption situation such as apparel purchasing, will include a sequence of typical procedures and actions. Scripts can also be linked to expectations as they provide a platform for the consumer on which experience and future purchasing possibilities are built. New information can match an existing script – be consistent with expectations – and leave the script unaltered. If new information or a new experience cannot be fully accommodated in an existing script, the script evolves or is “tuned” (adapted) to include the new information or experience. When new information or a new experience is so

different that it cannot be accommodated in an existing script, a new script may be created, or an existing one restructured (Perry, 2004). In terms of this study, the online apparel purchasing experience may fall into the latter category as it may be so different from conventional apparel purchasing that the consumer is forced to create a new script. New information accessed through an online guide will be added to the script and used to make future online purchases, experiences that are more satisfying.

Individual differences are important in this context and can affect the way in which social information is processed and the extent to which attention is given to social stimuli. This is especially true for apparel bought either in-store or online. Consumers will for instance react differently to certain stimuli – for some the availability of a description of textile performance properties or good care labelling would help them to decide between two garments, while others judge solely on appearance and fashion trends. It would therefore be prudent to try to cater for a variety of different approaches when designing a website or providing information in an online guide (Baron & Byrne, 1997:94-101; Lennon & Davis, 1989b; Fiske & Taylor, 1991:99; Shiffman & Kanuk, 2000: 441).

Memory is important during pre-processing, processing, and post-processing of information. The meaning that is assigned to sensory impressions depends on both the background knowledge of the consumer and the context in which something is experienced. After a sensory impression (stimulus) has registered, it passes to the short-term memory (also known as the working memory). What happens to this information while in the working memory, will determine whether and how it will get stored in the long-term memory (Perry, 2004). Experience with previous positive purchases can influence the way new information is perceived, processed, used and evaluated when confronted with similar products and may influence judgements, cognitions, attitudes and recall. For information to be stored in the long-term memory it must be encoded and, in the long term, the encoding strategies that work best are those that emphasise meaningfulness. As online buying has only recently mushroomed, many online customers could revert to memory (prior experience) regarding

specific retailers and the type of products they have on offer. As many retailers with an online presence, also have “traditional” stores (as is the case in South Africa), this could influence the decision-making process for online shoppers familiar with the products offered in stores. Added, well-organised textile information, linked to familiar concepts could supply the mental “scaffolding” for new concepts, especially where shoppers do not have enough experience to make a good judgement when the sensory properties (touch and observation) are not available (as in the online situation) (Lennon & Davis, 1989b; Bettman & Park, 1991; Bettman & Zins, 1991; Perry, 2004; Sasaki *et al.*, 2004). In terms of this study organised, instructive textile information linked to familiar concepts would help the online apparel consumer with decision-making.

Consumer buying behaviour has always been a popular marketing topic, which has been extensively studied (Foxall & Goldsmith, 1994: 15; Belch & Belch, 1998: 103; Hawkins *et al.*, 1998: 26; Schiffman & Kanuk, 2000: 14). The consumer buying process is usually described as including learning, information-processing and decision-making activities that are divided into several consecutive steps, which include problem identification, information search, and evaluation of alternatives, the purchasing decision, and post-purchase behaviour (Foxall & Goldsmith, 1994: 29; Belch & Belch, 1998: 103; Hawkins *et al.*, 1998: 3; Schiffman & Kanuk, 2000: 443). High and low involvement purchasing is usually also mentioned, which indicates that the actual buying activity depends on the buyers perceived risks and experience (Foxall & Goldsmith, 1994: 27). It is also accepted that demographic, social, economic, cultural, psychological, and other personal factors (usually beyond the control of the marketer) have a major effect on consumer behaviour and purchasing decisions (Foxall & Goldsmith, 1994: 29; Sproules & Burns, 1994: 280; Schiffman & Kanuk, 2000: 438). Research on how these aspects affect the online consumer has become important in the recent past (Burke, 2002; Ha & Stoel, 2004; Kulviwat *et al.*, 2004). It is more likely that career women have a higher level of education as well as a higher income – they also fit the profile of women who would be more inclined to purchase garments online. These consumers would also be those who would want to know more about

a garment and how it will perform during use, before making a purchase decision. Once again additional textile information in an online guide would help the decision-making process – by acquiring more information on available products, the consumer is enabled to make a better match between her needs and wants and the product in question, and eventually make a better purchase decision (Mahmood, Bagchi & Ford, 2004).

