



Consumer Responses to Key Environmental Attributes in the Retailscape

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Margaret McOmish

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*To my daughters
Jessica and Freya*

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Abstract

This thesis develops and tests a new conceptual framework – the proposed ‘Model of Consumer Response to Retailscapes’. It integrates theories from environmental psychology, urban design, and architecture, as applied to a retail environment, termed *retailscape* in this thesis. This research contributes to the marketing literature by adopting a broader conceptualisation of the retailscape by acknowledging the multidimensional and multilayered nature of the retail environment, encompassing both spatial and temporal properties.

Despite prolific research on the topic of retail atmospherics, few studies had specifically examined how key environmental attributes from *both* the interior and exterior retailscape influence the affective and behavioural responses of shoppers, and no research had yet examined how shoppers respond to these environmental attributes *as they move through a retail precinct*. Therefore, the two key research questions guiding this research were:

1. What effects do key environmental attributes in the interior and exterior retailscape have on shoppers’ affective and behavioural responses?
2. How do shoppers’ affective and behavioural responses vary as they move through a retailscape?

Three research themes summarising the knowledge gaps were addressed in this research. The first research theme focused on key environmental attributes in the interior and exterior retailscape most likely to influence shoppers’ affective and behavioural responses. The second research theme examined the kinaesthetic experience of shoppers as they move through a retail precinct. Finally, the third research theme investigated consumers’ affective and behavioural responses to the presence of social spaces in the retailscape.

A two-stage program of research was undertaken with qualitative and quantitative research methodologies. Key environmental attributes identified in the exploratory

research included positive affective and behavioural responses associated with: 1) an **open** rather than closed feeling in retailscapes; 2) a **natural** rather than unnatural feeling in retail environments; 3) retailscapes that feel like they have **evolved** and grown organically instead of appearing artificial and contrived; 4) retailscapes with a **village-like** rather than a non-villagy feel; 5) retailscapes with an **historical** feel instead of a non-historical feel; and 6) retail environments with **social spaces** as opposed to no social spaces.

In its second and more quantitative stage, this research empirically tested these six environmental attributes in the proposed 'Model of Consumer Response to Retailscapes' in five locations in a Queensland shopping centre, with a sample of over 150 'real' consumers. An evaluative mapping methodology, borrowed from environmental psychology and urban design, was adopted to capture the kinaesthetic experience of shoppers as they move through a retail precinct, taking into account the spatial and temporal elements of the retailscape.

The results show that the environmental attribute of 'social spaces' had both direct and indirect influences on consumers' behavioural responses, mediated by the affective response of 'pleasure' in four out of the five research locations. The environmental attribute of 'naturalness' had a direct influence on shoppers' behavioural response in two locations, and an indirect influence on shoppers' 'pleasure' in four locations. The direct and indirect influence of 'openness' on both pleasure and approach was significant in two locations. However, the direct and indirect influences of the three attributes of 'evolved', 'village-like', and 'historical', were not significant in four out of the five locations. Only one of the indirect paths linking the six environmental predictor variables to the mediator variable 'arousal', and sequentially to the dependent variable 'approach', were significant.

This multidisciplinary research presented in this thesis highlighted a new direction for further research designed to enhance our understanding of how consumers respond to environmental attributes in both the interior and exterior retailscape, taking into account the kinaesthetic experience of shoppers as they move through a retail precinct.

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Chapter 1 Rationale and Research Program

1.1 Introduction

Since the early 1970s the retail environment has provided marketers with a rich field of research. Kotler (1973-4) emphasised the importance of the execution of retail marketing strategies by focusing on the importance of place, or atmospherics in influencing consumer behaviour. During the last few decades, an extensive body of research in the marketing literature has specifically examined consumer response to a multitude of different attributes of the retail environment. For instance, Turley & Milliman (2000) identified 58 variables from the store environment which influence consumer behaviour. Indeed, marketers have been searching for a coherent framework for analysing retail environments (Gilboa & Rafaeli, 2003) integrating both interior and exterior environmental attributes (Baker, 1987; Bitner, 1992; Wagner, 2000).

The concept of servicescape, first introduced by Bitner (1992) describes the physical elements in a service environment, that is, the man-made surroundings of a service setting. In this current research, the servicescape refers to the retail environment, and will be termed the *retailscape*. However, existing conceptualisations of the retailscape tend to adopt a uni-dimensional perspective, focusing on consumers' responses to discrete elements in the interior retailscape. This research adopts a broader conceptualisation of the retailscape by acknowledging the multidimensional and multilayered nature of the retail environment, encompassing both spatial and temporal properties.

This thesis contributes to the marketing literature by developing and testing a new conceptual framework – the proposed 'Model of Consumer Response to Retailscapes'. This conceptual framework builds on research from marketing and associated research streams of services marketing and consumer behaviour. The model integrates theories from environmental psychology, urban design, and architecture as applied to a retail environment. Further, this multidisciplinary

research applies an evaluative mapping methodology derived from environmental psychology and urban design (Nasar, 1990, 1998, 2000).

This first chapter summarises the thesis and provides a rationale for the research. Section 1.2 introduces the research problem, two research questions, and the conceptual model and central hypothesis guiding this research. In Section 1.3, key gaps identified in the literature review are summarised according to three research themes. An explanation of how this program of research addressed the research gaps is provided. Justifications and contributions of this research from a theoretical, methodological, and practical perspective are provided in Section 1.4. Section 1.5 explains the philosophical paradigm guiding this research, with the research design and justification for using a qualitative/quantitative research approach discussed in Section 1.6. In Section 1.7, the research design and structure of the thesis is presented. The delimitations of scope of this research are presented in Section 1.8, and key terms are referred to in Section 1.9. Finally, the chapter conclusion is found in Section 1.10.

1.2 Research Problem

Despite prolific research on the topic of retail atmospherics, there are few studies specifically examining how key environmental attributes from both the interior and exterior retailscape influence the affective and behavioural responses of shoppers. Likewise, to the author's knowledge, no research has yet examined how shoppers respond to these environmental attributes *as they move through a retail precinct*. Therefore, the two key research questions guiding this research are:

1. What effects do key environmental attributes in the interior and exterior retailscape have on shoppers' affective and behavioural responses?
2. How do shoppers' affective and behavioural responses vary as they move through a retailscape?

The conceptual framework guiding this research, labelled the proposed 'Model of Consumer Response to Retailscapes' is presented in Figure 1.1. The

interrelationships hypothesised in this model are based on a review of the marketing, environmental psychology, urban design, and architecture literature. Further, this model was developed from the results of the exploratory research (Study 1), which identified six key environmental attributes from both the interior and exterior retailscape most likely to influence the affective and behavioural responses of shoppers, both directly and indirectly.

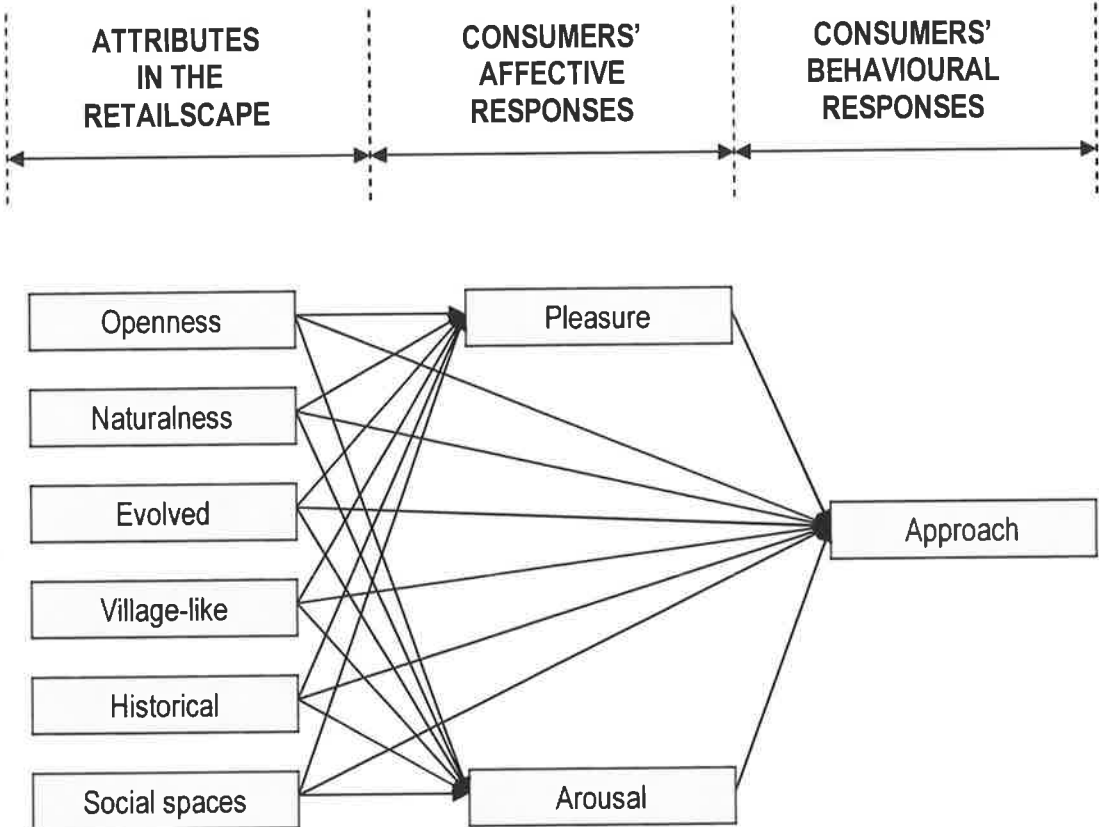


Figure 1.1: Proposed ‘Model of Consumer Response to Retailscapes’

The following overarching hypothesis was developed to reflect the interrelationships hypothesised in the model:

The six exogenous environmental attributes have both direct and indirect influences on consumers’ behavioural response (approach), mediated by the affective responses of pleasure and arousal.

The hypothesised direct influences are represented by the direct paths linking the exogenous environmental variables to the dependent variable of 'approach'. The hypothesised indirect influences are represented by indirect paths linking the exogenous environmental variables to the mediator variables of 'pleasure' and 'arousal', and sequentially to the dependent variable of 'approach'.

From an extensive review of the marketing, environmental psychology, urban design, and architecture literature, a number of knowledge gaps were identified. The following section discusses these research gaps in accordance with the three research themes discussed in the following section.

1.3 Gaps in the Literature

The three research themes summarising the knowledge gaps identified from a review of the literature from a marketing perspective (Chapter 2), and a multidisciplinary perspective (Chapter 3) are:

Research Theme 1: Key Environmental Attributes

- A lack of research identifying key environmental attributes in the interior and exterior retailscape most likely to influence shoppers' affective and behavioural responses.

Research Theme 2: Shopper's Kinaesthetic Experience

- No previous research examining the kinaesthetic experience of shoppers as they move through a retail precinct.

Research Theme 3: Social Spaces in the Retailscape

- Very little research examining consumer affective and behavioural responses to social spaces in a retailscape.

In sum, the primary aim of this research is to address these gaps in the marketing literature as summarised in the three research themes. In doing so, this research examines the two research questions, and tests the central hypothesis underpinning

the new conceptual framework – the proposed ‘Model of Consumer Response to Retailscapes’. Each research theme, and associated knowledge gap, are now discussed in further detail. Explanation of how this research will address the identified gaps is also provided.

1.3.1 Research Theme 1 – Key Environmental Attributes

The first theme guiding this research focuses specifically on identifying the key environmental attributes from both the interior and exterior retailscapes most likely to influence shoppers’ affective and behavioural responses. In the retailing literature, a number of theoretical frameworks and classification schemes (Baker, 1987; Berman & Evans, 1995; Bitner, 1992; Wagner, 2000) have been developed to integrate the various environmental attributes which influence consumer behaviour in a retail setting. However, most research has focused on discrete elements from the interior rather than exterior environment, with little acknowledgement of the intertwined nature of these two elements of the retailscape (Turley & Milliman, 2000).

In their review of past empirical research in retail atmospherics, Turley and Milliman (2000) highlighted the lack of research focusing on the exterior retail environment when compared with the proliferation of research examining interior elements of the retailscape. Indeed, Turley and Milliman identified only four research papers looking specifically at the exterior retail environment. Further, Turley & Milliman (2000 p. 207) emphasised the importance of the exterior of the retail environment in creating a positive first impression for a retail outlet which subsequently induces approach behaviours:

These variables are particularly important since the exterior of a marketing facility (e.g. retail store, restaurant, etc.) must be considered acceptable before the interior of the building is ever experienced.

Researchers have categorised elements in the retail environment according to whether the dimensions are interior/internal or exterior/external¹ (Berman & Evans, 1995; Doyle & Broadbridge, 1999; Greenland & McGoldrick, 1994; Lin, 2004; Turley & Milliman, 2000; Upah & Fulton, 1985; Wagner, 2000). The simple dichotomy between interior and exterior elements of the retailscape ignores the importance of integrating both these components of the environment. As shoppers move through a retail precinct, environmental attributes from both the interior and exterior retailscape affect their shopping experience. Recently, Lin (2004) stressed the importance of viewing the servicescape from a holistic perspective, calling for future research to focus on the exterior elements (e.g., architecture), including the overall flow and design of the servicescape from the exterior to interior components.

As mentioned previously, this research adopts a multidisciplinary perspective. In environmental psychology, Nasar's (1990; 1998; 2000) research identified a number of environmental attributes associated with the likability of the urban environment or cityscape. This research contributes to the marketing literature by extending Nasar's research to the retail environment or retail precincts. By adopting a multidisciplinary perspective, this research builds on previous research by taking into account a diverse range of environmental attributes in the retailscape not previously considered in the marketing literature.

Therefore, the first research theme guiding this research focuses on identifying which environmental attributes in the interior and exterior retailscape are most likely to influence the affective and behavioural responses of shoppers. To address this research theme and gap in the literature, exploratory research was undertaken in Study 1. Further details of this initial qualitative research are found in Chapter 4.

1.3.2 Research Theme 2 – Shopper's Kinaesthetic Experience

The second research theme underpinning this research relates to a shopper's kinaesthetic experience. This multidisciplinary research draws on the urban design

¹ Within the atmospherics literature, interior/internal and exterior/external have been used interchangeably.

and architecture literature, where a number of authors have acknowledged the kinaesthetic experience of individuals as they moves through space, over intervals of time (Carmona, Heath, Oc, & Tiesdell, 2003; Cullen, 1961; Thiel, 1997).

However, in the marketing literature there is limited research recognising the kinaesthetic experience of shoppers as they move through a retail precinct. For instance, the kinaesthetic experience has been described superficially in terms of shoppers moving about, mingling, looking at products without making a purchase (Cox, Cox, & Anderson, 2005; Lehtonen & Maenpaa, 1997). However, this interpretation of the kinaesthetic experience does not encapsulate Cullen's (1961) concept of 'serial vision' where an individual experiences the environment in a series of jerks and revelations. As individuals move through the environment they become aware of an 'existing view', but they are also aware of a different 'emerging view'. That is, as individuals move through the environment they have a sense of being in a particular place ('here'), but they also sense that around and outside it are other places ('there') (Carmona et al., 2003).

Existing research in marketing tends to view the retail environment from a static, unidimensional perspective. For instance, most research has employed a cross-sectional design, where data is gathered at one point in time. However, shoppers who move through a retail precinct experience the environment sequentially. In other words, they experience their surroundings as they move through space, over intervals of time (Thiel, 1997). By viewing the retailscape from the perspective of a shopper moving through a retail precinct, this research recognises a shopper's kinaesthetic experience and takes into account the spatial and temporal elements of the retailscape.

The second research theme and associated gap in the marketing literature is addressed in Study 2 where Nasar's (1990; 1998; 2000) evaluative mapping methodology from environment psychology and urban design is applied in a retail context. The aim of the evaluative mapping methodology is to capture the kinaesthetic experience of shoppers as they move through a retail precinct. In this regard, evaluative mapping methodology recognises the multi-dimensional and

dynamic nature of the shopping experience. To capture the kinaesthetic experience of shoppers, Study 2 specifically examined shoppers' affective and behavioural responses to key environmental attributes, identified in Study 1, in five different locations in an established retail precinct. Therefore, a unique contribution of this research was the adoption of Nasar's evaluative mapping methodology in a retail setting. Based on the results from Study 2, an evaluative map of the research location was developed, highlighting specific locations and environmental attributes influencing the affective and behavioural responses of shoppers. To date, no known research has applied this methodology in a retail context. Further detail of the evaluative mapping methodology adopted in Study 2 is presented in Chapter 6.

1.3.3 Research Theme 3 – Social Spaces in the Retailscape

Finally, the third research theme guiding this research focuses on the presence of social spaces in a retailscape. It is widely recognised in the urban design and architecture literature that the spatial elements of the built environment influence human activity and social life (Gehl, 1987, 1996; Whyte, 1980, 1988). For instance, social spaces support and facilitate social and cultural interaction between individuals. Both sociability and vitality are associated with successful social spaces characterised by the presence of active street life and frontages (Carmona et al., 2003; Montgomery, 1998).

Retail precincts provide social spaces for shoppers, either in the public space of the city centre and a street shopping environment, or in the private space of a shopping centre. However, from a marketing perspective, there has been limited empirical research focusing on how shoppers respond to the presence of social spaces in retail precincts. Despite considerable research examining the impact of how shoppers respond to crowded retail environments (Eroglu, Machleit, & Barr, 2005; Harrell, Hutt, & Anderson, 1980; Hui & Bateson, 1991; Machleit, Kellaris, & Eroglu, 1994; Machleit, Eroglu, & Mantel, 2000), there has been very little research emphasising how individuals respond, either positively or negatively to the presence of social spaces in retail environments. This gap in the literature is surprising given that many

retail precincts integrate some form of social space in their retailscapes to enhance the experiential benefits of shopping (Haytko & Baker, 2004; Southworth, 2005).

Finally, the third research theme addressed in this program of research focuses on how social spaces in a retailscape influence the affective and behavioural responses of shoppers. The initial exploratory research (Study 1) identified the presence of social spaces as one of the six environmental attributes influencing shoppers' affective and behavioural responses to retailscapes. Subsequently, 'social spaces' was incorporated in the proposed 'Model of Consumer Response to Retailscapes' and empirically tested in Study 2 where Nasar's evaluative mapping methodology was applied in an established retail precinct.