According to O’Cass and Fenesh (2003), most researchers agree that, as in traditional markets, the interaction of controllable and uncontrollable factors play an important role in online decision-making. Consumer characteristics and environmental influences have been identified as the uncontrollable factors, while product / service characteristics, medium characteristics (the Internet), and merchant characteristics are identified as the controllable factors. Online marketers can influence the decision-making process by creating “a proper” web experience. The web experience is described as a combination of online functionality, information, emotions, cues, stimuli and products or services and is a new, additional input in traditional buying frameworks which can affect or even determine the outcome of the virtual interaction (Constantinides, 2000). If one takes into account that online customers are not simply shoppers but also information technology users, one can argue that the online shopping experience is more complicated than the shopping experience in a traditional shopping environment (Cho & Park, 2001). The web experience includes aspects like searching, browsing, and finding, selecting, comparing and evaluating information as well as interacting with the online firm. The online customer is influenced by the web page design, events, emotions, atmosphere, and other factors experienced while interacting with the specific web site and all these aspects will influence the eventual decision and outcome of the interaction (Constantinides, 2000 & 2004). The quality of the projected online experience is therefore an important issue for e-tailers to consider. Constantinides (2004) describes and defines what he sees as the building blocks for the web experience. He identifies the following factors: functionality (usability and interactivity), psychological factors (integrity and credibility), and content factors (aesthetics and marketing mix), and also indicates that the significance of each of these

factors can differ depending on the buying situation, the type of consumers targeted by the website as well as the “visiting” client’s intentions. All these factors are also applicable to apparel textiles. A textile quality assessment guide should be functional (increasing usability and interactivity), be credible (by supplying information pertinent to decision-making), be aesthetically pleasing in terms of how the information is presented, and add to the overall feeling of satisfaction because of added confidence when making a purchase decision.

These are all aspects that should capture the mix of motives and experiences of online consumers and should be considered when planning a retail website but, as this study is concerned with the online apparel consumer, it warrants a brief look into the specific problems these consumers encounter when purchasing online.

2.3.2.1 The online apparel consumer and expected Internet features

Online apparel consumers appear to be no different to other online consumers concerning their shopping motivations. They fall into the same general categories as other online and conventional apparel shoppers (Phau & Poon, 2000; Siddiqui *et al.*, 2003; Goldsmith & Flynn, 2004; Jang & Burns, 2004; Wilde, Kelley & Scott, 2004). It is however evident that those who shop online are often the innovative shoppers who like to try out the new and unfamiliar (Goldsmith & Flynn, 2004:85; Ha & Stoel, 2004; Phau & Lo, 2004). As a highly dynamic shopping medium the Internet is creating a new set of rules and expectations between online shoppers and fashion retailers (Siddiqui *et al.*, 2003). The advantages of the Internet as a retail channel also apply to the online apparel retailer. As with other products the advantages include not only access to a wider audience, cost savings, direct communication, and increased personalisation with the consumer, but also 24-hour availability seven days a week. Additional value-added features offered to the online shopper include in-depth product information, two-way communication, demonstration of products and services and up to date

online information (Breitenbach & van Doren, 1998; Rowley, 1996 & 2000; Siddiqui *et al.*, 2003; Wilde *et al.*, 2004). In 2001/ 2002 the Internet was already seen as an essential business requirement for apparel retailers, and more retailers started to develop a multi-channel strategy. Many traditional fashion retailers now also have an online presence, but it has been argued that many did so more out of peer pressure and customer expectations rather than as part of a strategic plan. Research showed that some retailers had a web presence solely to be noticed (Siddiqui *et al.*, 2003).

In South Africa, research that results in added value for the online consumer could help the retailer to enhance the online presence. By viewing South African apparel websites, it seems that a far smaller variety of products (as available in traditional shops) is presented and very little, if any, textile information is provided. Only one retailer supplies a link to care labels and care instructions (various South African apparel websites were consulted). There is therefore scope for improvement to make the online shopping experience satisfactory. An online textile quality assessment guide could be the first step to improve the local apparel retail websites, which could benefit both the apparel retailer and the consumer.

In developing an online presence, the web page of the apparel retailer should be regarded as the primary interface with customers and should, as in other cases, be representative and distinctive of the image that the e-tailer is seeking to portray. The site should also have desirable elements to encourage the purchase of apparel online. These include the same specifications as for general Internet sites: good Web page design, ease of navigation, and a search function; security guarantees and a clear return policy. Purchasing apparel online is different to purchasing apparel in a store and retailers should develop websites that pursue deeper relationships based on interests, personal identities, and affinities. It should also be noted that memory and the use of stored information is not essential in online purchasing as masses of online information as well as product comparisons, in terms of both properties and price, are available through the click of a button (Goldsmith & Goldsmith, 2002; Siddiqui *et al.*, 2003). Although e-

tailors that sell apparel online are starting to utilise the latest technology, much more can be done to give consumers more textile information, be it properties or clear images of the specific textile.