1.4 Research Justifications and Contributions

This program of research is one of the first to investigate the retail environment from a broader perspective by examining the retailscape from a holistic perspective, taking into account the dynamic and multi-faceted nature of the shopping environment. This research seeks to enable a wider understanding of consumers' responses to environmental attributes in the retailscape. In this section, the research justifications and contributions are discussed from a theoretical, methodological, and practical perspective.

1.4.1 Theoretical Perspective

This research contributes to the marketing literature by proposing and testing a new conceptual framework, the proposed 'Model of Consumer Response to Retailscapes'. As discussed in the previous section, there has been limited research focusing on consumers' affective and behavioural responses to environmental attributes of both the interior and exterior retailscape. Further, previous research has disregarded the close interaction between both these elements of the retailscape (Turley & Milliman, 2000). Therefore, an important theoretical contribution of this research is the introduction of a new conceptual framework which provides a broader conceptualisation of the retailscape by acknowledging both the interior and exterior attributes of the retail environment and the interrelated nature of these attributes.

As emphasised in the previous section, the broadened conceptualisation of the retailscape adopts a multidisciplinary perspective by acknowledging the consumer's kinaesthetic experience through focusing on the dynamic relationship between individuals and their environment as they move through space and time. Previous research in retail atmospherics tends to adopt a unidimensional and static perspective where data is gathered once, representing a 'snapshot' of one point in time (Emory & Cooper, 1991). However, this static perspective of the retailscape does not reflect how shoppers evaluate their surroundings. For instance, when shoppers move through a retail precinct they evaluate their surrounding from a more dynamic or multi-dimensional perspective. Likewise, the surrounding environment in a retail precinct does not remain static. For instance, as shoppers move from one location to another, the environmental attributes surrounding them may vary substantially. Therefore, this research contributes to the marketing literature by specifically examining consumers' affective and behavioural responses to environmental attributes in the interior and exterior retailscape in a number of different locations in a retail precinct. To date, no known research has adopted such a dynamic perspective by integrating both the spatial and temporal elements of the retailscape in the research design.

Finally, this research contributes to the marketing literature by acknowledging the importance of social spaces in a retailscape. In both the urban design and architecture literature, it is widely recognised that the spatial elements of the built environment influence patterns of human activity and social life (Carmona et al., 2003; Isaacs, 2000; Southworth, 2005). Yet, little is known about how shoppers respond to the presence of social spaces in a retail precinct. Therefore, this research contributes to the marketing literature by empirically examining shoppers' affective and behavioural responses to the presence of social spaces in the retailscape.

1.4.2 Methodological Perspective

From a methodological perspective, this research contributes to the marketing literature by applying Nasar's (1990; 1998; 2000) evaluative mapping methodology to measure consumers' affective and behavioural responses to environmental

attributes in the retailscape in a number of different locations. In doing so, this research acknowledges a shopper's kinaesthetic experience, as a person moves through space, over intervals of time. The dynamic nature of shopping involves a cumulative sequential process, where the individual experiences the retailscape in a succession of different locations (Thiel, 1997). In this research, shoppers were asked to evaluate the surrounding retailscape during the shopping experience, rather than relying on memory based measures which may not capture how individuals actually felt while shopping. Therefore, real-time measures of experience were obtained, rather than relying on how individuals reconstruct and evaluate their past (Kahneman, 1999). As discussed, evaluative mapping allows a shoppers' affective and behavioural responses to be measured in a number of different locations during the shopping experience. As noted, previous research in marketing has failed to recognise the importance of movement as fundamental to how a person experiences the surrounding retail environment.

1.4.3 Practical Perspective

The limited size and highly competitive nature of the retail landscape in Australia has seen regional shopping centres become proactive to ensure that customers' needs are met across the entire retail and entertainment spectrums (Dimasi, 2004). Within Australia, there are approximately 1,266 shopping centres, with the majority of this total made up of supermarket anchored neighbourhood or community centres (63% of the total). These shopping centres account for 14 million square metres of retail space, but represent only 33 percent of the total retail space. The balance of the retail space is represented by traditional strip centres, CBD retail, and highway retail (Dimasi, 2006).

Since 1990, the total number of shopping centres has increased by 350 or almost 40 percent. Dimasi (2006 p. 28) identified the following developments contributing to this expansion:

- Ten new regional centres, mainly from expansions/redevelopments of existing subregional centres.
- 37 new subregional centres.
- 235 new regional centres.
- Approximately 40 new bulky goods/homemaker centres
- Nine new factory outlet centres.
- Approximately 22 new CBD retail centres.

Much of the increase in value in the shopping centre sector in Australia has been driven by expansions and redevelopments. Increasingly, retail management monitor trends and changes in consumer demand as shoppers' needs have become more discerning and increasingly more sophisticated (Dimasi, 2004, 2006). For many retail developments, the physical facilities of the retailscape represent a substantial capital investment. Given the competitive marketplace within the retail industry, the physical facilities or retailscape provides an important opportunity for creating a competitive advantage for shopping centre management and retail developers. This research examines attributes in the retailscape from a consumer-oriented perspective, focusing on the end-user or shopper. To date, no known research has been undertaken in the retail industry specifically examining how consumers respond to key environmental attributes in the retailscape.

The results of this research should offer a number of practical guidelines to practitioners involved in the design, development, and management of retail precincts, including shopping centres, inner city redevelopments, and the upgrade of existing retail streetscapes. First, one key outcome of this research is the identification of which environmental attributes could be incorporated or accentuated in the interior and exterior retailscape to provide shoppers with a more pleasurable shopping experience. A second important outcome, from a practical perspective, is the development of an evaluative map of the retail precinct highlighting specific locations and environmental attributes influencing the affective and behavioural responses of shoppers. Indeed, evaluative mapping of the research location in Study 2 may contribute to the design of future retail refurbishment. In sum, the results of this research may provide valuable information for retail managers and consultants

such as architects, landscape architects and urban designers, in collaboration with developers and government bodies, involved in the retail industry.

1.5 Research Paradigms and Philosophical Approach

This research adopts a form of realism research where the researcher is not seeking an absolute truth, but rather developing models from prior theory and empirical data that move closer towards the truth. Realism researchers recognise that an external reality exists but within a dynamic framework, reflecting complex phenomenon which cannot be easily apprehended (Carson, Gilmore, Perry, & Gronhaug, 2001; Healy, 2000). The researcher is neither an objective nor an involved participant, but rather, mediates the respondents' perceptions of reality through the perceptions and experiences they bring to the research. Operating within the realism paradigm, the researcher does not consider a universal or absolute truth as an attainable goal. Rather he/she recognises that the development and improvement of models from prior theory can move the researcher closer to the truth (Aronson, Harre, & Way, 1995; Healy, 2000).

1.6 Multiple Methods

This research adopts a mixed methods research strategy where both qualitative and quantitative research methodologies are undertaken in a two-stage program of research. Mixing qualitative and quantitative methods 'capture a more complete, *holistic*, and contextual portrayal of the unit(s) under study' (Jick, 1979 p. 603). In this research, a sequential research design was employed, where a qualitative method was first adopted for exploratory purposes (Study 1), followed by a quantitative method, with a larger sample, potentially allowing generalisations of the results to a larger population (Study 2) (Brannen, 1992; Creswell, 2003).

In the two-stage program of research, qualitative methods played a crucial role in the discovery and exploration of a new area of research. For instance, the initial exploratory research (Study 1) consisted of in-depth interviews with shoppers. Study 1 adopted an inductive approach oriented towards exploration and discovery. The qualitative research elicited data and illuminated themes that may otherwise have

been neglected by a single quantitative method (Amaratunga, Baldry, Sarshar, & Newton, 2002; Jick, 1979). The primary aim of Study 1 was to explore shoppers' affective and behavioural responses to the retail environment in three different retail precincts, including shopping centres, on-street shopping environments, and city centres. The focus of the in-depth interviews was on respondents' experiences, designed to obtain rich insights into the thoughts and feelings of shoppers. Overall, the research aim of Study 1 was to develop potential empirical generalisations and to identify preliminary relationships from the ground up, using an inductive research approach (Neuman, 2003).

The findings from the exploratory research identified six environmental attributes in both the interior and exterior retailscape which influenced the affective and behavioural responses of shoppers. The results from Study 1, together with a comprehensive review of the literature from a marketing and multidisciplinary perspective, provided a focus to the research, and aided in the development of the new conceptual framework and the central hypothesis guiding this program of research.

Building on the exploratory research, Study 2 was deductive and explanatory in nature by testing and extending a theory in a new area of research (Neuman, 2003). A primary aim of Study 2 was to empirically test the proposed 'Model of Consumer Response to Retailscapes' in an established retail precinct. The research undertaken in Study 2 was designed to address the research questions and test the central research hypothesis developed from the proposed conceptual model.

As discussed previously, Study 2 also adopted Nasar's (1990; 1998; 2000) evaluative mapping methodology applied in a retail context. During the evaluative mapping methodology, respondents' affective and behavioural responses to environmental attributes in the retailscape were measured in five different locations. The quantitative data was analysed separately for each location of the retail precinct. Finally, the results were integrated into an evaluative map of the retail precinct highlighting specific locations and environmental attributes influencing shoppers' affective and behavioural responses.

In summary, this research adopted a combined qualitative and quantitative research design in a two-stage program of research. This sequential research design was complementary in that the findings from Study 1 provided input into the development of the conceptual model, the central research hypothesis, and the design of Study 2. The next section overviews the structure of the thesis and summarises the research design.

1.7 Structure of the Thesis and Program of Research

This thesis is structured according to eight chapters as summarised in the following sections. This introductory chapter has provided the foundations for this research. The research design and structure of this thesis is shown in Figure 1.2, highlighting the link between the chapters and the two studies in this program of research.

Chapter 2 reviewed the literature relevant to this research from a marketing perspective. Literature pertinent to this research was reviewed, highlighting relevant theories and research findings from services marketing and consumer behaviour. The chapter concludes with a summary of key research gaps identified from a marketing perspective.

Chapter 3 constitutes the second part of the literature review by adopting a multidisciplinary perspective. Relevant theories and research finding from environmental psychology, urban design and architecture, were reviewed. Likewise, the literature review concluded with a summary of the research gaps from a multidisciplinary perspective. Finally, an initial conceptual framework is presented.

Chapter 4 presents Study 1, the initial exploratory study in this program of research. Exploratory research, in the form of in-depth interviews, was undertaken to identify key environmental attributes in the retailscape most likely to influence the affective and behavioural responses of shoppers. The research findings from Study 1 are summarised according to six environmental attributes in the interior and exterior retailscape.

Chapter 5 formalises the conceptual framework derived from an extensive review of the literature and the exploratory research undertaken in Study 1. This chapter introduces two research questions, the proposed ‘Model of Consumer Response to Retailscapes’, and the central hypothesis guiding this research.

Chapter 6 introduces Study 2, the main quantitative component of this research. The application of Nasar’s (1990; 1998; 2000) evaluative mapping methodology in the context of this research is presented. Justification is given for the choice of research location, as well as an overview of the data collection procedure. In addition, the questionnaire format and construct measurement scales are presented, followed by details of the pre-testing procedure. Finally, data collection, including sampling issues, and the recruitment of respondents, are examined.

Chapter 7 tests the central hypothesis encapsulated in the proposed ‘Model of Consumer Response to Retailscapes’, and reports the results of the evaluative mapping methodology undertaken in Study 2. A two-step approach to data analysis was applied to the data collected from respondents in five different locations at Sunshine Plaza. First, the affective and behavioural response measures were analysed using exploratory factor analysis. Second, path analysis using stepwise multiple regression tested the linkages between the six exogenous environmental attributes, the affective response (mediating) variables and the behavioural response (dependent) variable. Based on the results of the path analysis, an evaluative map of Sunshine Plaza was developed, highlighting specific locations and environmental attributes influencing the affective and behavioural responses of shoppers.

Chapter 8 presents an interpretation of the research findings, including the conclusions and research implications. The theoretical and managerial contributions of this research are examined. Finally, the chapter concludes with a discussion of the limitations of this research and possible directions for future research. Figure 1.2 presents the research design, highlighting the link between the eight chapters in this thesis.

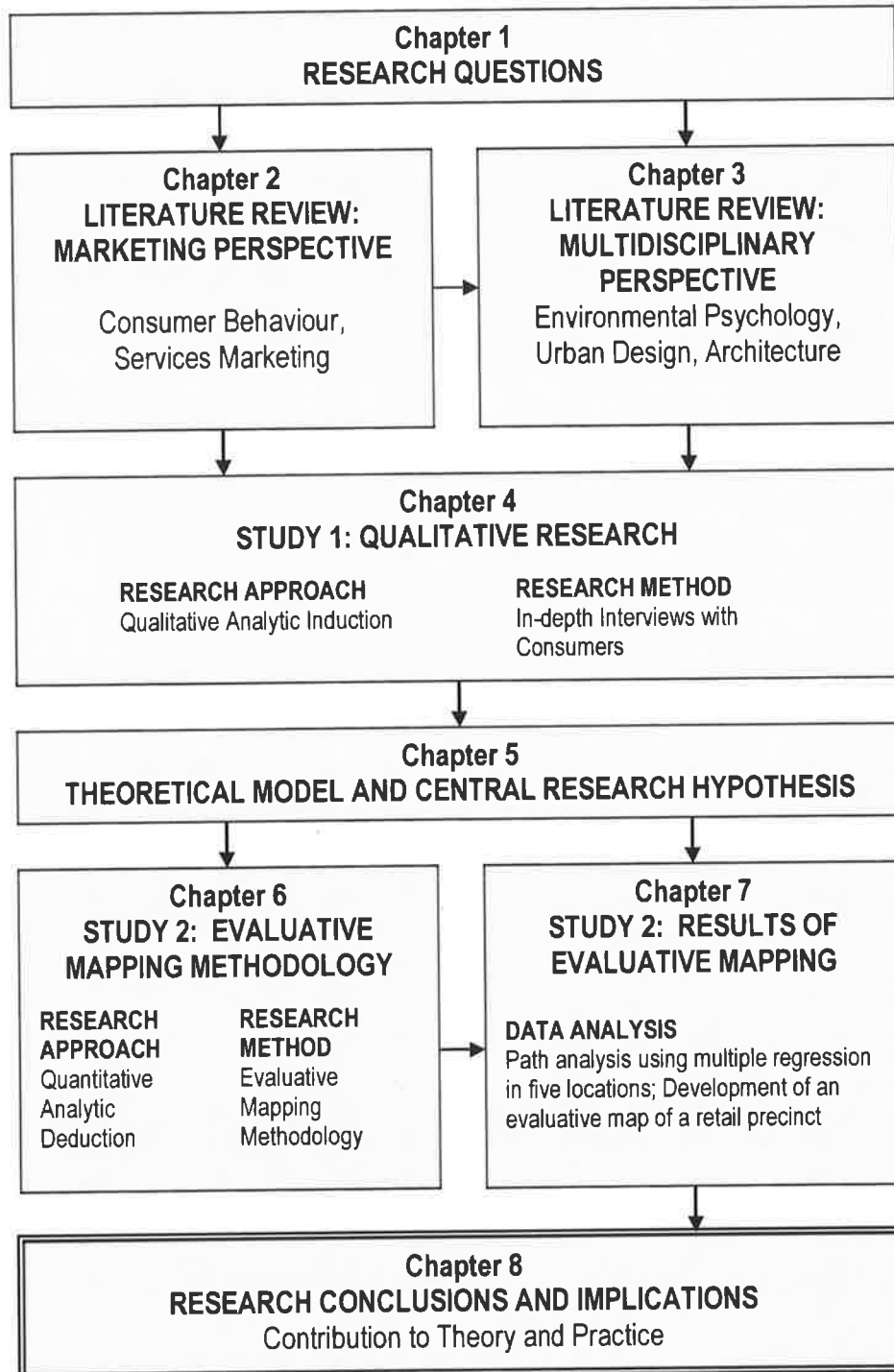


Figure 1.2: Research Design

1.8 Delimitations of Scope

A number of delimitations of scope relevant to this research needed to be addressed. First, the research setting selected for Study 2 was confined to only one research site, at the Sunshine Plaza, located at Maroochydore, Queensland. The selection of this retail precinct was deemed appropriate for several reasons:

- The retailscape at Sunshine Plaza displays variation in terms of the environmental attributes identified in Study 1 and hypothesised in the conceptual model;
- The retail precinct consists of both indoor (interior) and outdoor (exterior) retail spaces;
- The outdoor retailscape is surrounded by a nature waterway, reflecting a more open, natural, evolved, village-like feeling, with social spaces for shoppers;
- The indoor retailscape is characterised by a more closed, artificial, contrived, non village-like, non-historical feeling, with limited social spaces; and,
- Access to the research site and industry funding were obtained from Lend Lease, the company managing Sunshine Plaza.

Second, the sampling frame for Study 2 was established as regular shoppers at the Sunshine Plaza. To qualify, respondents needed to live permanently on the Sunshine Coast and to have shopped at the centre at least once in the last two months. The implications of delimiting the research to only one research site and constraining the sampling frame to a specific group of shoppers are discussed in further detail in Chapter 8, in Section 8.7.

1.9 Key Terms

Key terms relevant to this research will be further expanded throughout the literature review and highlighted in italics. A glossary of terms is attached to this thesis.

1.10 Conclusion

The foundations of this program of research have been presented in Chapter 1, outlining the importance and context of the research. The research problem, two key research questions, the proposed 'Model of Consumer Response to Retailscapes', and the central research hypothesis, were introduced. Three research themes, summarising the knowledge gaps identified from a review of the literature from both a marketing and multidisciplinary perspective, were discussed. Next, justifications and contributions of this research were presented from a theoretical, methodological, and practical perspective. This chapter also introduced the research paradigm and philosophical approach guiding this research. A summary of the multiple methods adopted in this two-stage program of research was presented, followed by an overview of the thesis structure and research design. Delimitations of scope were addressed, followed by a reference to key terms in the attached glossary. In the following two chapters, a review of the literature relevant to this research is presented from both a marketing and multidisciplinary perspective.

Chapter 2 Literature Review: Marketing Perspective

2.1 Introduction

Based on the foundations of this research established in Chapter 1, the following chapters provide a review and synthesis of previous theoretical and empirical research relevant to this program of research. Both Chapters 2 and 3 review and highlight issues from the pertinent literature, providing the theoretical foundation for this research. Chapter 2 will discuss the significance of the environment, from a marketing perspective, by reviewing key literature relating to atmospherics and environmental effects on consumer behaviour. Both the consumer behaviour and services marketing literature contributing to the development of a conceptual model of the retailscape are synthesised. Chapter 2 concludes with a summary of knowledge gaps identified in the marketing literature. This thesis adopts a multidisciplinary approach by integrating theories and concepts from environmental psychology and urban design. Therefore, Chapter 3 will review key theoretical and empirical research from these related academic fields. Building on the knowledge gaps identified in Chapter 2, a number of gaps in the multidisciplinary literature relevant to this research are summarised. Finally, Chapter 3 concludes with an initial theoretical framework, as well as key research questions guiding this two-study program of research.

2.2 The Significance of the Environment in a Marketing Context

The physical environment has been the focus of marketing academics interested in examining its influence on customer response behaviours since the early 1960s. Research in the area was popularised by Kotler (1973-4) who coined the term *atmospherics* to describe how marketers can intentionally control and structure environmental cues. In short, '*atmospherics* is the effort to design buying environments to produce specific emotional effects in the buyer that enhance his [*sic*] purchase probability' (p. 50). In the marketing literature, Kotler emphasised the importance of atmospherics, in influencing consumer behaviour, and has been

credited with initiating the literature stream examining atmospheric effects on shopping behaviour.

Kotler (1973-4) proposed a causal chain connecting atmosphere and purchase probability whereby: 1) purchase objects are surrounded by sensory qualities that are either designed into the space by the seller, or intrinsic to the space; 2) buyers perceive certain qualities of the space based on selective attention, distortion, and retention; 3) the perceived qualities of the atmosphere can effect the consumer's cognitive and affective state; and 4) the consumer's modified cognitive and affective state may increase purchase probability. Kotler applied sensory terms to describe how consumers apprehend the atmosphere through their senses of sight (colour, brightness, shapes, and sizes), hearing (volume and pitch), smell (scent and freshness), and touch (temperature, softness, and smoothness). Although Kotler's sensory classification scheme has not been used as a general framework for theory construction, it has highlighted the importance of environmental cues on consumers' affective and behavioural responses and stimulated research examining the impact of environmental factors on consumer behaviour (d'Astous, 2000).

A variety of terms has been used to describe the effects of facility-based environmental cues, or atmospherics, on consumer behaviour. For instance, atmospheric dimensions have been categorised according to key environmental characteristics in a retail setting. Turley and Milliman (2000) reviewed the empirical experimental research in the atmospheric literature adopting and revising Berman and Evan's (1995) classification scheme to include the following key categories: external variables; general interior variables; layout and design variables; point-of-purchase variables; and human variables.

Tai and Fung (1997) identified two general approaches to atmospherics research including investigation of specific atmospheric elements, and investigation of the overall effect of store atmosphere. Indeed, the majority of studies in atmospherics have dealt with consumers' perceptions of specific interior atmospheric variables despite calls for further research at the 'macro' level to help explain how consumers process the entire atmosphere (Turley & Milliman, 2000).

Everett, Pieters and Titus (1994) referred to the scale of the consumer environment as ranging from the micro environment via the meso environment to the macro environment. Researchers have traditionally focused on the interaction between consumers and the micro environment, highlighting the need for further research examining the effect of more global aspects of the meso and macro environment. For instance, future research could examine how consumers interact with meso environments such as shops, shopping areas, and shopping centres. Everett et al. noted that there is limited research specifically examining key dimensions consumers use when evaluating aspects of the environment. For example, the psychological dimensions such as perceived 'openness or smoothness' may affect consumers' preferences. From a macro perspective, future research could focus on consumer-environment interactions at the macro level including cities, neighbourhoods and resort areas.

Research examining environmental cues in retailing has generally focused on customers' perceptions and their affective and behavioural responses to discrete atmospheric variables in the interior (rather than exterior) environment, including music (Areni, 2003a, 2003b; Bailey & Areni, 2006; Beverland, Lim, Morrison, & Terziovski, 2006; Caldwell & Hibbert, 2002; Chebat, Chebat, & Vaillant, 2001; Dube & Morin, 2001; Eroglu, Machleit, & Chebat, 2005; Herrington & Capella, 1996; North, Hargreaves, & McKendrick, 1999; North, Shilcock, & Hargreaves, 2003; Sweeney & Wyber, 2002), lighting (Areni & Kim, 1994; Summers & Herbert, 2001), colour usage (Bellizzi & Hite, 1992; Crowley, 1993), clutter and cleanliness (Bitner, 1992; Gardner & Siomkos, 1986), aromas (Eroglu & Machleit, 1993; Hirsch, 1995; Mattila & Wirtz, 2001; Michon, Chebat, & Turley, 2005; Mitchell, Khan, & Knasko, 1995; Spangenberg, Crowley, & Henderson, 1996), as well as layout and design, point-of-purchase, and in-store signage (Ang, Leong, & Lim, 1997; Park, Iyer, & Smith, 1989; Smith & Burns, 1996). In addition, the social-servicescape (Tombs & McColl-Kennedy, 2003; Tombs, 2005) and other human variables including crowding (Eroglu, Machleit, & Barr, 2005; Hui & Bateson, 1991; Machleit et al., 1994; Machleit et al., 2000; Pons, Laroche, & Mourali, 2006), and front-line employees' dress cues (Shao, Baker, & Wagner, 2004), have also been investigated in retail settings (Turley & Milliman, 2000).

Previous research examining customers' responses to the retail environment have adopted a variety of dependent variables to measure aspects of consumers' purchasing behaviour in a given retailscape. The dependent measures of sales, time spent in the environment, and approach-avoidance behaviour, have been extensively used by researchers (Babin & Dardin, 1995; Donovan & Rossiter, 1982; Donovan, Rossiter, Marcoolyn, & Nesdale, 1994; Sherman, Mathur, & Smith, 1997; Turley & Milliman, 2000). Further, the retail environment has been found to influence consumer perceptions (Luomala, 2003; Parker, Pettijohn, Pettijohn, & Kent, 2003), satisfaction (Dawson, Bloch, & Ridgway, 1990; Greenland & McGoldrick, 1994; Wirtz, Mattila, & Tan, 2000), mall choice (Haytko & Baker, 2004), impulse purchasing (Mattila & Wirtz, 2001), intended loyalty (Mummalaneni, 2005), willingness to buy (Baker, Levy, & Grewal, 1992), desire to stay (Wakefield & Bush, 1998), and purchase intentions (Fiore, Yah, & Yoh, 2000; Grewal, Baker, Levy, & Voss, 2003).

In the retailing literature, a number of researchers have highlighted the experiential benefits of shopping, where the retail environment plays an integral role in providing shoppers with a pleasurable shopping experience (Kim, 2001; Kozinets et al., 2002; Sit, Merrilees, & Birch, 2003; Wakefield & Baker, 1998). For many consumers, shopping and browsing are a form of entertainment. Others enjoy the social aspects of shopping – for example, shopping with friends, or meeting others for coffee or lunch. The retailscape provides the physical space and surroundings designed to complement and enhance the experiential benefits of shopping (Backstrom & Johansson, 2006; Haytko & Baker, 2004). Overall, an enticing retail environment plays an important role in the retail strategy of experience-oriented firms where a key objective is to provide shoppers with enhanced hedonic value (Arnold & Reynolds, 2003; Jones, 1999; Penaloza, 1999; Pine & Gilmore, 1999; Underhill, 2004).

A review of the retail literature reveals that the current body of research on atmospherics has adopted a unidimensional and static perspective of the shopping experience. That is, researchers have focused on how consumers respond to discrete atmospheric variables in the interior retailscape at a fixed point in time (Turley & Milliman, 2000). Indeed, a review of the extensive body of empirical research

dedicated to retail atmospherics failed to uncover any study where a more dynamic view of consumers' shopping experience prevails – for example, by measuring a set of dependent variable(s) in multiple locations, and/or at consecutive time periods during the same shopping trip. This is surprising given the dynamic nature of the shopping experience where shoppers move through space (spatial elements) during intervals of time (temporal elements) (Thiel, 1997).

While some researchers have acknowledged the importance of the spatial and temporal qualities of the retailscape (Cox et al., 2005; Lehtonen & Maenpaa, 1997; Penaloza, 1999; Wagner, 2000), no known empirical studies have specifically addressed both these elements throughout a shopping experience. In Wagner's (2000) conceptual paper, the aesthetic experience is described as sequential, derived from movement in time through space. For instance, a well-designed servicescape should provide a sequence of 'vistas' aimed at capturing the attention of consumers as they move through their surrounding environment. Wagner describes this movement through a series of spaces in the servicescape as the core of the aesthetic experience, allowing consumers to experience other types of value – for example, efficiency, quality, and status. Recently, Cox et al. (2005) noted that some consumers enjoy shopping primarily as a kinaesthetic experience as they move about and mingle, even if they have little interest in the merchandise. Likewise, Lehtonen and Maenpaa (1997 p. 150) explain that for many individuals 'moving around and looking at things is pleasurable in itself, even without making any purchases ... by their interpretation they create a space where they feel free.'

Penaloza's (1999) ethnographic research at Nike Town, Chicago, explored both the spatial and kinetic aspects of consumer behaviour from an interpretative perspective. Both interspatial design and intertextual displays were considered critical in conveying meaning to consumers. *Interspatialities* refer to the mapped paths a consumer makes through a store such as Nike Town. As consumers moved through the retail environment 'the most crucial factor was the sequence of visuals produced by their physical movement, as these trajectories played a key role in producing meaning' (Penaloza, 1999 p. 341). For instance, at Nike Town, the architectural design, including high ceilings, narrow passageways, circular rooms, and theatrical

props, placed consumers in varied spatial and visual relations with the displays. *Intertextualities* refer to the principles by which displays, images, and products were arranged in the store, with the aim of encouraging some meaning, while precluding others. Ultimately, the consumer's physical mobility throughout the store places them in relation to both design and the surrounding displays in a retailscape (Penaloza, 1999).

Despite the dynamic nature of the shopping experience, no known empirical research has specifically examined consumers' affective and behavioural responses to the surrounding retailscape as shoppers move through a retail precinct. For the most part, the main body of empirical research has adopted a unidimensional approach, based on an experimental paradigm, resulting in an 'elemental' rather than a 'holistic' approach to atmospheric research. As noted by Gardner in Eroglu and Machleit (1993), researchers usually examine one or two elements of the environment at a time, usually in artificial settings. Examining the effects of one variable while holding all other variables constant provides the researcher with experimental control. However, the dominance of certain research methods in marketing, such as surveys and laboratory research do not allow researchers to fully capture the essence of many behaviours in retail environments (Everett et al., 1994).

As shoppers typically evaluate their surroundings sequentially as they move through a retailscape, the aim of this thesis is to fill this gap in the literature by examining shoppers' affective and behavioural responses to the surrounding retailscape in a number of different locations in a retail precinct. To date, no known empirical research in retailing integrates both the spatial and temporal qualities of the shopping experience.

A seminal paper by Bitner (1992) highlighted the importance of the physical environment in a service setting by conceptualising a detailed framework for exploring the impact of the physical surroundings on the behaviours of both customers and employees. Bitner introduced the word *servicescape* to describe the man-made, physical surroundings in service settings, as opposed to the natural and social elements. As illustrated in Figure 2.1, Bitner's servicescape model is based on

the stimulus-organism-response (S-O-R) paradigm, where the relationship between the environmental dimensions and customer/employee response behaviours is mediated by individuals' internal responses. Internal responses may be cognitive, emotional and physiological, and may be interdependent. Behavioural responses are conceptualised in terms of approach-avoidance behaviours (Mehrabian & Russell, 1974), discussed in further detail in Section 2.4.2.

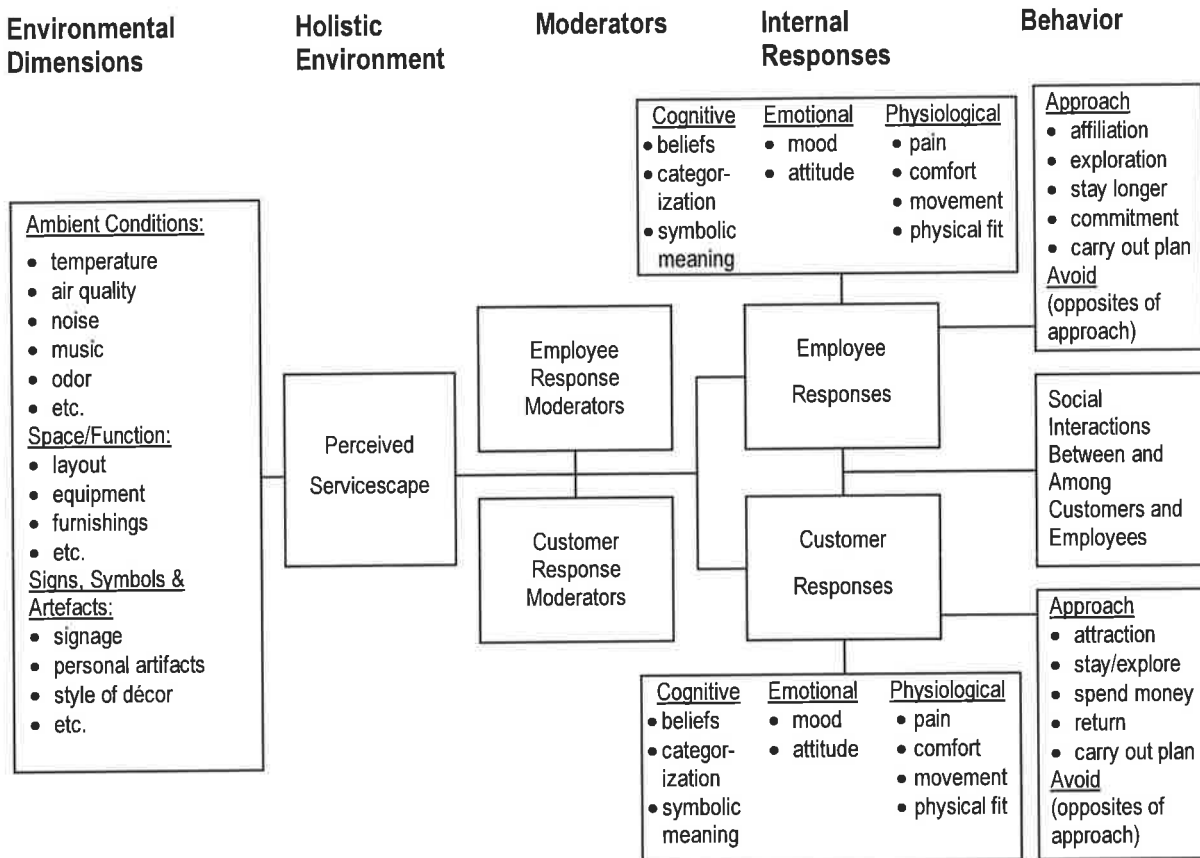


Figure 2.1: Bitner's Servicescape Conceptual Framework

Source: Bitner (1992 p. 60)

In her conceptual framework, Bitner (1992) proposed that the environmental dimensions or features that constitute the servicescape include all the physical factors that can be controlled by the firm to enhance (or constrain) employee or customer actions. The three composite dimensions encompassing Bitner's environmental features are:

- *Ambient conditions*: includes background characteristics of the environment (for example, temperature, lighting, noise, music, and scents) which generally affect the five senses, or may be totally imperceptible;
- *Spatial layout and functionality*: includes the way in which furniture and equipment are arranged, including their shape and size, and their spatial relationship (spatial layout), as well as the ability of the items to facilitate accomplishment of goals and performance (functionality); and
- *Signs, symbols, and artefacts*: includes interior and exterior signs, and other environmental objects which communicate indirectly by giving implicit cues (for example – artwork, certificates, photographs, personal objects, construction materials, and floor coverings).

In Bitner's (1992) model, the environmental dimensions are components of the perceived servicescape, which encompass the 'holistic environment'. However, the holistic perspective is oriented to the interior servicescape, with little emphasis on the exterior environment (with the exception of exterior signs), and the interrelated nature of the exterior/interior environment. In addition, Bitner's (1992) definition of servicescape excludes the relationship between the built and natural environment, focusing on the man-made environment of a service setting. Further, Bitner's conceptualisation of the servicescape does not recognise the importance of the surrounding natural environment, and how the built and natural environments are closely intertwined.

Likewise, Baker's (1987) conceptual article focused on the importance of the physical environment in services marketing and proposed a classification scheme for the physical environment, drawing on the environmental psychology literature to develop three key components of the environment: 1) ambient factors; 2) design factors; and 3) social factors. Baker (1987) makes a distinction between ambient factors that exist below a person's immediate awareness (for example, temperature, noise, and scent), and design factors of which consumers are fully aware (for example, architecture, materials, colour, layout, and signage). Indeed, there is some similarity between Baker's ambient factors and Bitner's ambient conditions described earlier. Likewise, Kotler (1973-4) referred to the sensory qualities of the

retail atmosphere and emphasised the importance of design in retail spaces. A summary of Baker's (1987) dimensions and their subcomponents is found in Table 2.1.

Table 2.1: Baker's Components of the Physical Environment

Ambient Factors	Design Factors*	Social Factors
Background conditions that exist below the level of immediate awareness.	Stimuli that exist at the forefront of awareness.	People in the environment.
<ul style="list-style-type: none"> • Air Quality <ul style="list-style-type: none"> - Temperature - Humidity - Circulation/ Ventilation • Noise <ul style="list-style-type: none"> - Level - Pitch • Scent • Cleanliness 	<ul style="list-style-type: none"> • Aesthetic <ul style="list-style-type: none"> - Architecture - Color - Scale - Materials - Texture, pattern - Shape - Style - Accessories • Functional <ul style="list-style-type: none"> - Layout - Comfort - Signage 	<ul style="list-style-type: none"> • Audience (other customers) <ul style="list-style-type: none"> - Number - Appearance - Behavior • Service personnel <ul style="list-style-type: none"> - Number - Appearance - Behavior

*interior and exterior

Source: Baker (1987 p. 80)

Although Baker's (1987) typology has yet to be validated, the three environmental components have been extensively adopted as an organising scheme to test research hypotheses in the marketing literature (Baker, Berry, & Parasuraman, 1988; Baker et al., 1992; Baker, Grewal, & Parasuraman, 1994; Baker, Parasuraman, Grewal, & Voss, 2002; d'Astous, 2000; Grewal & Baker, 1994; Grewal et al., 2003; Wakefield & Baker, 1998; Wakefield & Blodgett, 1999).