Different categories of online apparel shoppers should be catered for and furthermore the experience of online shopping should be engaging, interactive and memorable (Breitenbach & Van Doren, 1998; Siddiqui *et al.*, 2003). Some researchers (Siddiqui *et al.*, 2003) contend that consumers will only visit a website if it offers a viable alternative to offline services or if it adds value. The addition of 3-D features, which allow the apparel shopper for instance to “try on” clothes or to coordinate garments, has improved the online experience (Fiore & Jin, 2003; Lee, Fiore & Kim, 2003; Siddiqui *et al.*, 2003). Additional textile information supplied in a textile quality assessment guide could add more value and enhance the online experience even more. Irrespective of shopper typology, the primary reason for not purchasing apparel online is the inability to assess the sensory aspects of apparel (i.e. trying on, and feeling the textile) before purchasing (Gaal & Burns, 2001; Beck, 2002; Siddiqui *et al.*, 2003; Kim, Kim & Kumar, 2003; Watchravesringkan & Shim, 2003). LandsEnd (USA) has, for instance, introduced interactive models. This permits shoppers to see how a particular fashion product will look on a variety of body sizes, hair colours, skin tones, and body characteristics, while others add more product information, new ideas and a level of interactivity to their websites (Siddiqui *et al.*, 2003; Fiore & Jin, 2003). The emphasis has not yet been on interactivity features regarding textiles, but the same could be done to give a clearer picture of the textiles used in the garment – the fabric structure, drape, colour-ways, and patterns could be changed in the same way as body size, hair colour and skin tones. In addition, information on physical and performance properties could expand the online experience and assist the decision-making process. Easily accessible textile information (that could also be interactive) could therefore contribute to attract customers, increase sales and decrease returns.

It was found that online apparel consumers regard the replication of the traditional store format boring and that they were disappointed with the lack

of interactivity of the websites (Siddiqui *et al.*, 2003). It was also evident that consumers' expectations and experience far exceed the retailer's ability to understand and satisfy apparel consumer needs online. Within the fashion sector, this supports the view of Breitenbach and Van Doren (1998) that online consumers are in search of an online experience that is engaging and memorable. It also seems that retailers have failed to recognise how an online presence would allow consumers to obtain a different brand experience or the positioning of the fashion brand within the virtual environment (Siddiqui *et al.*, 2003). Some researchers also found that fashion retailers are inclined to use the Internet mainly as a platform for communication rather than as an electronic shop (Siddiqui *et al.*, 2003).

Research done on fashion websites indicated that retailers are not fully aware of consumer expectations and requirements. Of the websites reviewed, most of them included the common features such as employment services, store locators and store hours, but few provided a date of the last update. This puts doubt on the relevancy of the information provided, which could be a key feature in establishing an online presence (Breitenbach & Van Doren, 1998). All the websites these researchers investigated provided opportunity to capture customer information including an e-mail facility for two-way communication. Only a few offered the opportunity for customer comments, and in general the websites failed to maximize the opportunity of developing one-to-one personalized relationships with online customers. Common site features include product pictures and information, which varied in picture quality and length of text. A couple of websites utilised sound and video clips. Consumers commented on the lack of multi-media as surprising and disappointing. When purchasing fashion, consumers are looking for close-up zoom ability as well as viewing the product in 3-D – this supports the view that consumers are looking for a particular online experience that most websites still fail to offer (Siddique *et al.*, 2003). Consumers also want to be able to search product information (including textile features) as well as fashion ideas and a lack of providing this, impacted negatively on their web experience in terms of ease of navigation. Features expected from fashion websites include video clips, fashion shows, fashion information, and trends.

Consumers also expect access to ranges only available online and would like to be notified by retailers of the arrival of new stock in stores. According to researchers retailers not prepared to provide this, would miss the opportunity to integrate online and offline marketing activities (Breitenbach & Van Doren, 1998, Siddiqui *et al.*, 2003).

It is evident that more should be done to accommodate these aspects to ensure satisfactory online experiences, and more effort should be made to facilitate the assessment of tangible product features (Fiore & Jin, 2003).

Sasaki *et al.* (2004) found that consumers have concrete images of fibres and fabrics that have distinct features and those that are widely used in every day life, but have difficulty judging less familiar fibres and fabrics. They also found that assessment, when using visual sensation on a computer display was more difficult than actual handling, but if the images of fabrics have been established through experience, it is easier to assess the texture and hand from visual information. It therefore seems that if one could supply the consumer with more textile information (both text and visual) in an online guide, this would help with future decision-making.

2.3.2.2 The apparel consumer's assessment of quality and specific problems encountered by online apparel textile consumers

The assessment of garment quality is already problematic for the consumer in traditional retail setting, and even more so for the online consumer. According to Brown and Rice (1998), Jacobs (2003: 137) and Sasaki *et al.* (2004) consumers, when purchasing garments, first assess the textiles of the possible garments they consider purchasing, before assessing other features. As online consumers do not have the opportunity to touch, feel, and directly examine the garment, it becomes an even bigger issue.

The term, *quality*, can be used in many different ways, depending on the perspective from which it is viewed. When viewed from a consumer

perspective, quality assessment tends to focus on the extent to which apparel conforms to the serviceability that the individual consumer desires. This is in accordance with the ISO (the International Organisation for Standardisation) definition that defines quality as all the characteristics of an entity that have an effect on its ability to satisfy stated or implied needs (Abraham-Murali & Littrell, 1995b; Kadolph, 1998: 16; Marshall, Jackson, Stanley, Kefgen & Touchie-Specht, 2004: 334). In this study, quality therefore refers to the extent of serviceability desired by each consumer. This indicates that consumers have certain expectations concerning the quality of the items they purchase. Jacobs (2003: 142-148) and Lubbe (2003: 95-96) both found that some consumers use colour to evaluate the product, while others use texture, fit or care instructions for this purpose. They also handle the textile to determine durability (judged according to the weight of the fabric). All these aspects indicate that there is a definite need for more textile information so that the online apparel consumer can make decisions with more confidence.