When comparing Bitner's (1992) and Baker's (1987) environment dimensions, there is some overlap in terms of the functional dimensions which encompasses the layout of the servicescape. Baker (1987) distinguishes between two dimensions of design factors: 1) aesthetic dimensions, including architecture, shape, style, and materials; and 2) functional dimensions, including layout and comfort.

Further, there are two notable characteristics of Baker's (1987) typology: 1) the recognition that design factors are present in both the interior and exterior environment; and 2) the inclusion of social factors in the conception of the environment. It is noted that few researchers acknowledge both the interior and exterior elements of the servicescape, focusing almost solely on the interior dimensions of the environment. Also, many researchers exclude human elements in their conception of the physical surroundings (for example Bitner, 1992). However, Baker (1987) emphasised the importance of the people component of the environment, including other customers and service personnel.

In a conceptual paper, Wagner (2000) proposed a model of aesthetic value in the servicescape by integrating concepts derived from architecture, design, and marketing. Wagner's model focuses on the visual aspects of the servicescape, including its architecture and décor. Wagner has extended the concept of 'aesthetic value' from philosophy, architecture, and the visual arts, to servicescapes, by applying Holbrook's (1994) typology of consumer value. In this typology, aesthetics is one of the eight categories of value that are derived from the experience of using products. Wagner (2000 p. 71) defines aesthetic value as 'an experience derived from perceiving, evaluating, and judging the design of the architecture and décor of the servicescape'.

Wagner's (2000) conceptual paper defines architecture as the overall design of the built environment, including the interior and exterior elements. Décor forms an important aspect of the built environment and includes furniture, fixtures, and artefacts, used to enhance the attractiveness of the interior and exterior elements of the built environment. Hence, aesthetic value may be derived from the overall design of the servicescape, or from any of its components. Further, Wagner's model differentiates between the objective features of the servicescape and the consumers' subjective responses. The objective features include the visual elements and principles of design, representing those aspects that can be controlled by the marketer when designing a service environment. The subjective responses include consumer responses to the design of the servicescape in terms of psychological (cognitive and affective), and behavioural responses. Wagner's model is shown in Figure 2.2.

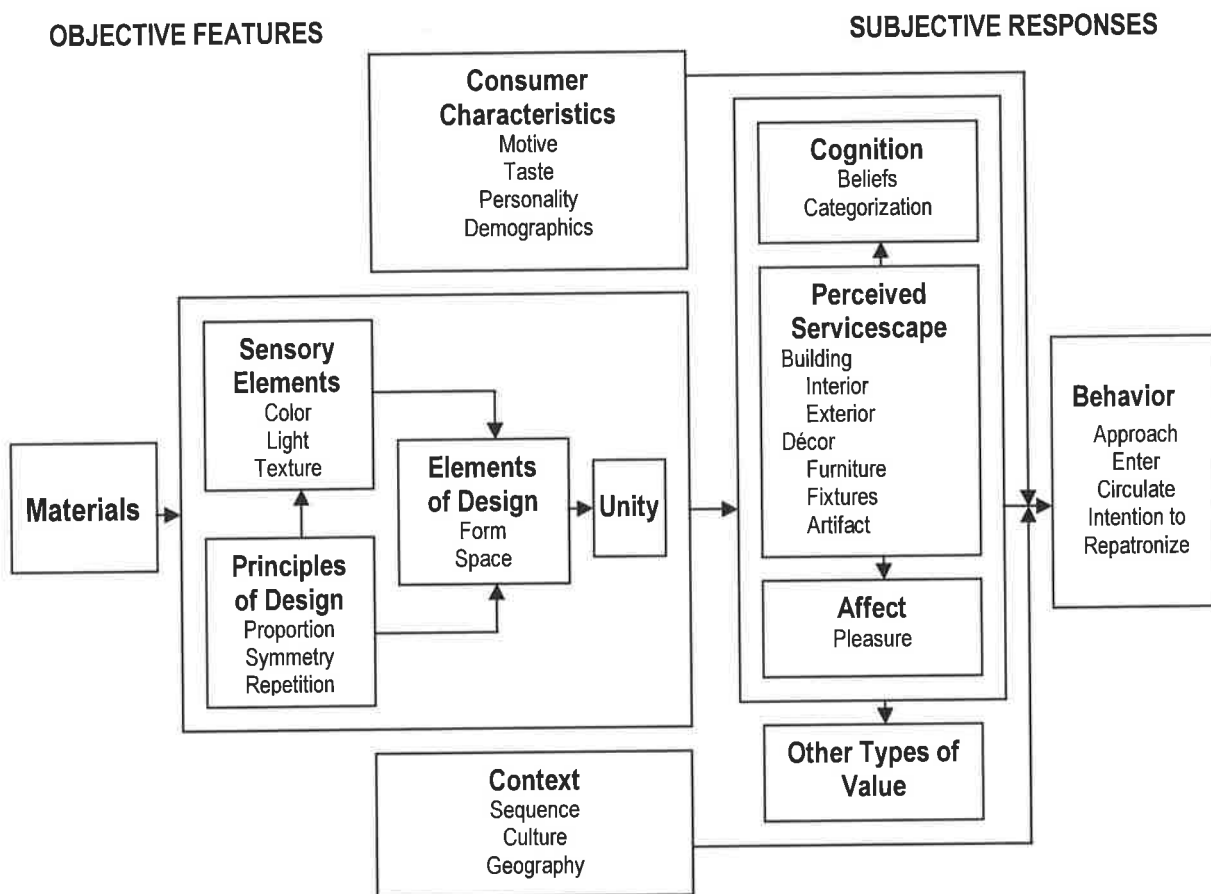


Figure 2.2: Wagner's Model of Aesthetic Value in the Servicescape

Source: Wagner (2000 p. 70)

Both Wagner (2000) and Baker's (1987) conceptualisation of environmental attributes tend to focus on design factors, integrating concepts from architecture and design into their conceptual frameworks. For instance, Wagner incorporates principles and elements of design, whereas Baker also includes elements such as architecture, style, and scale, as being part of the aesthetic component of design. Both Baker's (1987) environment components and Wagner's (2000) objective features in the servicescape include both interior and exterior elements of the environment. As mentioned earlier, Bitner's servicescape model is primarily focused on the interior dimensions of the servicescape.

The conceptual frameworks proposed by both Bitner (1992) and Wagner (2000) recognise that the servicescape influences both psychological (cognitive and

affective) and behavioural responses of consumers. In terms of behavioural response, Wagner's model assumes that aesthetic value is a positive factor, whereby the consumer is encouraged to approach, enter, and circulate through the servicescape. On the other hand, Bitner's conceptual framework adopted Mehrabian and Russell's (1974) approach-avoidance model, suggesting that the servicescape can elicit either approach or avoidance behavioural responses from consumers and employees.

In their conceptualisation of the servicescape, both Bitner (1992) and Wagner (2000) purport to represent a holistic perspective. However, neither model takes into account the interrelated nature of the exterior and interior elements of the environment, nor how the natural environment is closely connected to the built environment. Therefore, this thesis adopts a broader conceptualisation of the retail environment by examining environmental attributes in both the exterior and interior retailscape, as well as recognising the importance of the natural environment in a retail precinct. As this research focuses on consumers' affective responses to the retailscape, which in turn influences their behavioural responses, the following sections will review literature related to this field of enquiry.

2.3 Consumer Affect and Marketing

Marketing scholars have based much of their research examining consumers' affective processes on frameworks of emotion developed in psychology (Huang, 2001; Richins, 1997). In the marketing literature, the term 'affect' has assumed different meanings, due to the divergent views associated with the construct and the lack of consensus related to key terminology (Erevelles, 1998). Cohen and Areni (1991 p. 190) defined *affect* as a 'valenced feeling state', where both mood and emotion are examples. Mood is relatively low in intensity and not usually associated with a stimulus object. In contrast, emotion is higher in intensity, and is usually associated with a stimulus object. Cohen and Areni (1991) distinguish between attitude, which is an evaluative judgment, and affect, which is a valenced feeling state.

2.3.1 Affective and Cognitive Processes

Earlier research in consumer behaviour tended to focus on multi-attribute models of consumer decision making, which emphasised cognitive processing and extensive decision making by consumers prior to making a purchase decision (Erevelles, 1998). This perspective was based on contemporary theories in psychology which consider affect to be post-cognitive, elicited after considerable processing of information. It was posited that an affective reaction, including liking, disliking, experience of pleasure or displeasure, is based on a prior cognitive process. In other words, 'objects must be cognized before they can be evaluated' (Zajonc, 1980 p. 151).

However, Zajonc (1980; 1984; 1998; 2000) proposed that cognition and affect are in fact distinct and therefore conceptually separable processes. In short, affective reactions can occur independently of cognition. In arguing for the primacy of affect, Zajonc (1980 p. 152) cites earlier work of Wundt (1907) who made the following assertion:

When any physical process rises above the threshold of consciousness, it is the affective elements which as soon as they become strong enough, first become noticeable. They begin to force themselves energetically into the fixation point of consciousness *before anything is perceived of the ideational elements*².

In general, debate in both the psychology and marketing domain has centred on two competing models related to cognitive and affective processes. On the one hand, the *cognitive-affective model* suggests that affective responses follow cognitive processes. According to this model, a series of cognitive processes are thought to occur before individuals make an affective decision (Anand, Holbrook, & Stephens, 1988; Lazarus, 1982; Lazarus, 1984; Tsal, 1985). Alternatively, the *affective primacy hypothesis* suggests that affective responses do not depend on prior cognition. Cognitive and affective processes are thought to be either wholly or

² Italics added by Zajonc (1980, p. 152).

partially independent of each other and can therefore occur separately (Kunst-Wilson & Zajonc, 1980; Murphy & Zajonc, 1993; Zajonc, 1980; Zajonc & Markus, 1982).

This research adopts the affective primacy hypothesis, where individuals' affective reactions to their surrounding environment can be evoked with minimal stimulus input and limited cognitive processing (Zajonc, 1980, 1984, 1998, 2000). The following section expands on the measurement of consumer affect related to this program of research.

2.3.2 Measuring Consumer Affect

Measures of emotions have been commonly adapted from psychology to fit the consumption context. For instance, Izard's (1977) ten fundamental emotions from his Differential Emotions Theory, Plutchik's (1980) eight basic emotion categories, and Mehrabian and Russell's (1974) pleasure, arousal and dominance (PAD) dimensions, have been frequently used in marketing to capture the emotions experienced by consumers (Machleit & Eroglu, 2000).

In the marketing literature, Richins (1997) developed the Consumption Emotions Set (CES), a set of descriptors that represent the range of emotions consumers most frequently experience in consumption situations. The CES scale was not adopted in this research, as the number of items measuring each set of emotions was considered too great to allow the repeated administration of the scale in different locations of a retail precinct. Indeed, to date the CES scale has not been employed to measure emotional response to environmental stimuli in a retail setting.

Since Donovan and Rossiter's (1982) adaptation of the PAD scale in a retail context, Mehrabian and Russell's (1974) scales have been extensively adopted in the marketing literature. Likewise, this research relies on Mehrabian and Russell's pleasure and arousal scales to measure consumers' affective responses to the surrounding retailscape in a number of different locations in a retail precinct. The following section expands on Mehrabian and Russell's approach to environmental psychology and its subsequent adoption in the marketing literature.

2.4 Mehrabian and Russell's Model and the Retail Environment

Mehrabian and Russell's (1974) approach to environmental psychology has provided a theoretical foundation for a diverse body of research in consumer research, and more specifically retailing for over two decades (Donovan & Rossiter, 1982; Donovan et al., 1994; Gilboa & Rafaeli, 2003; Mattila & Wirtz, 2001; Sherman et al., 1997; Tai & Fung, 1997).

Based on the stimulus-organism-response (S-O-R) paradigm, the Mehrabian and Russell (1974) (M-R) model proposed that the environment provides a stimulus (S), which contains cues affecting consumers' internal evaluations (O), which influence behaviour (R). According to the M-R model, environmental influences on behaviours are mediated by the individual's affective response (Foxall & Greenley, 2000). In other words, a person's response to an environment is affected by the emotional states created by that environment. The M-R model is shown in Figure 2.3.

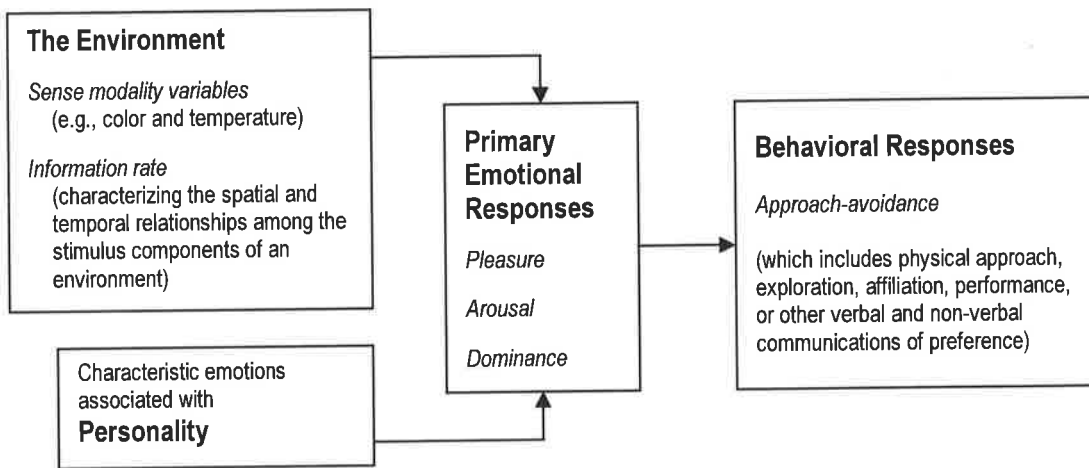


Figure 2.3: Mehrabian and Russell's Model

Source: Mehrabian and Russell (1974 p. 8)

2.4.1 The PAD Measures

The M-R Model summarised the emotion-eliciting qualities of the environment by proposing 'that physical or social stimuli in the environment directly affect the emotional state of the person, thereby influencing his [*sic*] behaviors in it' (Mehrabian & Russell, 1974 p. 8). In the environmental psychology literature, *affect* has been defined 'as the emotion expressed in language, and the affective quality of the molar physical environment'. In other words, affect is the emotion-inducing quality that individuals verbally attribute to 'place' (Russell & Pratt, 1980b p. 311).³

Mehrabian and Russell emphasised the directive function of emotions through three emotional dimensions: 1) pleasure-displeasure; 2) arousal-nonarousal; and 3) dominance-submissiveness. The three emotional responses, known by the acronym PAD, are conceptualised by Mehrabian and Russell (1974) as follows:

Pleasure: The affective state of pleasure-displeasure refers to the degree to which an individual feels good, happy, joyful, or satisfied with the situation. Pleasure-displeasure can be readily assessed by self-reported semantic differential measures, or through evaluating behavioural criteria such as laughter and smiles, and positive or negative facial expressions.

Arousal: The affective state of arousal varies along a single dimension from sleep to frantic excitement. The arousal-nonarousal dimension refers to the degree to which an individual feels excited, alert, and stimulated. Semantic differential scales, using verbal reports, can measure the feeling state of arousal. Other behavioural indicators include measures of vocal activity (both positive and negative), facial activity (negative and positive expressions), and speech rate and volume.

Dominance: The dominance-submissiveness affective state refers to the extent to which an individual feels in control of, or alternatively how free they feel to act in a situation. Likewise, this feeling state can be assessed from verbal reports using the

³ Some of the marketing literature reviewed in this chapter is based on research from the related fields of psychology/environmental psychology.

semantic differential method. Behavioural indicators of dominance are measured in terms of postural relaxation, that is, body leaning and asymmetrical positioning of the limbs (Donovan & Rossiter, 1982; Mehrabian & Russell, 1974; Yani-de-Sorinao & Foxall, 2006).

Despite subsequent refinement of the original PAD scale by one of the original authors (Mehrabian, 1978, 1995a, 1995b, 1995c), the original PAD scale has been widely adopted in the marketing literature. Although the refined PAD scales exhibited 'increasing psychometric usefulness', the original 1974 scales correlate sufficiently highly with the modified scales to ensure its continuing reliability and validity (Yani-de-Sorinao & Foxall, 2006 p. 404).

Mehrabian and Russell's original theory was modified by Russell and Pratt (1980b), who proposed that an individual's affective meaning attributed to the environment can be conceptualised in a two-dimensional bipolar space defined by two main dimensions of pleasure and arousal (pleasant-unpleasant, arousing-sleepy). Russell and Pratt argued that dominance required a cognitive interpretation by an individual, and was therefore not applicable when measuring affective responses. The eight-descriptor 'circumplex' model of affective response proposed by Russell and Pratt is shown in Figure 2.4.

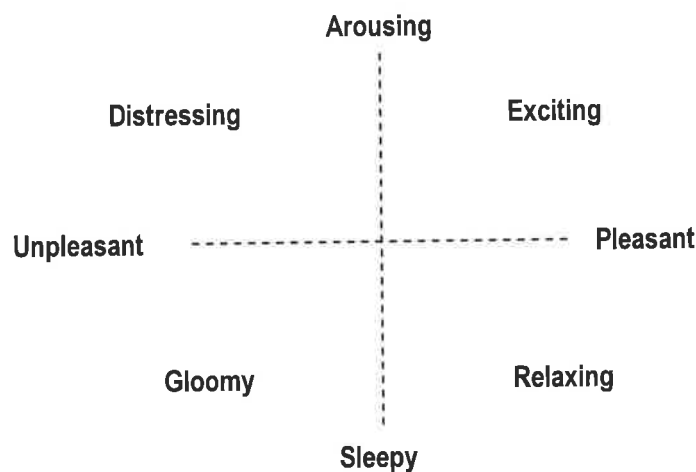


Figure 2.4: Russell and Pratt's Circumplex Model

Source: Russell and Pratt (1980b p. 313)

As mentioned earlier, Mehrabian and Russell's (1974) model was initially tested in a retail context by Donovan and Rossiter (1982 p. 42) who proposed that 'the model predicts that persons will enjoy spending more time and perhaps more money in those retail stores where they feel pleasure and a moderate to high degree of arousal'. In this earlier research, respondent's emotional states in a store were measured using Mehrabian and Russell's PAD semantic differential measures with several of the original dominance items replaced by more context-appropriate scales. Donovan and Rossiter's (1982) results indicated that the two emotional states of both pleasure and arousal were significant mediators of shopping behaviours, whereas dominance was found to have a non-significant effect on behaviours.

In line with the results presented by Russell and Pratt (1980a) and Donovan and Rossiter (1982), the two-factor model of pleasure and arousal has been extensively adopted in the marketing literature (e.g. Donovan et al., 1994; Mattila & Wirtz, 2001; Sherman et al., 1997; Sweeney & Wyber, 2002). At the same time, a number of researchers have used the original three-factor PAD model proposed by Mehrabian and Russell (1974) to measure consumer's pleasure-arousal-dominance in a retail setting (e.g. Foxall & Greenley, 1998; Foxall, 1997; Soriano & Foxall, 2002; Soriano, Foxall, & Pearson, 2002).

This research adopts Mehrabian and Russell's approach-avoidance measures, based on Donovan and Rossiter's (1982) adaptation of the original scale in a retail context. Therefore, the following section will examine approach-avoidance behavioural responses in the M-R model. The next section concludes with Table 2.2, which provides a summary of key research in retailing adopting Mehrabian and Russell's PAD and approach-avoidance measures (or some variation of the original 1974 scales).

2.4.2 Behavioural Responses to the Environment

The M-R model posited that an individual's response toward and within an environment can be classified as either approach or avoidance behaviour, broadly defined by Mehrabian and Russell (1974 p. 96):

... to include physical movement toward, or away from, an environment or stimulus, degree of attention, exploration, favorable attitudes such as verbally or nonverbally expressed preference or liking, approach to a task (the level of performance), and approach to another person (affiliation).

The eight approach avoidance measures originally adopted by Mehrabian and Russell were categorised according to four main themes: 1) desire to stay in the situation; 2) desire to explore the situation; 3) desire to work in the situation; and 4) desire to affiliate in the situation. The first three categories of approach-avoidance were highly inter-correlated and therefore defined into a single factor called 'preference', and the final factor labeled 'desire to affiliate'.

In the marketing literature, Mehrabian and Russell's original approach-avoidance measures were adapted by Donovan and Rossiter (1982 p. 37) where the four general response behaviours were related to specific aspects of behavioural response in a retail environment. Table 2.2 summarises the four approach-avoidance behaviours as applied to a retail setting.

Table 2.2: Approach-Avoidance Behaviours in Retail Environments

Approach-Avoidance Behaviours	Applied in Retail Environments
<i>Physical approach and avoidance:</i> A desire physically to stay in the environment; or, a desire to get out of the environment.	Related to store patronage intentions.
<i>Exploratory approach and avoidance:</i> A desire or willingness to look around and to explore the environment; or, a tendency to avoid moving through or interacting with the environment; or, a tendency to remain inanimate in the environment.	Related to in-store search and exposure to a broad and narrow range of retailing offerings.
<i>Communication approach and avoidance:</i> A desire or willingness to communicate with others in the environment; or, a tendency to avoid interacting with others; or, to ignore communication attempts from others.	Related to interaction with sales personnel and floor staff.
<i>Performance and satisfaction approach and avoidance:</i> The degree of enhancement or hindrance of performance and satisfaction with task performances.	Related to repeat-shopping frequency and reinforcement of time and money expenditures in the store.

Source: Adapted by Donovan & Rossiter (1982 p. 37) from Mehrabian & Russell (1974)

Donovan and Rossiter's (1982) adaptation of the original approach-avoidance measures have been extensively adopted in the marketing literature, where all eight items, or some variation of the measures, have been used (Bateson & Hui, 1992; Bellizzi & Hite, 1992; Foxall, 1997; Foxall & Greenley, 2000; Gilboa & Rafaeli, 2003; Hui & Bateson, 1991; Kaltcheva & Weitz, 2006; Mattila & Wirtz, 2001; Ruiz, Chebat, & Hansen, 2004; Soriano & Foxall, 2002; Soriano et al., 2002; Sweeney & Wyber, 2002; Tai & Fung, 1997; Van Kenhove & Desrumaux, 1997). Table 2.3 summarises key literature adopting the behavioural response measures of approach-avoidance.

2.4.3 *Pleasure, Arousal, and Approach-Avoidance Behaviour*

Mehrabian and Russell (1974) proposed that the PAD dimensions are orthogonal. However, the model specified a conditional interaction between pleasure and arousal in determining approach-avoidance behaviour. This conditional interaction between pleasure and arousal depends on whether the environment is perceived as pleasant, unpleasant or neutral – that is neither pleasing nor displeasing, as summarised by Donovan and Rossiter (1982 p. 39):

- *Pleasant environment*: The greater the level of arousal, the greater the resulting approach behaviour.
- *Unpleasant environment*: The higher the arousal, the greater the avoidance behaviour.
- *Neutral environment*: Moderate arousal enhances approach behaviours, and very low or very high arousals lead to avoidance behaviours.

Donovan and Rossiter (1982) and Donovan et al. (1994) hypothesised that arousal induced by the retail environment would intensify pleasure or displeasure, in that spending behaviour and time spent in the store would be increased in a pleasant environment and decreased in an unpleasant environment. Both studies found partial support for the bi-directional effect of pleasure and arousal. In their earlier study, Donovan and Rossiter (1982) observed the ‘positive’ part of the relationship, that is – in a pleasant environment, the greater the arousal, the greater the approach behaviour. Whereas the second study by Donovan et al. (1994) observed the ‘negative’ part – that is, in an unpleasant environment the higher the arousal, the greater the avoidance behaviour. However, research undertaken by Van Kenhove and Desrumaux (1997) does not support the bi-directional influence of pleasure and arousal proposed in the M-R Model.

Research by Wirtz, Mattila and Tan (2000) indicated that the traditional pleasure-arousal interaction effects proposed by Mehrabian and Russell (1974) may be limited to high target arousal situations. It was argued that consumers possess desired levels of arousal in their service environments depending on their consumption goals. Subsequently, Wirtz et al. (2000) introduced a new moderating

variable, 'target-arousal level', to help understand the interplay between arousal and pleasure in the context of service satisfaction. In other words, the 'target-arousal level' of the consumer moderates the pleasure-arousal relationship. Research results supported the traditional pleasure-arousal interaction (e.g. Mehrabian & Russell, 1974) in relation to consumers' satisfaction under high-target arousal. For instance, in pleasant (unpleasant) conditions the higher the level of arousal, the more positive (negative) the reported satisfaction. By contrast, participants subject to the low-target arousal condition failed to exhibit higher levels of satisfaction in pleasant, but high arousal environments. Rather, participants who wanted to feel relaxed reported being less satisfied when experiencing increasing levels of arousal. The results supported the notion that an individual's target-arousal level determines the nature of the pleasure-arousal interaction effect in terms of consumer satisfaction.

Recently, Kaltcheva and Weitz (2006) addressed the differential effectiveness of arousal levels in store environments. In their review of the literature, it was concluded that in most cases pleasant retail environments positively influence a shopper's behavioural responses, or their approach behaviours, such as unplanned spending, duration of visit, and social interaction. However, less consistent results were found for arousal. Addressing these inconsistencies, Kaltcheva and Weitz (2006) proposed and tested a theoretical framework where a consumer's motivational orientation moderates the relationship between arousal and pleasure. Results indicated that when shoppers possess a recreational motivational orientation, high arousal has a positive effect on pleasantness. However, when shoppers have a task-oriented motivational orientation, high arousal decreases pleasantness. Further, for recreationally oriented shoppers, high arousal increases consumer intentions to visit and make purchases in the store, whereas it has a negative impact on shopping behaviour for task-oriented shoppers. In other words, recreational shoppers who derive inherent satisfaction from shopping activities prefer high-arousal environments that enhance their overall shopping experience. Conversely, the task-oriented shopper, focused on completing their shopping activities as efficiently as possible, find high-arousal environments to be unpleasant (Kaltcheva & Weitz, 2006).

As mentioned previously, Donovan and Rossiter's (1982) adaptation of Mehrabian and Russell's (1974) PAD scale and the approach-avoidance scales have been extensively adopted by other researchers in marketing. Indeed, evidence of the validity and reliability of Mehrabian and Russell's pleasure and arousal scales and the approach-avoidance response scales have been provided by over 30 empirical studies in the marketing literature summarised in Table 2.3.

Table 2.3: Marketing Literature based on Mehrabian and Russell

Author(s)	PAD Measures	Findings and Behavioural Response Measures
Donovan & Rossiter (1982)	18 PAD measures Pleasure (α .90) Arousal (α .86) Dominance (α .65)	Adapted Mehrabian and Russell's (1974) items for approach-avoidance and developed 8 items (averaged α .88 or separately: affect α .90; time α .67; and affiliation α .72). Results indicated that the influence of pleasure on all approach/avoidance behaviours were statistically significant, arousal had significant influence only on affiliation measures and dominance on none of the measures. A split sample (pleasant and pleasant environments) provided reasonable support for pleasure-arousal interaction hypothesis.
Sherman & Smith (1987)	18 PAD measures Single mood measure summed across three PAD dimensions (α .76)	Mood was found to influence a number of dependent variables including the number of items purchased, spending more money than originally anticipated and spending more time in store than planned.
Bateson & Hui (1987)	18 PAD measures Pleasure (α .80) Arousal (α .56) Dominance (α .84)	Both dominance and personal control correlated with pleasure. Results indicated that crowding was inversely correlated with dominance and personal control. Crowding and pleasure were correlated, whereas arousal was uncorrelated with other variables.
Ridgway, Dawson & Bloch (1989)	Modified PA scale, with additional items Pleasure (α .72) Arousal (α .64)	Modified approach-avoidance measures based on environment exploration, communication/interaction with others in the environment, satisfaction with the environment and patronage behaviour. Results indicated that both pleasure and arousal were significantly and positively related to the four approach-avoidance factors. Arousal found to play a more significant role than pleasure in determining approach-avoidance behaviours.
Dawson, Bloch & Ridgway (1990)	7 PA measures Pleasure (α .72) Arousal (α .64)	Results indicated that consumers with strong experiential motives reported the most pleasure and arousal. Pleasure and arousal were found to be most important regarding expectations. Mixed support was found for emotions acting as a possible mediator for other retail-related outcomes.
Hui & Bateson (1991)	Pleasure only Cronbach's alpha not given	Approach-avoidance scale measured desire to stay and desire to affiliate. Results confirmed the importance of perceived control in mediating the effects of consumer density and consumer choice, on the pleasantness of the service experience and the consumers' approach-avoidance responses.
Bellizzi & Hite (1992)	18 PAD measures Pleasure (α .89) Arousal (α .88) Dominance (α .79)	Adopted Donovan and Rossiter's 8 approach-avoidance measures to develop an average score (α .86). Results confirmed Donovan and Rossiter's findings, demonstrating a statistical association between pleasure and approach-avoidance, but not for arousal or dominance.

Table 2.3: (Continued)

Author(s)	PAD Measures	Findings and Behavioural Response Measures
Bateson & Hui (1992)	Pleasure and Dominance Pleasure (α .86) Dominance (α .77)	Approach/avoidance measured by asking respondents to report their degree of preference for the situation. Results indicated an insignificant relationship between perceived control and pleasure.
Donovan, Rossiter, Marcoolyn & Nesdale (1994)	12 items for PA Pleasure (α .88) Arousal (α .77)	Measured unplanned time spent in store and unplanned purchasing as well as four cognitive factors (perceptions of merchandise quality, variety, specials, and value for money). Results supported the mediating role of pleasure, but the role of arousal was only partially supported. Research indicated that in unpleasant environments, arousal was associated with 'unspending'.
Greenland & McGoldrick (1994)	Modified PA items Cronbach's alpha not given	Results suggested that modern styles of bank design have a more favourable impact on outcome variables (image, satisfaction and services used/arranged) in terms of pleasure and arousal.
Babin & Dardin (1995)	12 PAD measures Pleasure (α .91) Arousal (α .86) Dominance (α .82)	Research examined the role of consumer self-regulation as a moderator of relationships between shopping emotions and consumer evaluations of the shopping experience. Results indicated that dominance significantly alter shopping behaviour among those with low self-regulation.
Foxall (1997)	18 PAD measures Cronbach's alpha not given	Pleasure, arousal and dominance were found to be significant predictors for six approach-avoidance measures adopted in the research.
Sherman, Mathur & Smith (1997)	11 items for PA Pleasure (α .87) Arousal (α .74)	Research found that the influence of pleasure was limited to the liking for the store and the dollar amount spent in the store. Arousal affected behavioural measures such as time, money spent, and number of items purchased.
Tai & Fung (1997)	8 PA measures Pleasure (α .87) Arousal (α .87)	Approach-avoidance measures using 8 items for overall behaviour (α .87). Results indicated that both pleasure and arousal are positively related to approach-avoidance behaviour in both pleasant and unpleasant environments.
Van Kenhove & Desrumaux (1997)	12 PA measures Pleasure (α .94) Arousal (α .94)	Adopted 8 approach-avoidance measures (averaged α .85 or separately affect α .97 and time α .87). Results indicated pleasure and arousal were not good indicators of underlying constructs. Findings did not support the conditional interaction between pleasure and arousal in determining approach-avoidance intentions.
McGoldrick & Pieros (1998)	9 PA measures Arousal averaged over 2 items Cronbach's alpha not given	Results indicated customers with strong shopping motives experienced the most pleasure and arousal. If customers' expectations are positively confirmed, they experienced higher levels of pleasure. Whereas, if their expectations were negatively confirmed, their level of pleasure was reduced.

Table 2.3: (Continued)

Author(s)	PAD Measures	Findings and Behavioural Response Measures
Wirtz & Bateson (1999)	12 PAD measures Pleasure (α .85) Arousal (α .78)	Research integrated pleasure and arousal with satisfaction model. Results failed to exhibit significant arousal-pleasure interaction effects on consumer satisfaction.
Foxall & Greenley (1999)	18 PAD measures Coefficient alphas not given	Results indicated pleasure, arousal and dominance explain consumer's verbal expressions of six measures of approach-avoidance. Results substantiated the predictive validity of the Behavioral Perspective Model (BPM).
Machleit, Eroglu & Mantel (2000)	6 PA measures Pleasure (α .87) Arousal (α .76)	Research found that both human and spatial crowding significantly affected pleasure. Perceived human crowding did not significantly affect arousal. The affect of spatial crowding on arousal was negative.
Yalch & Spangenberg (2000)	17 PAD measures Pleasure (α .88) Arousal (α .70) Dominance (α .52)	Respondents reported greater pleasure and dominance when listening to unfamiliar music, and greater arousal when listening to familiar music. Overall, product evaluations were positively related to pleasure and negatively related to arousal. Neither emotion measure accounted for the effects of familiar music on product evaluations.
Wirtz, Mattila & Tan (2000)	12 PAD measures Pleasure (α .92) Arousal (α .86)	Researchers introduced a new moderating variable 'target-arousal level' to advance understanding of the role of pleasure and arousal in the satisfaction evaluation process. Results found that traditional pleasure-arousal interaction effects may be limited to high target arousal situations.
Foxall & Greenley (2000)	18 PAD measures Cronbach's alpha not given	Research adopted six measures of approach-avoidance. Results indicated that Mehrabian and Russell's PAD measures are predicted by the consumer situations proposed by the BPM.
Mattila & Wirtz (2001)	12 PAD measures Pleasure (α .89) Arousal (α .83)	Research adopted 8 approach-avoidance measures (α .78). Results indicated that when ambient scent, and music, are congruent with each other in terms of their arousing qualities, consumers rated the environment significantly more positive, showed higher levels of approach and impulse buying and experienced enhanced satisfaction.
Soriano and Foxall (2002)	18 PAD measures in two studies Pleasure (α .93 & α .94) Arousal (α .75 & α .84) Dominance (α .82 & α .90)	PAD and approach-avoidance measures translated into Spanish and applied in two studies with internal consistency for approach (α .77 & α .72) and avoidance (α .79 & α .83). Results indicated that the translated scales were suitable in a Spanish context.

Table 2.3: (Continued)

Author(s)	PAD Measures	Findings and Behavioural Response Measures
Sweeney & Wyber (2002)	12 PAD measures Pleasure (α .88) Arousal (α .84)	Adapted approach-avoidance measures and developed 11 items (approach intentions α .92 and affiliation intentions α .81). Results indicated that liking of music has a major effect on pleasure and arousal, while music characteristics had an additional effect on pleasure. Pleasure affected intended approach behaviours, whereas arousal contributed to these behaviours in a pleasant store environment. Affiliation behaviours resulted from pleasure and arousal.
Soriano, Foxall & Pearson (2002)	18 PAD measures Cronbach's alpha not given	PAD adopted to test BPM in a Latin American context. Results validated PAD as the three basic emotions capable of influencing consumers' approach-avoidance behaviour in different consumption situations. The findings supported BPM model as a predictive device and validated the model in a cross-cultural context.
Gilboa & Rafaeli (2003)	Adapted 14 PAD measures Pleasure (α .73) Arousal (α .62) Dominance (α .70)	Adapted 5 approach-avoidance items (α .79). Examined PAD and the mediating role of approach-avoidance behaviours with complexity and order. Results indicated three emotional dimensions mediated an inverted 'U' relationship between complexity and approach behaviour, whereas order had a positive correlation with approach.
Ruiz, Chebat & Hansen (2004)	8 PA measures Pleasure (α .96) Arousal (α .79)	Adapted 4 approach-avoidance measures (α .62). Segmentation analysis of shopping mall customers based on activities they perform while shopping was undertaken. Activity based clusters identified distinct profiles for each segment of shoppers.
Michon, Chebat & Turley (2005)	3 pleasure measures Pleasure (α .94)	Research investigated the moderating effects of ambient odours on shoppers' emotions, perceptions of the retail environment, and perceptions of product quality under various levels of retail density. Results indicated an inverted U shaped relationship between ambient odours and mall perceptions.
Foxall & Yanide-Sorino (2005)	18 PAD measures Cronbach's alpha not given	Participants rated descriptions of consumer situations based on categories identified in the BPM in terms of pleasure, arousal, and dominance. The results indicated that attitude responses to consumer environments vary as predicted by the model.
Kaltcheva & Weitz (2006)	10 PA measures in two studies Pleasure (α .86 & α .91) Arousal (α .78 & α .87)	Adapted 6 approach-avoidance items to measure behavioural intentions. Task-oriented participants found the low-arousal environment to be significantly more pleasant than the high-arousal environment. Whereas, recreation-oriented participants found the high-arousal environment to be significantly more pleasant than the low-arousal environment. For recreationally oriented shoppers, high arousal increases intentions to visit and make purchases in store, but it has a negative effect on shopping behaviour for task-oriented shoppers.