The growing global marketplace and increase in online purchases, has made a wider variety of apparel products available, represented by a range of fibres, fabrics, surface decoration, construction methods, appearance standards and performance levels. These variables all combine to create products with varying levels of quality. This poses a challenge to consumers who have to make choices and determine which products will prove to be satisfactory. Furthermore, quality can be viewed from different angles and represent a different set of attributes for different people (Norum & Clark, 1989; Abraham-Murali & Littrell, 1995a; Kadolph, 1998:12-13; Hsu & Burns, 2002). In this study, quality will be viewed from the perspective of the consumer. From this view, quality is equated with meeting consumer expectations and is associated with the capacity of a product to satisfy consumer needs (Norton, 1991; Sieben, 1991; Yoon & Kijewski, 1997; Kadolph, 1998: 13-16; Yoon & Kim, 2000; Marshall *et al.*, 2004).

Researchers have found that different consumer groups vary in their expectations of quality and in their ability to distinguish various quality characteristics (Swinker & Hines, 2006). In general, the more educated and

sophistic the consumer, the more specific are the expectations of quality and the more precise the ability of the consumer to express those expectations. Kristensen, Martensen and Gronholdt (1999) relate expectations to satisfaction and define satisfaction as the evaluative response of the product performance and the consumption experience, which results from a comparison of that what was expected and that which was actually received.

Researchers such as Eckman, Damhorst and Kadolph (1990), Fiore and Damhorst (1992), Hines and O'Neal (1995), Hines and Swinker (2001), and May-Plumlee and Little (2001) all mention the importance of both *intrinsic* and *extrinsic* information cues when evaluating apparel quality. The same can be said of textiles, as these are also the cues used to assess textile quality. The personal involvement of consumers in the purchase of apparel (and apparel textiles) is directly related to the different dimensions of apparel (Haynes, Pipkin, Black and Cloud, 1994). It is evident that there are different dimensions of quality that consumers use to a greater or lesser extent when evaluating the quality of textile products (Stamper, Sharp & Donnel, 1991: 313-4; Swinker & Hines, 2006). Roach (1994), and Brown and Rice (1998: 38-41) refer to performance features and explain how they determine the standards a garment should meet to benefit the consumer.

The performance features of textiles include the aesthetic as well as functional performance features. *Aesthetic performance* refers to those aspects that create attractiveness and include design, materials used, and finishes enhancing the appearance. These features also include design elements and principles, classical or current fashion trends and the ability to fulfil the consumers' emotional needs (Roach, 1994; Brown & Rice, 1998:38; Kadolph, 1998:23, 27-8; McColl-Kennedy & Schneider, 2000; Zhang, Li, Gong & Wu, 2002). Aspects that affect aesthetics during maintenance and care of the product could also fall under this heading (Powers, 1984).

The importance that consumers place on aesthetic attributes (part of the intrinsic cues) when evaluating the quality of apparel textiles and garments during actual point of purchase situations, has also been indicated (Eckman

et al., 1990; Fiore & Damhorst, 1992; Hines & Swinker, 2001; Lubbe, 2003:23). Intrinsic characteristics were indicated as more important, in the assessing of quality than were extrinsic properties (Fiore & Damhorst, 1992; Dickson & Littrell, 1997; Park & Stoel, 2002).

Studies done by Kawabata, Niwa and Yamashita (1999), Inoue, Niwa, Yamashita, Minamide, Inoue, Ishokawa and Kawabata (2000) and Geršak (2002) emphasise the important role that the fabric plays when evaluating apparel products. According to Geršak (2002) and Marshall *et al.* (2004: 337), in an objective evaluation of garment appearance quality, it is necessary to start from fabric mechanics, as fabric is a basic construction element of an article of clothing. Every element, from the fibre to the final finishing detail, will influence the appearance of the garment. This means that visual appearance quality is expressed and seen as complete harmony of the physical properties of the fabric used, its drape and the quality of processing. Aesthetic properties can be further subdivided into formal, emotional, and cognitive qualities. The formal aspects (design elements and principles) were mentioned above; the emotional and cognitive qualities are those aspects that refer to the satisfying of the consumer's social-psychological needs (to impress or be accepted). Therefore, formal qualities also imply cognitive and emotional responses (Rice & Brown, 1998: 38-39; Fiore, 2002). Haynes *et al.* (1994) also refer to an experience dimension that is related to activities associated with evaluating apparel products. This usually occurs at the point of purchase in traditional retail outlets (Brown & Rice, 1998:43), which could indicate a problem for online consumers who cannot touch and feel the merchandise.