2.5 Summary of Gaps in the Marketing Literature

Although there is considerable research examining discrete attributes in the internal retail environment (for example, colour, music, and aromas), relatively little research has adopted a holistic perspective to the retailscape. In the marketing literature very few researchers have examined both exterior and interior attributes of the retailscape, nor recognised the close interrelationship between these two elements from a broader perspective.

Kotler (1973-4) was one of the earlier researchers to acknowledge the importance of managing atmospherics, recommending that firms engage in 'atmosphere planning' based on their target audience's buying experience. Kotler recommended that atmospheric planning and monitoring should include three major art forms that contribute to a firm's atmosphere: 1) architecture, including the exterior structure of buildings; 2) interior design, including the interior space of the buildings; and 3) window dressing, including the store's window display. Despite this earlier recognition of both exterior and interior dimensions of the marketing environment, the marketing literature has tended to focus on discrete elements in the interior marketing environment, rather than adopting a broader perspective where both exterior and interior attributes of the retailscape are considered from a holistic perspective.

Turley and Milliman's (2000) review of 60 empirical research studies examining the impact of specific environmental cues on consumer responses identified that the majority of these studies examined consumer responses to marketing variables in the interior retail environment. Despite the importance of the exterior variables in the marketing environment, Turley and Milliman concluded that research examining the impact of exterior variables in atmospherics is extremely limited. In their discussion stressing the importance of further research examining the exterior elements of the physical environment, Turley and Milliman (2000 p. 207) stated that the exterior category of variables is 'ripe for further investigation', adding that 'this portion of the environment deserves more attention in that the exterior is the first set of cues normally seen by a consumer ... these elements must be pleasing and induce approach behaviors for a retail store or service to be successful' (p. 195).

Likewise, Ward, Bitner and Barnes (1992) divided the physical environment of a retail store into two parts: 1) the external environment, including the part of the store visible to shoppers prior to entry; and 2) the internal environment, which is visible from the retail selling space. The authors noted that there are few empirical studies examining how consumers perceive the multiple facets of physical environments, further highlighting an under-researched part of the retail and service marketing mix. More recently, Lin (2004) emphasised the overall flow and design of the servicescape by recognising the linkages between the exterior and interior components. Further, Lin argued that the researchers should not only focus on the interior attributes of servicescape, but rather take a holistic perspective in order to enrich the servicescapes literature in marketing and consumer behaviour.

Existing research in marketing has tended to adopt a unidimensional or static perspective by focusing on how consumers respond to discrete atmospheric elements at a fixed point in time. There appears to be no previous empirical research in marketing examining the retailscape from a multidimensional perspective, taking into account both exterior and interior components of the retail environment at multiple locations in a retail precinct. This lack of research is noteworthy given that shoppers usually move throughout a retail precinct from the surrounding exterior retail environment to reach a specific retail outlet or store. Therefore, this research adopts a multi-dimensional perspective, by acknowledging the dynamic nature of the shopping experience where shoppers move through space over intervals of time. A unique contribution of this research is to measure consumers' affective and behavioural responses to the retail environment in a number of different locations in a retail precinct.

Research indicated that retail consumers can be induced to behave in a certain way based upon the retail environment created by management (Turley & Milliman, 2000). Turley and Chebat (2002) noted that this well-established research stream which centres on the nature, importance, and construction of an effective retail environment also directly coincides with managerial interests. However, it is surprising that there is not more quantitative evidence in the marketing literature

adopting a more strategic approach to atmospheric design and shopping behaviour (Turley & Chebat, 2002).

Further calls for theoretical development within the marketing literature were emphasised in Bitner's (1992 p. 57) seminal work on the servicescape, where the lack of research examining the effects of the environment in consumption settings was highlighted:

Managers continually plan, build, change and control an organization's physical surroundings, but frequently the impact of specific design or design changes on ultimate users of the facility is not fully understood.

Likewise, the need for additional theoretical development is emphasised by Turley and Chebat (2002) who argued that researchers do not know which atmospheric elements are the most salient when shoppers form impressions of a retail environment. For instance, what atmospheric elements do shoppers use to help them decide whether a retail environment is inviting? Or do consumers make their decision based upon a holistic or macro interpretation of the environment? In their conclusions, Turley and Chebat (2002) recommended further research to determine how consumers process cues from the shopping environment.

This program of research represents one of the first to investigate the retailscape from a broader perspective in an attempt to address a number of significant gaps in the marketing literature. Key gaps in the marketing literature identified in Chapter 2 are:

- The lack of research identifying key environmental attributes in the exterior and interior retailscape most likely to influence shoppers' affective and behavioural responses.
- The lack of research examining how these environmental attributes influence the affective and behavioural responses of shoppers in different locations in a retail precinct.

- No previous research examining the dynamic nature of the shopping experience as shoppers move through a number of different locations in a retail environment.

2.6 Conclusion

The aim of this chapter was to review the marketing literature and to position the current research program within the context of both consumer behaviour and services marketing. A retailscape represents a complex array of environmental attributes or cues potentially influencing the affective and behavioural responses of shoppers. In the marketing literature, a number of theoretical models and classification schemes have been proposed in an attempt to integrate environmental attributes and consumer responses into an overall framework. However, empirical research has tended to focus on discrete environmental cues in the internal retailscape. There is limited research recognising the importance of exterior environmental attributes, with very little acknowledgement of the close integration and overall flow from the exterior to the interior retailscape. Further, existing research has tended to adopt a static, unidimensional perspective, ignoring the dynamic nature of the shopping experience where individuals usually move through multiple locations in a retail precinct. To date, no research has identified key environmental attributes from both the exterior and interior retailscape influencing shoppers' affective and behavioural responses in multiple locations in a retail precinct. This research contributes to the marketing domain by addressing these gaps in the extant literature.

The theoretical foundations of this research are also based on theories and empirical research from related academic fields. Therefore, the next chapter adopts a multidisciplinary perspective by reviewing literature from the associated disciplines of environmental psychology, urban design, and architecture, as they pertain to this program of research.

Chapter 3 Literature Review: Multidisciplinary Perspective

3.1 Introduction

The previous chapter examined the marketing literature to provide a theoretical foundation for this research. Seminal contributions from the marketing literature focused on the significance of the retail environment in the context of services marketing and consumer behaviour. Chapter 2 concluded by summarising the knowledge gaps identified in the marketing literature. This next chapter adopts a multidisciplinary perspective, by reviewing relevant theories from the disciplines of environmental psychology, urban design, and architecture, as they relate to this research. Building on the key gaps highlighted in the previous chapter, a number of knowledge gaps are identified from a multidisciplinary perspective. Finally, Chapter 3 concludes with an initial theoretical framework guiding this program of research.

3.2 Adopting a Multidisciplinary Perspective

This thesis adopts a multidisciplinary perspective where the underlying theoretical framework is developed from theories emphasising the affective components of human experience. It is widely recognised in the environmental psychology literature that individuals exhibit emotional responses to their immediate environment (Kaplan & Kaplan, 1989; Russell & Pratt, 1980b; Russell, Ward, & Pratt, 1981; Russell & Snodgrass, 1991; Ulrich, 1983; Wohlwill, 1976), and that an individual's 'first level of response to the environment is affective' (Ittelson, 1973 p. 16). Overt behaviours, characterised as approach or avoidance responses, are mediated by the emotion-arousing properties of the environment. Specifically, it is proposed that environmental attributes influence individual affective states, which in turn influence behaviour (Veitch & Arkkelin, 1995).

Environmental psychologists recognise the importance of environmental variables and their ability to explain and predict behaviour. A central principle of environmental psychology is an interactional perspective, ensconced in Lewin's (1951) famous equation $B = f(P,E)$ where behaviour (B) is a function of the person

(P), the environment (E), and the interaction between the two. This interactionism is central to most current theories conceptualising environment-behaviour relationships (Veitch & Arkkelin, 1995) and underpins the research undertaken in this thesis. Further, this research adopts a number of basic principles of environmental psychology outlined by Cassidy (1997 p. 5):

- An applied research focus;
- A research base in the field, or natural environment;
- A multi-method approach, that is, qualitative and quantitative methods;
- An interdisciplinary perspective, and
- A holistic rather than reductionist approach to the environment.

This multidisciplinary perspective is expanded throughout this chapter, drawing on literature from environmental psychology, urban design, and architecture.

3.3 Nasar's Model of Evaluative Response to the Environment

In the environmental psychology literature, Nasar (1998) proposed a model of evaluative response to the environment, based on the premise that an evaluative image arises from the ongoing interaction between individuals and their environment. Nasar's model, an extension of Brunswik's lens model of perception (Craik, 1983), includes the observer's initial state, environmental attributes, perceptions, cognitions, affective, and evaluative responses. Humans exhibit a variety of evaluative responses to any environment, but given a set of circumstances, an evaluative response has probabilistic relationships to environmental perception and cognition. In turn, perceptions and cognition have probabilistic relationships to one another and to the physical character of the built environment. Consequently, probabilities result from the ongoing interaction between the individual (biology, personality, socio-cultural factors, and goals) and the environment. Nasar's model of evaluative response to the environment is shown in Figure 3.1.

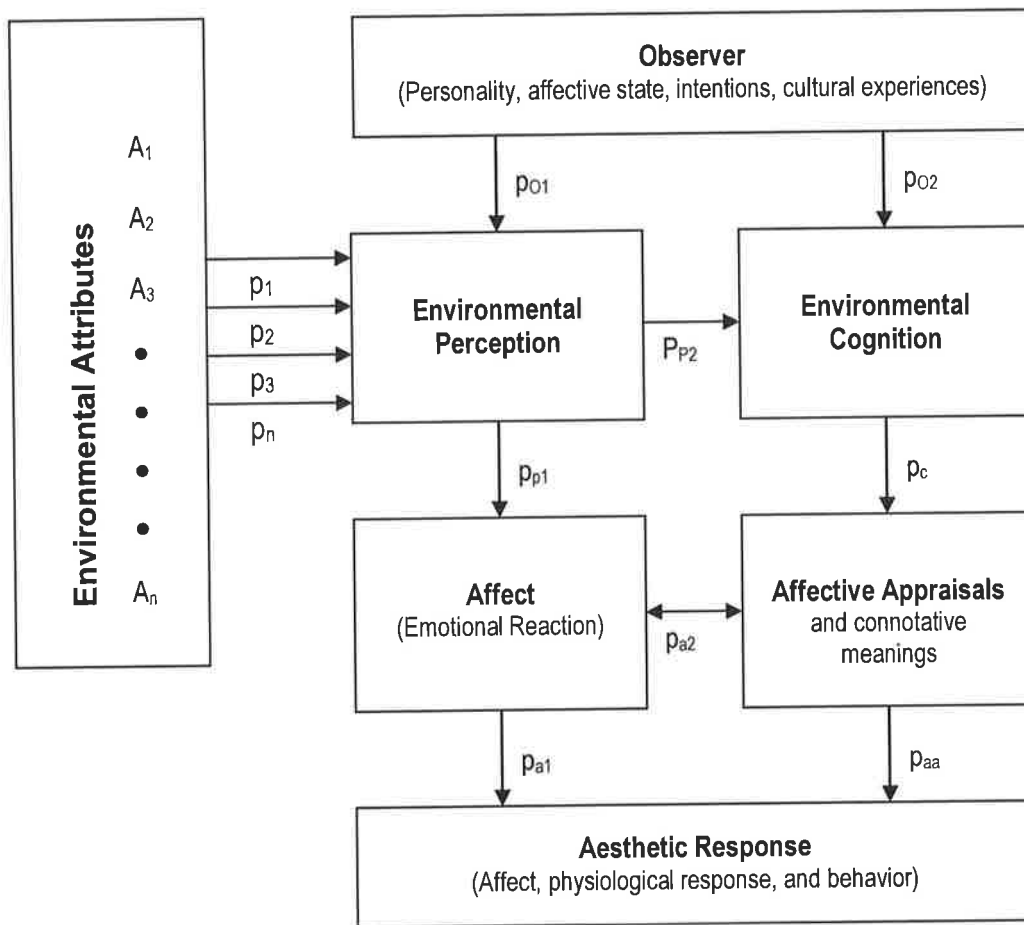


Figure 3.1: Nasar's Model of Evaluative Response to the Environment

Source: Nasar (1998 p. 5)

Based on Brunswik's lens model of perception, Nasar's model suggests two components of evaluative response (Nasar, 2000). For instance, the model posits that individuals can experience emotions independent from, and prior to, cognition (Zajonc, 1980, 1984), or they can experience emotions resulting from cognition (Lazarus, 1982; Lazarus, 1984).

Nasar's research (1998 p. 25) has focused on the meaning people associate with the image of cities where the *evaluative image* 'represents a psychological construct that involves subjective assessments of feelings about the environment.'⁴ Nasar (1998)

⁴ Nasar (2000) adopted the term 'evaluative response' rather than 'aesthetic response' as seen in Figure 3.1.

argued that individuals' feelings and meaning are central to their perception of, and reaction to, the environment. In other words, individuals' feelings and associations about their surroundings help define their evaluative image of a city. Only one aspect of the evaluative image and visual quality – the *likability* of the cityscape was examined in Nasar's (1990; 1998; 2000) research. In this context, likability 'refers to the probability that an environment will evoke a strong and favorable evaluative response among the groups or the public experiencing it' (Nasar, 1998 p. 3).

The concept of evaluative image proposed by Nasar (1990; 1998; 2000) extends Lynch's (1960) seminal work on cognitive maps. Lynch sought community consensus on the elements that enhance the structure or identity of a city, known as *imageability* or *legibility*, and identified five kinds of elements that give identity to a city – landmarks, paths, districts, edges, and nodes. Although Lynch (1960) recognised that a city image has three components – identity, structure, and meaning, his research emphasised the cognitive elements of identity and structure, disregarding the 'affective' dimensions of the urban environment. In contrast, Nasar's research in environmental psychology and urban design has focused on how individuals develop an evaluative image of an urban environment based on the affective components or their feelings and associations about their surrounding environment. As noted by Knox and Finch (2000), the meaning attached to, or evoked by, different components of the environment are at least as important as the structural or physical aspects of a person's imagery (Carmona et al., 2003).

To measure the evaluative image of cities, Nasar (1990; 1998; 2000) developed *evaluative mapping* to reveal both the memorable features of the city and the evaluative quality of those features. With the exception of Nasar's (1998) evaluative mapping of a three-block portion of a commercial strip, no known previous research has applied this method to a city's retail precincts. The application of Nasar's evaluative mapping methodology in a retail context aims to capture the kinaesthetic experience of shoppers by encompassing both the spatial and temporal elements of the shopping experience. As a research methodology, evaluative mapping has been applied in both urban design and environmental psychology. To date, no researchers have applied evaluative mapping in a marketing context to measure consumers'

affective and behavioural responses to environmental attributes in a number of different locations in a retail environment. Therefore, a unique contribution of this research is the application of evaluative mapping in an established retail precinct. Further detail of the application of Nasar's evaluative mapping methodology is discussed in Chapter 6 of this thesis.

3.3.1 Nasar's Likable Environmental Attributes

Through evaluative mapping of cities, Nasar (1998 p. 62) identified five features or five kinds of environmental attributes associated with *likability* of a cityscape, as summarised in Table 3.1.

Table 3.1: Nasar's Likable Environmental Attributes

Attribute	Description
1. Naturalness	Refers to the presence of vegetation, water, or mountains. Respondents liked countryside, landscaping, lakes, rivers, water, and mountains. Conversely, respondents disliked built areas of high contrast, such as the appearance of commercial strips, industry, signs, poles, and wires.
2. Upkeep/civilities	Refers to the maintenance of areas. Respondents liked maintenance, cleanliness, and new homes. On the other hand, they disliked dirtiness, dilapidation, lack of upkeep, and weeds.
3. Openness	Refers to the vista where respondents liked open space and scenery. Disliked features included crowding, restriction, congestion, and narrow roads.
4. Historical significance	Refers to places perceived as having historical significance. Respondents liked places with historical associations, whether the area had authentic historical significance or merely looked like it was historical.
5. Order	Refers to the degree to which respondents feel a place looks organised. Respondents liked areas with visual order (referring to order, cohesiveness, and compatibility). Respondents disliked areas with disorder, with negative associations related to chaos, and lack of uniform style. Compatibility refers to the degree to which features fit with one another, providing order. Incompatible elements or non-uniform styles lessen order.

Source: Nasar (1998 p. 62)

Nasar (1998) points out that these five likable attributes of a city may also have more general application as they are supported in theory and past research on environmental preference. Indeed, a unique contribution of this research is the identification of the likable environmental attributes in a retail precinct in terms of shoppers' affective and behavioural responses. Therefore, this research builds on the research of Nasar (1990; 1998; 2000) by: 1) identifying the likable environmental attributes in a retail context (Study 1); and 2) applying evaluative mapping to examine how these attributes influence the affective and behavioural responses of shoppers in different locations in a retail precinct (Study 2).

In the environmental psychology literature, research has indicated that people prefer naturalness and that naturalness is a powerful predictor of preference (Herzog, 1989; Kaplan & Kaplan, 1989). People prefer natural scenes to scenes perceived as having human intervention (Kaplan, Kaplan, & Wendt, 1972; Wohlwill, 1983), and adding vegetation to scenes increases preference (Thayer & Atwood, 1978). The naturalness of an area depends on the individual's perception of an area being natural, or the predominance of natural over built elements (Wohlwill, 1983). Therefore, some natural settings depend on human intervention, others have built elements, and others exist within built contexts (Nasar, 1998).

Research in residential communities indicated that a 'nature view from home' is a high priority when people choose where to live (Kaplan, Austin, & Kaplan, 2004). A nature view from residents' windows contributed to a sense of well-being and satisfaction with the neighbourhood (Kaplan, 2001), and visual proximity to nature areas was found to have a strong effect on neighbourhood satisfaction (Kearney, 2006). Likewise, respondents reported higher levels of positive affect when viewing a tree-lined street (Sheets & Manzer, 1991). The presence of nature was found to enhance individual's preference for urban settings, with tended nature preferred over untended nature (Herzog & Gale, 1996).

Lynch (1981) recognised the importance of the natural environment, not only in a rural setting, but also in the city. For individuals 'the mental sense of connection with nature ... is a basic human satisfaction, the most profound aspect of sensibility'

(p. 257). Lynch suggested that the city should be accepted as being as natural as rural areas for further conservation and improvement. Lynch (1960 p. 44) emphasised the importance of natural features of the city stating that individuals often noted both vegetation or water 'with care and with pleasure.' For instance, respondents reported making detours from their usual trip to work so they could pass by a particular park, planting, or body of water.