Functional performance refers to features that enhance a product's utility, such as durability (including colour integrity, shape retention and wear resistance), comfort (which could include a soft hand, drape ability), and care consideration (Brown & Rice, 1998:39). The physical properties describe a textile product - the fibre content, yarn structure, and the construction of the fabric, and these in turn determine the performance in use. According to Collier and Epps (1999:3), textile properties are affected by a number of

structural features that help to explain, and often predict, fabric performance. Performance properties are usually used to indicate the level of need satisfaction. Here both aesthetic and functional aspects are included, the former referring to the attractiveness of the product and the latter to utility aspects.

The following diagram was therefore used to describe the concept of apparel quality in this study. [The extrinsic attributes are only included to indicate that they are also aspects that influence the perceived quality of products]. These dimensions of apparel product quality all play an important part in the decision-making process and buying behaviour of consumers. Certain aesthetic aspects, namely the sensory aspects of touch (feel) and sight (or the lack of these aspects in the online situation), are also included. Comfort, which is associated with the hand (feel) of a fabric, is also included.

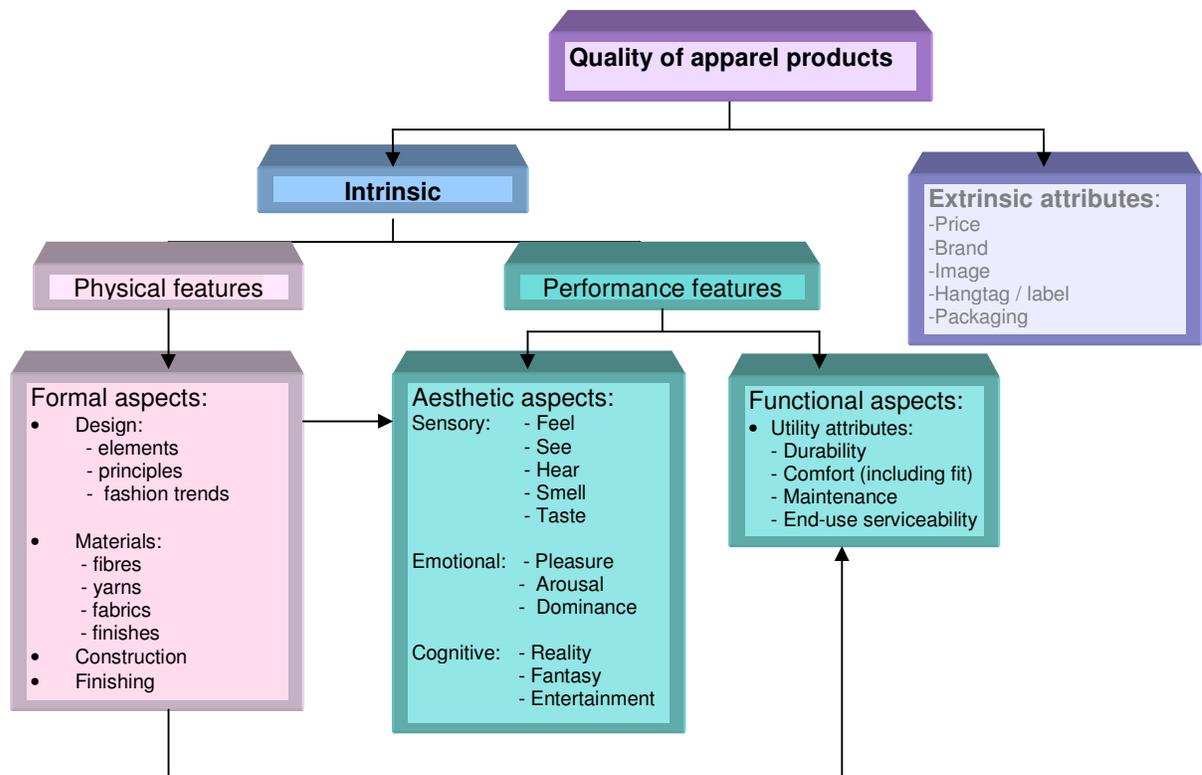


FIGURE 2: THE DIMENSIONS OF TEXTILE PRODUCT QUALITY

The online consumer cannot touch, handle, and try on garments to help with the assessment of quality. As quality is often judged by touching, feeling, manipulating and trying on the garment, the Internet consumer is at a distinct disadvantage. The consumer often only has a photograph to rely on when making a quality judgement. These photographs vary – some show the garment on a model, while other websites only show pictures of the garment. As indicated previously little or no information on textile properties is provided with the images, but some websites do include care instructions (Various South African apparel retail sites accessed during March 2005).

There is clearly room for improvement and the possibility for providing more information to facilitate the assessment of the quality of products on offer. Interactivity could assist the online consumer. The availability of information and images in the form of an online guide will be of value to assist online apparel consumers in their decision-making.

To ensure satisfied customers, manufacturers and retailers should understand how consumers evaluate quality both at point of purchase and in use. At the point of purchase the determinant factors for purchase are usually the aesthetic features of the garment, which are judged by looking at and feeling the product. The consumer is emotionally and psychologically affected by the attractiveness of a garment. The perceived aesthetic quality is what initially attracts or repels the consumer at the point of purchase – the focus is often on the textile and product aspects like colour, hand, texture, weight, as well as style and fit. These aesthetic judgements are usually very subjective and influenced by personal taste and preference, current fashions and garment fit (Zeithaml, 1988, Eckman, 1997, Brown & Rice, 1998:44, Kadolph, 1998:23; Jansson, Bointen & Marlow, 2002).

Consumers are seldom able to judge the functional performance at the point of purchase as they rarely possess complete information about the product. Due to prior experience some consumers could try to predict the functional performance based on the design, materials or construction of the garment.

Most consumers, however, lack the knowledge of materials and processes used to make the product. This often leads to incorrect perceptions regarding product quality. They purchase garments assuming that they will perform adequately in use – this could be the key factor in post-purchase satisfaction or dissatisfaction (Yoon & Kijewski, 1997; Brown & Rice, 1998:44, Kadolph, 1998:23). Functional performance becomes important in use. Consumers now re-evaluate the garment and compare it to their expectations at the point of purchase – problems arise when expectations are not met. Although the aesthetic qualities still remain important, other aspects may increase in importance, for instance durability, comfort or care procedure (Brown & Rice, 1998:45, Kadolph, 1998:23).

Consumers use different methods, different courses of action to bridge this knowledge gap to enable them to gauge the quality of the textile when shopping in a traditional store environment. They would for instance scrunch the fabric to test crease resistance, hold it against the light to determine translucence, examine the surface for fuzziness, which could result in pilling during use. In a traditional setting consumers often react to symbolic and cognitive aspects at the point of purchase, which usually result from the formal qualities of the product. The formal qualities of apparel therefore influence both the functional performance and aesthetic properties and play a determining role in quality decisions (Fiore & Kimle, 1997:19).

When purchasing online consumers rely more on symbolic and cognitive processing, but the fact that it is difficult to judge tactile aspects causes problems for these consumers. The online consumer also relies on aesthetics and emotional responses when making purchase decisions. They have to rely heavily on visual sensations when evaluating a product (Sasaki *et al.*, 2004). Lack of complete sensory information may constrain purchase decisions. Image interactivity, photo-realistic rendering, close up images, attractively composed photographs and good page layout can be used to provide the desired sensory information (Fiore & Jin, 2003; Kerfoot, Davies & Ward, 2003).

In a recent study on the social and physical interactions in textile evaluations (Kaiser, Pan, Chandler & Hethorn, 2005) a sensory science framework was developed to understand the relationship between physical properties and human perceptions. The findings show that there were discrepancies between website perceptions (expectations) and actual perceptions (look and feel). One of the reasons for the discrepancies was, for instance, the website's ability to communicate softness of fabric visually. This study stresses the importance of more accurate written, visual, and graphic descriptions that relate to both consumer perceptions and the physical properties of the fabric. This would stimulate higher order cognitive processing resulting in more positive response outcomes (Griffith, 2005; Kaiser *et al.*, 2005).

2.4 THE BENEFIT OF INTERACTIVE AIDS AND IMAGES

One of the unique characteristics of online shopping environments is that they allow for the implementation of highly interactive features. Interactivity is a multi-dimensional construct, which includes reciprocity in the exchange of information, availability of information on demand, response contingency, and customisation of content, and real-time feedback (Alba, *et al.*, 1997; Ariely, 2000; Häubl & Trifts, 2000). In this setting, interactivity refers to the ability to interactively access information in an online database.

One characteristic feature of electronic shopping environments is the lack of physical constraints with respect to product display. From a consumer's point of view, it is highly desirable to have access to a large number of products (Häubl & Trifts, 2000; Fiore & Jin, 2003). On the other hand, however, consumers have limited cognitive resources and may be unable to process the potentially vast amounts of information about all these alternatives. Research done by Payne during the 1980's (Häubl & Trifts, 2000) determined that humans adapt their decision-making strategies to specific situations and environments. This early research on consumer behaviour indicated that consumers could be described as "cognitive misers" who strive to reduce the

amount of cognitive effort associated with decision-making (Häubl & Trifts, 2000). It was also suggested that individuals are typically willing to settle for imperfect accuracy of their decisions in return for a reduction in effort (Bettman, Luce & Payne, 1998). A possible solution to this dilemma is to provide consumers with interactive decision aids designed to help them to effectively manage and capitalise on the large amounts of information that may be available in electronic shopping environments (Häubl & Trifts, 2000).

According to Jacobs (2003:175), when confronted with a lot of new and confusing stimuli, most consumers revert to their established scripts to guide decisions. Some consumers, who have less structured scripts for purchasing apparel, would adapt the actions and procedures they usually follow to accommodate newly accessed information from the Internet. Consumers who often use the Internet for information searches are more inclined to look for and utilise new or added information on a web page (Jacobs, 2003:177). Additional textile information that can be easily accessed could help to elaborate their scripts and eventually simplify the online purchasing process. One should, however take precautions not to overload the consumer's cognitive capacity, as this could lead to frustration and a negative response (Xia & Sudharshan, 2002).