The upkeep/civilities of an area have emerged as prominent in human perception of the environment. For instance, Nasar's (1990) evaluative mapping of two cities identified dilapidation (dirtiness and weeds) and man-made nuisances (poles, wires, signs, commercial strips, and industry) as being disliked attributes of a city. Negative attributes listed by respondents related to maintenance or poor upkeep of the cityscape (Nasar, 1998). Herzog and Gale (1996) found that when older buildings are disliked, poor maintenance is likely to be a contributing factor. Likewise, Isaacs (2000) identified poor maintenance, including poor pavement surfaces, construction debris, and dilapidated houses as being negative features of a city. To improve the upkeep and civilities of the cityscape, Nasar (1994) recommended a reduction in artificial nuisances, including litter, billboards, traffic, dilapidation, poles, wires, and incompatible land uses.

Research has also confirmed that the prominence of spacious and related variables (such as openness, building density and defined space) is preferred (Kaplan & Kaplan, 1989; Nasar, 1994). For example, Lynch and Rivkin (1959) found that changes in spaciousness or constriction of the streets impacted on pedestrians' experience. Research also indicated increased preference associated with defined openness or open but bounded space (Nasar, 1998). Isaacs (2000) highlighted that a variety of open spaces along walkways connected by narrow bending streets was more pleasant for individuals moving through that environment.

The appearance of historical significance tends to evoke favourable responses. Historical context may or may not be authentic in that 'if observers consider a place historical, it has historical content for them' (Nasar, 1998 p. 69). In other words, if individuals consider a place historical, it will have historical meaning to them. The

popularity of restored areas in many cities has been supported by Milgram and Jodelet (1976) who found that people preferred the central historical areas and complained about modern apartments and offices replacing the charm of older structures. Research undertaken by Isaacs (2000) highlighted a nostalgic reaction from respondents who preferred the original architecture prior to renovations carried out almost thirty years ago in Dresden, Germany. The older, more detailed buildings and the smallness of the shops were identified as positive features. Herzog and Gale (1996) found strong support for both the preservation and restoration of older buildings and recent architectural trends returning to the features of older buildings. The physical features of older buildings provide visual richness in their design – that is, ornaments, curves, natural materials, colours and texture. In addition, older buildings also provide nonphysical qualities such as shared meaning.

People also have a preference for order and the related variables of coherence, organisation, congruity, fittingness, legibility, and clarity (Kaplan & Kaplan, 1989; Nasar, 1994; Ulrich, 1983). Kaplan and Kaplan (1998) found that legibility, identifiability, and coherence, are important predictors of preference. Likewise, Lynch's (1960) concept of legibility recognises the importance of order. Individuals' preference for naturalness, good maintenance, open views, and historical elements, may relate to their effect on perceived coherence (order). For instance, each likable feature may enhance order or coherence. Whereas the opposite, including intense uses, dilapidation, and restricted movement, may reduce order. In conclusion, 'the presence of likable features creates identifiable and sensuous places conveying favorable emotional meaning for many people' (Nasar, 1998 p. 77).

Despite the large body of research in environmental psychology supporting Nasar's findings on the likability of the cityscape, very little research has focused on identifying the likable environmental attributes of retail precincts. For instance, are the environmental attributes influencing the likability of the cityscape applicable to the retailscape? What specific likable attributes are relevant in a retail environment? How do these likable attributes influence shoppers' affective and behavioural responses to their surroundings? And how do these attributes vary as shoppers move to different locations in a retail precinct?

The aim of Study 1, outlined in Chapter 4, is to identify which environmental attributes in the interior and exterior retailscape are most likely to influence the affective and behavioural responses of shoppers. Study 2, presented in Chapter 6, applies Nasar's evaluative mapping methodology in order to examine shopper's affective and behavioural responses to environmental attributes (identified in Study 1) in five different research locations in an established retail precinct. The aim of evaluative mapping is the capture the kinaesthetic experience of shoppers as they move through a retail precinct. The following section examines the literature from environmental psychology, urban design, and architecture, pertaining to an individual's kinaesthetic experience.

3.4 The Kinaesthetic Experience

As discussed in Chapter 2, shopping is a dynamic activity involving both spatial (movement) and temporal (time) elements. The kinaesthetic experience takes place in an environment 'experienced as a dynamic, emerging, unfolding temporal sequence' (Carmona et al., 2003 p. 134). Thiel (1997 p. 33) describes the environmental experience as being 'a time based accretive and cumulative *sequential* process' where space and the passage of time are essential components. That is, individuals experience their surroundings as they move through space, over intervals of time.

In the urban design literature, the kinaesthetic experience is encapsulated in Cullen's (1961) theory of visual sequence, known as the concept of 'serial vision'. For instance, an individual's experience of the environment is a series of jerks and revelations, where both delight and interest are stimulated by contrasts, which come alive through the 'drama of juxtaposition'. As individuals move through the environment, they become aware of the 'existing view', but there are also hints of a different 'emerging view'. In other words, individuals have a sense of being in a particular place ('here'), but they can also sense that around and outside it are other places ('there') (Carmona et al., 2003; Isaacs, 2000).

Cullen (1961 p. 182) acknowledged the significant tension between ‘hereness’ and ‘thereness’:

... that no sooner do we create a HERE⁵ than we have to admit a THERE, and it is precisely in the manipulation of these two spatial concepts that a large part of urban drama arises.

The kinaesthetic experience has been recognised as being central to an individual’s experience of the environment in the architecture and urban design literature. Arnheim (1977 p. 130) describes ‘the building as an event in time experienced by man in action.’ Individuals experience architecture sequentially, where buildings are seen as a unified image in space comprised of ‘smaller subwholes’. Further, Gibson’s (1979) ecological approach to visual perception recognised that observation implies movement. For instance, when an individual is at rest at a stationary point this represents the ‘null case’, or a limiting case of the point of observation. Because humans are mobile, ‘the point of observation normally proceeds along a path of locomotion, and the “forms” of the array change as locomotion proceeds’ (Gibson, 1979 p. 72). Hence, individuals experience multiple perspectives, as their surroundings are not experienced from a single vantage point (Isaacs, 2000).

According to Gibson (1979 p. 196), individuals see their environment while they are moving, not just when they pause between movements, which Gibson referred to as ‘perception over time from paths of observation’:

An observer who is getting around in the course of daily life sees from what I will call a *path* of observation. A path does not have to be treated as an infinite set of adjacent points at an infinite set of successive instants; it is thought of as a unity movement, an excursion, a trip, or a voyage.

Bacon (1974) argues that the purpose of architectural design is to affect individuals who use that environment. This effect is a continuous flow of impressions that assault individuals’ senses as they move through the environment. The sensory

⁵ Capitalisation in original citation by Cullen (1961).

experience is a cumulative experience beginning with the changing visual picture. Also associated with this sense of movement are changes from light to shade, noise to silence, hot to cold, the flow of smells, and the tactile qualities of the surface the person is walking over. Through movement and space, a person senses the flow of messages transmitted by a design. Consequently, 'the design of buildings, which must be stationary, should be based on the movement that will flow *through* them' (Rasmussen, 1962 p. 150).

Ching (1996) described architectural systems as being experienced through movement in space and time. In other words, both sensory perception and recognition of physical elements are experienced sequentially during time. Prior to moving to the interior of a building, individuals approach its entrance where they prepare to see, experience, and use the space within a building. Entering a building involves 'the act of penetrating a vertical plane' where one space is distinguished from another, separating 'here' from 'there' (Ching, 1996 p. 238).

When discussing the structural quality of image, Lynch (1960) describes how individuals develop images of cities in a dynamic manner where parts are interconnected by a sequence over time. Lynch (1960; 1981) refers to visual sequence experienced in motion as being similar to a picture seen through a motion picture camera. For instance, visual sequence incorporates forward views and the succession of objects as individuals pass alongside. This sense of movement is closely related to how individuals experience movement through the city.

There have been a number of research studies in both environmental psychology and urban design that have attempted to capture the kinaesthetic experience of individuals in their research design. In urban design, Lynch and Rivkin (1959) interviewed respondents while they walked through an urban environment. After the walk was completed, respondents' memories were tested verbally and through photo recognition. The research was undertaken along a typical shopping street, surrounded by both offices and middle-income speciality stores. Lynch and Rivkin's (1959 p. 25) research highlighted the importance of open spaces in the cityscape, as illustrated in the following quote:

I like the openness, I like the width of the side-walks, I like the feeling of uncrowded space. You can never feel at the bottom of the well on this spot.

Likewise, respondents commented on both the presence and lack of vegetation. There was universal and strong positive reaction of pleasure when respondents commented on the Public Gardens as they approached the end of one street where the Gardens were located. Conversely, comments were made relating to the 'wishful replanting of street trees, or sadness at the "pathetic" grass islands in the vortex of traffic' (Lynch & Rivkin, 1959 p. 31).

Building on Cullen's (1961) and Bacon's (1974) research which emphasised how movement can be read as pictorial sequence, Bosselmann (1998) described the experience of walking through Venice, noting that an individual's perception of time passing and distance traveled differed from reality due in part to the visual and experiential qualities of the environment. The aesthetic experience of the same length of walk was assessed in fourteen other cities, including Rome, London, Copenhagen, and Kyoto. Individuals measured their walks in terms of 'rhythmic spacing', which was related to their visual and spatial experiences. For instance, the Venice walk had frequent and different types of rhythmic spacing compared to other cities, resulting in the walk through Venice appearing to take more time than it actually did (Carmona et al., 2003).

Isaacs (2000) focused on the pedestrian experience of urban places in Dresden, Germany. By adopting both qualitative and quantitative methodologies, respondent reactions to the surroundings were recorded using cognitive mapping and on-site interviews in two walks through the city. The results indicated that 'people in the street' were considered a positive aspect of their experience emphasising the importance of the social environment. The presence of trees was also found to enhance the quality of the street, with outdoor seating and fountains providing focal points where people could pause and stay for a while.

Despite the kinaesthetic experience being widely recognised in the environmental psychology, urban design, and architecture literature, there is limited research in the

marketing literature focusing on how individuals respond to both the spatial and temporal elements of the retail environment. As discussed previously, Nasar (1990; 1998; 2000) developed evaluative mapping as a methodology to reveal both the memorable features of the city and the evaluative quality of those features. Nasar adopted both qualitative and quantitative methodologies to develop an evaluative map of an urban environment. In this research, Nasar's evaluative mapping was selected as an appropriate research methodology to capture the kinaesthetic experience of individuals as they move through a retail precinct. To date, no known empirical research has applied Nasar's methodology from environmental psychology and urban design in a retail context. Chapter 6 provides a detailed overview of Nasar's evaluative mapping methodology applied in Study 2.

3.5 Social Spaces in a Retailscape

In urban design, it is well established that the spatial elements of the built environment influence patterns of human activity and social life (Gehl, 1987, 1996; Whyte, 1980, 1988). Space and society are clearly interrelated. For instance, it is difficult to conceive of space without a social component, and equally to conceive a society without a spatial component. The relationship between space and society can be conceived of as being a continuous two-way process where people create and modify spaces, while at the same time people are influenced by the space around them. In urban design, a *social space* is described as 'spaces that support, enable or facilitate social and cultural interaction and public life' (Carmona et al., 2003 p. 114).

Successful public spaces are characterised by people and are essentially discretionary environments: individuals can use that space or they can choose to go elsewhere. As noted by Carmona et al. (2003, p. 99-100) if public spaces 'are to become peopled and animated, they must offer what people want, in an attractive and safe environment.' One of the key attributes of successful places is 'sociability'. Closely associated with sociability is the 'vitality' of the public space, including the availability of spaces for people-watching, and the presence of active street life and street frontages (Montgomery, 1998).

Whyte's (1980; 1988) research in environmental psychology indicated that the physical environment had a significant influence on how people used open space, their interactions with other people, and the length of time they spent in an urban environment. In his observational research, Whyte (1980; 1988) identified several features that characterise the most successful social spaces. First, streets become part of the 'social' space, such that isolating a space from the street will subsequently reduce its use. Second, a good location, preferably on a busy route that is both physically and visually accessible, adds to the desirability of a social space. Finally, a social space should be level or almost level with the pavement, and provide places to sit, preferably movable seats, enabling choice, and the communication of personality and character of the urban area.

Gehl (1987; 1996) proposed that through design, it is possible to influence how many people use public spaces, how long these individual activities last, and which activity types develop. As shown in Figure 3.2, activities in a public space can be divided into three categories:

1. Necessary activities that are usually compulsory such as going to work or a shopping task;
2. Optional activities include pursuits that individuals participate in if time and place make it possible, such as stopping for a cup of coffee in a street café; and,
3. Social activities which depend on the presence of other people in the social space and develop in connection with necessary and optional activities.

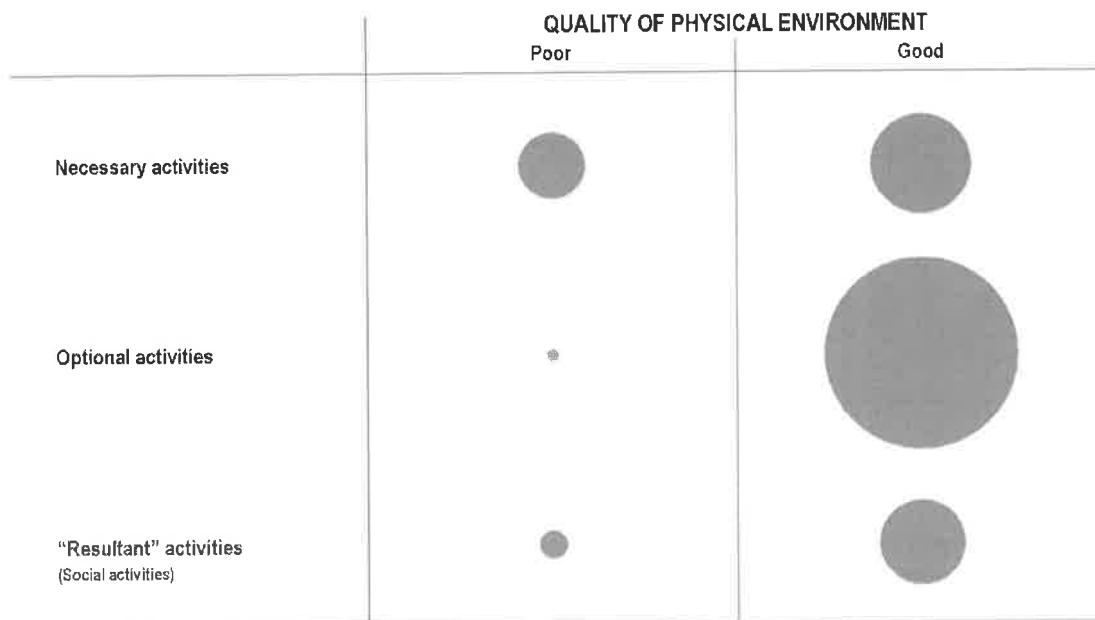


Figure 3.2: Quality of Environment and Outdoor Activities

Source: Gehl (1987 p. 13)

Further, the spatial aspects of the environment can influence the time an individual spends carrying out necessary, optional, and social activities. For instance, a person will only carry out their necessary activities within a poor quality public space. On the other hand, people will choose to stay longer in high quality places, not just for their necessary activities, but also for both optional and social activities (Gehl, 1987, 1996).

Oldenburg's book, *The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons and the Other Hangouts of a Community* (1999 p. 16) highlighted the importance of the 'third place', otherwise known as 'the core setting of informal public life':

The third place is a generic designation for a great variety of public places that host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work.

Settings such as sidewalk cafes, beauty salons, bookstores, bars, and taverns, encompass the third places, as opposed to the first place of home, and the second

place of work and school. Banerjee (2001) suggested that today the major icons of the third place may have become the Starbucks coffee shops, the Borders bookstores, or the local health club where people congregate. The concept of public life is derived from a desire for relaxation, social contact, leisure, and entertainment, reflecting the essential components of the experience economy (Pine & Gilmore, 1999).

Carmona et al. (2003 p. 113) summarised a number of core qualities associated with Oldenburg's (1999) third places:

- A 'neutral ground' where individuals can come and go;
- Being highly inclusive and accessible, without formal criteria of membership;
- A 'taken-for-granted-ness' and a low profile;
- Open during and outside normal office hours;
- Characterised by a 'playful mood';
- Providing psychological support and comfort; and,
- Conversation providing their 'cardinal and sustaining' activity.

The importance of the social, psychological, and cultural dimensions of space is emphasised by Montgomery (1998) who argues that urban quality must be considered in wider terms than merely physical attributes of buildings, spaces and street patterns. Urban design is essentially about place making, where all activities and events are made possible. Successful urban places combine three essential elements: physical space, the sensory experience, and activity. Without activity, an urban environment becomes dull and lifeless.

Activity in social spaces is related to both vitality and diversity. Vitality refers to the number of people in and around the street at different times of day. Successful places appear to have their own pulse or rhythm and feel alive and lively. However, long term urban vitality is achieved when there is a complex diversity, including a combination of different types of activities. This mixture may include a wide range of activities in close proximity to city or urban populations large enough to support this economic activity. Diversity in retail precincts may be reflected in the availability of theatres, cinemas, galleries, cafes, delicatessens, cake shops, wine

bars, pubs and restaurants, and other meeting places, offering different types of services. The presence of an active street life and active street frontages also contributes to diversity in a retail precinct (Montgomery, 1998).

Southworth (2005) highlighted the important role of the street in public life, including how to make marketplaces work from both a retail and social perspective. A number of qualities that could be considered for creating people-friendly shopping environments were suggested, including the provision of places for social activities, so people can participate in, and observe the urban scene. In addition, by offering mixed uses, including civic and cultural uses, the retail precinct could offer varied public activities, such as concerts, theatre, art shows, dance performances, and farmers' markets. Further, shopper comfort could be enhanced by providing seating, shading, lighting, safe walkways, and visual interest.

Research undertaken by Isaacs (2000) highlighted the importance of vitality in an urban environment with respondents commenting on the importance of the presence of other people on the street. Despite sections of the city being considered aesthetically appealing, they were devalued if there was a lack of human activity. Conversely, sections of the city viewed as being less aesthetically pleasing were evaluated more favourably in the presence of human activity. As noted by Isaacs (2000 p. 178) 'emphasizing the aesthetic experience by incorporating picturesque design is an empty gesture without considering how to include a catalyst for a social context'.