The implementation of sophisticated tools to assist shoppers in their purchase decisions is desirable from a consumer perspective. One way of achieving this is by customising the electronic shopping environment to satisfy individual preferences. The availability of these interactive decision aids may lead to the transformation of the way shoppers search for product information and make purchase decisions. The way they search for product information and make purchase decisions, is a function of the particular interactive tool available in an online shopping environment (Ansari, Essegaiier, Kohli, 2000; Senecal & Nantel, 2004).

A well-known phenomenon regarding decision-making in complex environments is that individuals are often unable to evaluate all alternatives in great depth before making a choice. Humans tend to use two-stage

processes to reach a decision and the depth of information processing varies by stage. During the first stage consumers tend to screen a large set of available alternatives (products) and identify a subset of most promising alternatives. Following this, the latter is evaluated in more depth; comparisons are made on important attributes, which lead to the purchase decision (Häubl & Trifts, 2000).

Interactive aids that provide support to consumers in the following two respects would be valuable: (1) the initial screening of available products to determine which are worth further scrutiny, and (2) the in-depth comparison of selected products before making the actual purchase decision (Häubl & Trifts, 2000). Häubl and Trifts (2000) suggest the use of these two types of interactive tools to help consumers perform the key decision-making tasks. The first interactive tool that they suggest is a so-called recommendation agent (RA) to help consumers to more effectively screen the set (potentially very large) of alternatives available in an online store. Based on information provided by the shopper regarding own preference, an RA “recommends” a set of products likely to be attractive to the individual – it generates a personalised list of recommended alternatives. This list can use specific attributes, such as brand name, fabric type, and colour to identify the relative alternatives for a specific shopper. To generate this personalised list, the consumer indicates attribute importance weights and minimum acceptable attribute levels, which the computer uses to compute the order of the RA’s output. The consumer can also indicate a quota cut-off list that limits the number of products included in the list (Ansari *et al.*, 2000; Häubl & Trifts, 2000; Vijayasarathy & Jones, 2001; Senecal & Nantel, 2004). A well-structured textile guide with relevant information that the consumer can use to facilitate her purchasing decision could also be viewed as a decision-aid and, although it is not a recommendation aid as described by Häubl and Trifts (2000), it could supply the consumer with enough information to serve the same purpose.

The second interactive decision aid that Häubl and Trifts (2000) propose is a comparison matrix (CM), which is a tool that assists consumers in making in-

depth comparisons among those alternatives that appear most promising based on initial screening. The CM allows consumers to organise the attribute information of a variety of available products. This can be implemented in an interactive display format where the product information is presented in an 'alternatives (rows) x attributes (columns)' matrix. This enables shoppers to compare products more effectively and accurately. This display format is interactive as the shopper can have all products in the CM sorted by any attribute. The use of this type of aid should shift the emphasis from memory-based to stimulus-based decisions – the retaining of specific attribute information in memory therefore becomes less important. The use of these aids also allows the shopper to make better decisions with substantially less effort. They also seem to transform the way in which consumers search for product information and make purchase decisions (Häubl & Trifts, 2000). These tools allow shoppers to more easily detect products that are overpriced or otherwise dominated by competing alternatives; this in turn increases market efficiency and should also lead to more satisfied online customers. When designing an interactive tool, it is important to include all relevant attributes, not overlook attractive alternatives, and not to include information biased in favour of subsets of products (for instance certain brands). They should also be multi-retailer aids that allow for cross merchant or unrestricted cross-store comparisons (Häubl & Trifts, 2000).

Another interactive tool specifically useful for the online apparel shopper is the use of a 3-D virtual experience (Fiore & Jin, 2003). Although this still does not completely solve the problem of lack of touch, feel and "try-on" abilities on the Internet, a 3-D virtual experience can be a great help to give the consumer a better impression of the product. Consumers are then better able to get a more accurate image of for instance fabric drape, texture, and garment fit (Fiore & Jin, 2003; Sasaki *et al.*, 2004). Fiore and Jin (2003) suggest that image interactivity may not only contribute to approach responses toward the online store but may entice consumers to visit the bricks-and-mortar store to acquire the missing information. Li, Daugherty and Biocca (2003) also investigated 3-D product visualisation for a virtual experience and found that the Internet has the ability to serve as a powerful

medium for this experience, as consumers are able to interact with products in 3-D multi-media environments for a virtual experience, and at the same time enhance their learning experience. Accurate descriptions of textiles accompanied by visual material would also contribute to enhance the consumer's shopping and learning experience.

2.5 IMPLICATIONS FOR THIS STUDY

From the above discussion, it is apparent that research findings discussed in the review of literature also have a bearing on the development of an interactive aid to assist the apparel consumer in the decision-making phase of the purchase and could help to improve the consumer's product knowledge and ensure post-purchase satisfaction when wearing and caring for the product.

The schematic representation on the next page shows how the correct information can be used to develop an online consumer guide and how this guide can guide consumer decisions concerning the textiles used for the garments they purchase.

From the schematic representation it is clear that:

- Formal physical aspects of textiles have an effect on the performance features of textiles (both sensory and utility) and are used as cues to assess the quality of textiles
- The sensory aesthetic features of touch (hand/ tactile texture) and visual texture are two aspects that consumers use to judge textile comfort
- The (online) consumer uses both formal physical and performance features to assess the quality of the fabrics used for garments
- For an online textile quality assessment guide to be successful both formal physical and performance aspects used as quality cues, have to be included and interactive possibilities should be explored.

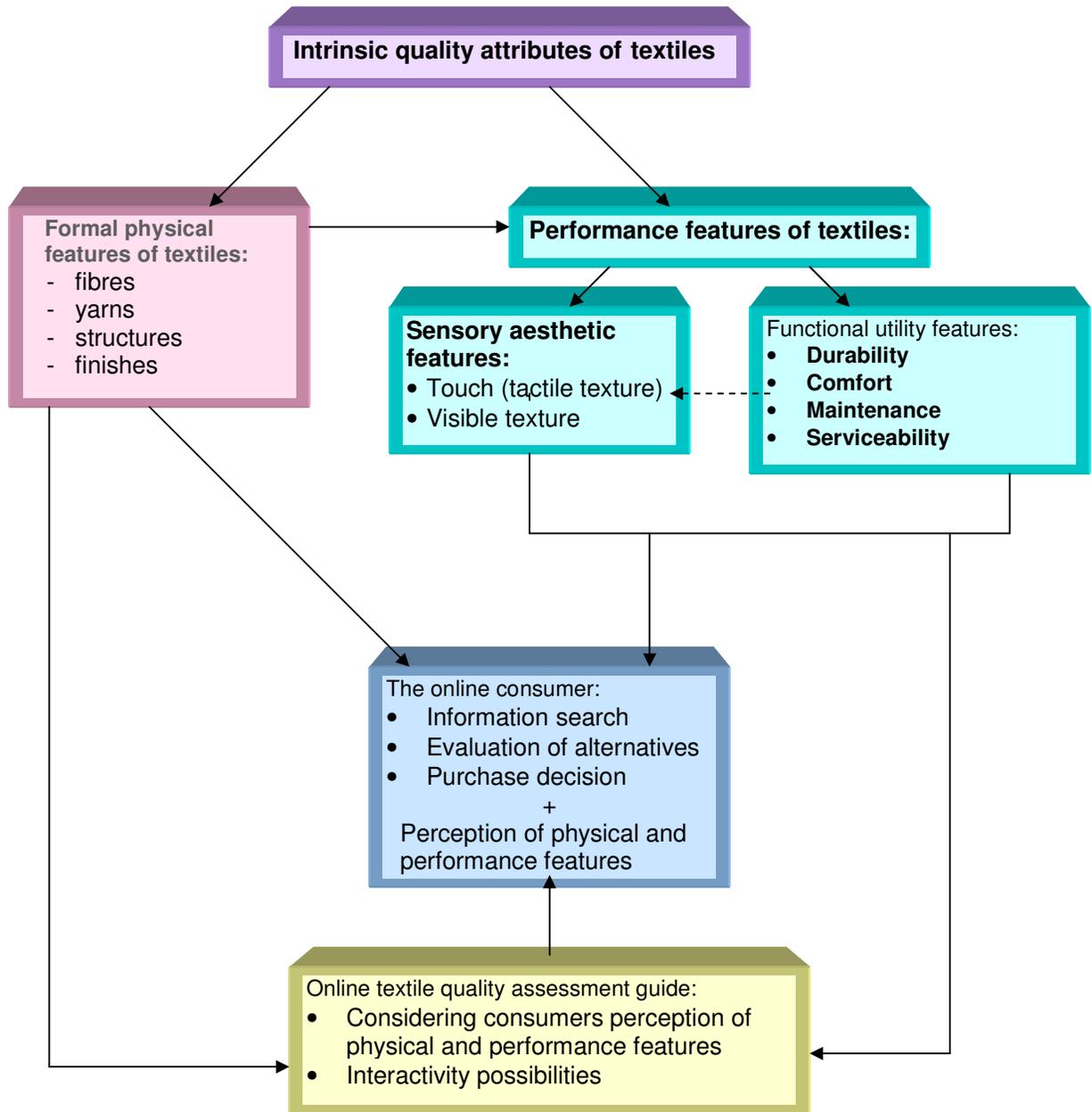


FIGURE 3: THE INTRINSIC QUALITY ATTRIBUTES THAT PLAY A ROLE IN CONSUMER DECISION-MAKING AND THE DEVELOPMENT OF THE ONLINE TEXTILE GUIDE

A general overview of the research design and the methodology used for the study, that includes the sub-objectives and specific goals, as well as the research strategy, the research style and operationalisation to meet these objectives, are discussed in the first part of Chapter 3. The rest of Chapter 3 is devoted to a discussion of the choice of the research sample, data collecting techniques and procedures, and data analysis for the first phase of the study. The quality of the data is discussed and the data presentation for this phase of the study also receives attention.