Despite the importance of social spaces in urban design, to date there has been limited empirical research examining how shoppers respond to social spaces in retail environments from a marketing perspective. With the exception of research comparing the social behaviour of shoppers in malls and downtown shopping areas (Feinberg, Sheffler, Meoli, & Rummel, 1989), the existing marketing literature has tended to ignore how consumers respond to social spaces in a retail precinct. This gap in the marketing literature is surprising given that many retail precincts integrate some form of social space into their retailscape to enhance the experiential benefits derived from shopping (Haytko & Baker, 2004; Ruiz et al., 2004; Sinha & Uniyal,

2005; Sit et al., 2003). Hence, this research addresses this gap in the literature by recognising the importance of social spaces in a retail precinct through measuring consumers' affective and behavioural responses to the presence of social spaces in different locations in an established retail precinct.

3.6 Summary of Gaps from a Multidisciplinary Perspective

In environmental psychology, a large body of research has supported Nasar's (1998) findings relating to the likability of the cityscape. However, in the marketing literature, very little research has focused on identifying the likable environmental attributes in both the interior and exterior of a retail precinct. Hence, this research addresses this gap in the marketing literature by identifying what key attributes contribute to the likability of a retailscape, and how these attributes influence the affective and behavioural responses of shoppers.

In the multidisciplinary literature, researchers have acknowledged the kinaesthetic experience of individuals as they move through space, over intervals of time (Carmona et al., 2003; Cullen, 1961; Thiel, 1997). However, from a marketing perspective there is limited research recognising the kinaesthetic experience of shoppers as they move through a retail precinct. For instance, researchers tend to view the retail environment from a static, unidimensional perspective adopting a cross-sectional research design, where data is gathered at one point in time. However, shoppers experience their surroundings as they move through space, over intervals of time (Thiel, 1997). This research examines this gap in the marketing literature by adopting Nasar's evaluative mapping methodology to capture the kinaesthetic experience of shoppers as they move through a retail precinct.

The availability of social spaces has been highlighted in the urban design and architecture literatures as influencing human activity and social life (Gehl, 1987, 1996; Whyte, 1980, 1988). As noted previously, there has been limited empirical research focusing on how shoppers respond to the presence of social spaces in retail precincts in the marketing literature. This research focuses on this gap in the

literature examining how social spaces in a retailscape influence the affective and behavioural responses of shoppers.

Building on the gaps highlighted in the marketing literature in the previous chapter, this chapter has identified a number of knowledge gaps from a multidisciplinary perspective:

- A lack of research identifying key environmental attributes contributing to the likability of a retailscape, and how these attributes influence the affective and behavioural responses of shoppers.
- A lack of research acknowledging the kinaesthetic experience of shoppers as they move through a retail precinct.
- Limited research examining the importance of social spaces in a retail precinct.

A two-stage program of research was undertaken to address the knowledge gaps identified in Chapters 2 and 3. In the initial exploratory research, in-depth interviews with shoppers identified what key environmental attributes influenced the affective and behavioural responses of shoppers. Further details of the exploratory research are found in the following chapter (Chapter 4). The second quantitative stage of this program of research applied evaluative mapping (Nasar, 1990, 1998, 2000) to a retail precinct in order to identify how key environmental attributes (identified in Study 1), influenced shoppers' affective and behavioural responses in a number of different locations in a retail precinct. Evaluative mapping, as applied to this research, is discussed in further detail in Chapter 6 of this thesis.

3.7 Initial Conceptual Framework

It would appear from the preceding synthesis of the academic literature in Chapters 2 and 3 that further research in marketing is needed to identify *what* environmental attributes in the interior and exterior retailscape influence shoppers' affective and behavioural responses. Further, gaps in the literature suggest that further research is required to better understand *how* different attributes from the interior and exterior retail environment impact on consumers' affective and behavioural responses as they

move through a retail precinct. Existing research has not yet examined how consumers' responses vary in different locations in a retail precinct taking into account the kinaesthetic experience of shoppers.

The initial conceptual framework presented in Figure 3.3 is based on the S-O-R paradigm, building on Mehrabian and Russell's (1974) Environmental Psychology Model and Donovan and Rossiter's (1982) approach-avoidance framework.

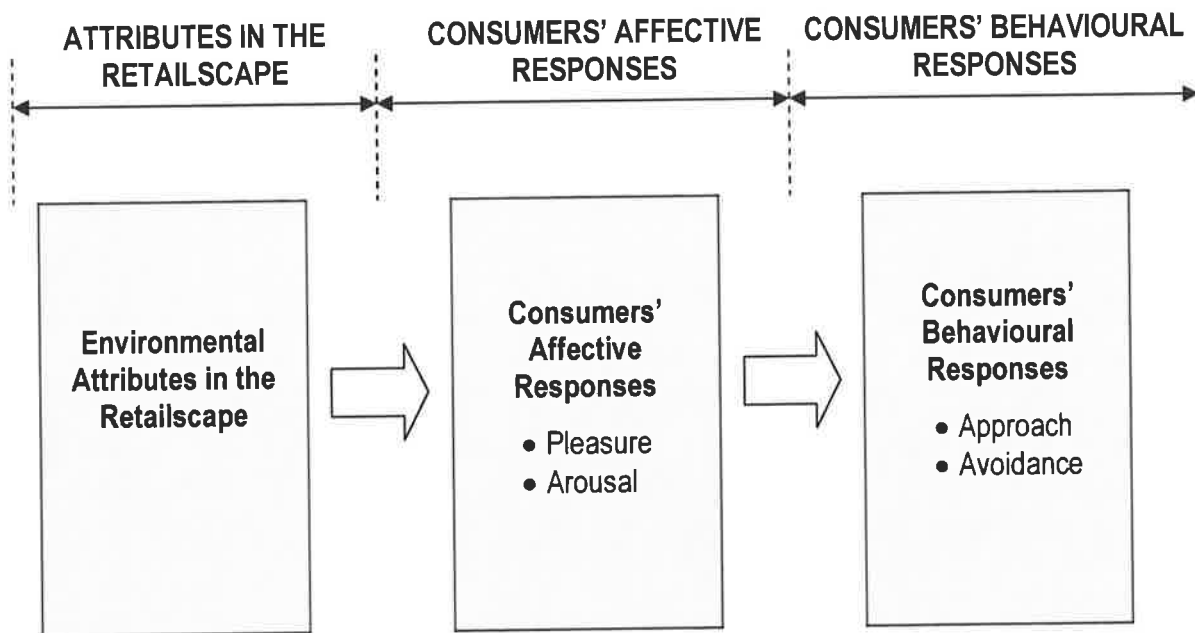


Figure 3.3: Initial Conceptual Framework

After completion of the initial exploratory research (Study 1) presented in Chapter 4, the proposed 'Model of Consumer Response to Retailscapes' and the central hypothesis guiding this research are introduced in Chapter 5.

3.8 Conclusion

Chapters 2 and 3 reviewed the literature from marketing, environmental psychology, urban design, and architecture, providing a theoretical rationale for the development of an initial conceptual framework. By adopting a multidisciplinary perspective, a

number of knowledge gaps were identified, contributing to the development of the initial theoretical framework guiding the program of research in this thesis. The next chapter presents the findings of Study 1, the qualitative stage of this research. In-depth interviews were undertaken to explore shoppers' responses to the surrounding retailscape. The aim of Study 1 was to identify key environmental attributes in the interior and exterior retailscape influencing the affective and behavioural responses of shoppers in order to refine the above conceptual framework into a testable model of consumer response to retailscapes.

Chapter 4 Study 1: In-depth Interviews

4.1 Introduction

The previous chapters provided a review and synthesis of past theoretical and empirical research from marketing and related academic fields relevant to this research. From the literature review, a number of gaps were identified providing justification for the multidisciplinary research undertaken in this thesis. In addition, the literature review provided theoretical rationale for the development of an initial framework underpinning this research. Chapter 4 outlines the inductive approach adopted in Study 1, the first exploratory study in this program of research. Exploratory research, in the form of in-depth interviews, was conducted during the initial stages of data gathering to identify key environmental attributes in the retailscape influencing the affective and behavioural responses of shoppers.

4.2 Study 1: Research Questions

The initial exploratory research undertaken in Study 1 was designed to explore shoppers' affective and behavioural responses to the retail environment in different retail precincts – that is, shopping centres, on-street shopping environments, and city centres. Semi-structured in-depth interviews were conducted with shoppers to obtain a deeper understanding of which attributes in the retailscape influenced their feelings about the environment, and how, in turn, these feelings affected their shopping behaviours. Three central research questions underpin the exploratory research in Study 1:

1. What key environmental attributes in the retailscape influence the affective and behavioural responses of shoppers?
2. How do these environmental attributes in the retailscape influence shoppers' affective and behavioural responses?
3. How do environmental attributes vary across different retail precincts? How does this variation influence shoppers' affective and behavioural responses?

4.3 Study 1: Research Method

In-depth interviews were undertaken in Study 1 to develop an understanding of the key issues identified in the research questions. Personal interviews enabled the researcher to develop an understanding of the issues by observing connections and influences by immersing in the phenomena, from a consumer's perspective. The purpose of in-depth interviews is to explore the respondents' world from their perspective, to discover their feelings, memories, and interpretations, that could not be observed or discovered in other ways (Carson et al., 2001; Gilmore & Carson, 1996).

Qualitative research methods are considered appropriate when the research is exploratory in nature and where the researcher aims to gain further insight into the research problem. During the early exploratory stages of the research process, qualitative research allows the researchers to fully explore the field in an open-ended and non-pre-ordained manner (Gilmore & Carson, 1996; Jarratt, 1996). The depth-interview technique has been found to be suited to uncovering the experiential aspect of the shopping, allowing respondents to talk about their shopping experiences in their own language (Haytko & Baker, 2004; Johnstone & Conroy, 2005; Sandikci & Holt, 1998).

As the primary aim was to obtain a deeper understanding of the phenomenon from the consumer's perspective, in-depth interviews were considered the most appropriate means of obtaining rich insights into the thoughts and feelings of shoppers (Kvale, 1996). Study 1 adopted an inductive approach oriented towards exploration and discovery. In this regard, the researcher attempted to make sense of multiple interrelationships emerging from the data without imposing his/her preexisting expectations on the phenomenon. The research aim was to develop empirical generalisations and identify preliminary relationships from the ground up. In-depth interviews with shoppers enabled the researcher to focus on individual experiences, without delimiting or pigeonholing what those experiences would be in advance. In short, the exploratory in-depth interviews permitted respondents to describe what was meaningful to them, with the outcomes emerging from individual experiences (Neuman, 2003; Patton, 1990).

4.3.1 Study 1: Ethical Considerations

Ethical clearance was obtained for Study 1. Informed consent from respondents is an ethical requirement for research. Hence, the interview process began with a brief outline of the purpose of the research. Confidentiality of the data and the respondent's name, in any reporting, was assured. Respondents were also told that participation was completely voluntary and that they could withdraw from the interview at any time without prejudice. Agreement to be interviewed was confirmed through a signed and dated consent form. In addition, permission was obtained to record all interviews using an unobtrusive hand-held recording device.

4.3.2 Study 1: Sampling Issues

Respondents were recruited through purposive sampling, where the researcher sought individuals who were most likely to relate to the research questions guiding Study 1. Purposive sampling is not just based on convenience and accessibility of respondents, but requires the researcher to think critically about the parameters of the population they are interested in, and to choose the respondents carefully (Silverman, 2001). Through purposive sampling, the researcher recruited recreational shoppers – that is, consumers who are motivated by experiential benefits of shopping. Recreational shoppers tend to shop more often for non-task related reasons and to enjoy the overall shopping experience. Further, these respondents were found to be more willing to discuss their shopping experiences, and could freely discuss their affective and behavioural responses to their surroundings in a retail environment (Bellenger & Korgaonkar, 1980; Jones, 1999; Roy, 1994).

Purposive sampling was combined with convenience snowball sampling where members of the sample suggest other possible respondents (Churchill & Iacobucci, 2002; Malhotra, Hall, Shaw, & Oppenheim, 2004). Although the sample was based on the researcher's network of friends, acquaintances, and referrals, care was taken to ensure that there was diversity in the sample in terms of key demographics such as age, occupation, income categories, and area of residence. Snowball sampling offered the researcher an easy and convenient method of obtaining a sample of females over 18 years of age who shop regularly. However, the final sample selected

was a non-probability sample, providing no assurance that the sampling process was unbiased.

The in-depth interviews were undertaken in three Australian capital cities – Brisbane, Sydney and Melbourne, between September 2003 and April 2004. From a purposive sampling perspective, three cities offered variation in terms of the different retail environments offered to shoppers. By including three cities in the sample, the researcher was able to check if the sub-sample from each city differed, or shared core experiences in the way they responded to the environmental attributes across three different retailscapes (Patton, 1990). In total, 42 in-depth interviews were undertaken with shoppers from three Australian capital cities. That is, a sub-sample of 14 respondents in each city. The final sample included female shoppers aged 18 to 60 years representing diverse occupational categories and socio-economic backgrounds, as summarised in Table 4.1.

Table 4.1: Study 1 Demographic Profile of the Sample

Demographics		Australian City		
		Brisbane n=14	Sydney n=14	Melbourne n=14
Age	<30	2	5	6
	31 to 45	4	5	4
	46 to 60	5	4	4
	>60	3	0	0
Occupation	Business Owner	2	3	0
	Senior Management	4	3	0
	Middle Management	2	1	4
	Med. Level White Collar	4	6	6
	Student	2	0	2
	Other	0	1	2
Level of Income	<50K	3	4	8
	51 to 80K	4	4	5
	81 to 100K	4	4	1
	>100K	3	2	0

4.4 Study 1: Procedure

Initially, potential respondents were contacted by telephone and invited to participate in the research. During this conversation, the researcher gained basic demographic information to ensure the respondent fitted within the range of demographics required. Questions were also asked about their general shopping behaviour and motivation to determine if they actually enjoyed the shopping experience. Through snowball sampling, 14 respondents were selected in each city and appointments were arranged for the date and time of each interview. The majority of interviews were carried out in the respondent's home, although a few interviews were undertaken in a quiet section of a centrally located café, or at the respondent's workplace.

Respondents were interviewed for up to one hour, with most interviews taking approximately 45 minutes to complete. The format of the in-depth interviews included four open-ended questions (see Table 4.2). The initial 'grand-tour' questions were more general in nature, where respondents were asked questions about their shopping experiences and motivations (McCracken, 1988). For example, these questions asked respondents to reflect on their shopping habits in general, whether it be in a shopping centre, on-street shopping precincts, or the city centre. At this point, they were asked to exclude any discussion on grocery-related shopping trips, which tend to be task oriented, rather than experiential in nature. In their reflection, respondents were asked to think about their main reasons for shopping and the benefits they derived from the shopping experience. These initial exploratory questions, although not directly related to the research question, were found to be an ideal way to get respondents to open up and reflect on their shopping experiences. These first questions were designed to encourage respondents to talk about their individual shopping experiences and tell their 'story' in relation to the research topic (Carson et al., 2001).

Table 4.2: Study 1 In-depth Interview Questions

Shopping Experiences and Motivations	
1.	Think about shopping in general, in shopping centres, on-street shopping precincts, or inner city shopping areas (excluding grocery shopping), and describe the main reasons you go shopping?
2.	What are the benefits you receive from shopping? Probe for reasons, feelings, and benefits.

The Retail Environment or Retailscape	
3.	Think about your recent shopping experiences and consider the physical environment of retail setting. How do you think the physical environment influenced your shopping experience? What were your experiences? How did the environment make you feel?
4.	What are your preferences for retail shopping environments? Shopping Centres? On-street shopping experiences? Inner city shopping precincts? How does your preferred shopping environment impact on your shopping experience? Again, probe for reasons, feelings, and benefits.

During the central part of the in-depth interviews, respondents were asked to reflect on the retail environment in each of the three different retail locations – that is, shopping centres, city centre, and on-street retail precincts. Throughout this line of questioning respondents were asked to think about how the physical environment influenced their shopping experiences, and how the environment made them feel while shopping. Generally, most respondents were articulate and freely expressed their feelings. When asked to reflect on the retail environment, some respondents were more expressive than others, whereas others required probing to think about how the physical aspects of the environment made them feel during a shopping experience. When required, non-directive questions, such as ‘Can you give me an example?’, or ‘Could you please explain how that made you feel?’, were used throughout the interview.

4.5 Study 1: Data Analysis

The data analysis process was divided into three concurrent stages: data reduction, data display, and drawing conclusions (Miles & Huberman, 1994). Data reduction involves selecting, focusing, simplifying, and abstracting the raw data. The data is then displayed in an organised assembly of information, so conclusions can be drawn. As pointed out by Miles and Huberman (1994), the three components of data

analysis and the activity of data collection form an interactive, cyclical process. For instance, after the data has been collected, the researcher moves among the activities of data reduction, display, and conclusion drawing/verification.

The first stage of data reduction was transcription of the interviews. The process of transcription allowed the researcher to further develop interpretive thinking in terms of the data (Lapadat & Lindsay, 1999). The longest transcript was fifteen pages, the shortest six pages, with the average page length being nine single-spaced pages. Once the interviews were transcribed, the data was stored, condensed, and coded using N-Vivo software (Gibbs, 2002).

During the coding of the qualitative data, the researcher organised the raw data into conceptual categories using the research questions as a guide. When coding the data, the researcher looked for patterns, themes, and categories of analysis emerging from the data (Neuman, 2003; Patton, 1990). Therefore, the process of coding proceeded inductively by identifying emergent categories from the data, rather than locating passages representing a priori constructs or themes (Spiggle, 1994).

The coding process required two simultaneous activities: 1) mechanical data reduction; and 2) analytical categorisation of the transcripts into themes. N-Vivo computer software assisted with the reduction of the data into segments with shared meaning (Catterall, 1996; Neuman, 2003). Analytical categorisation required the development of codes that capture 'the qualitative richness of the phenomenon' (Boyatzis, 1998 p. 31). Therefore, the researcher required creative insight to recognise patterns in the data to identify categories. As pointed out by Tesch (1990), coding is an intellectually demanding task requiring the identification of categories through a process of defining, refining, and identifying the boundaries between the categories. Throughout the coding process, categorisation of key themes followed an iterative process. For instance, during the initial stages of analysis, coding categories were provisional, allowing flexible interpretation throughout the coding process (Spiggle, 1994). The process of data analysis for Study 1 included the use of a computer program to assist with the mechanical coding of the qualitative data,

coupled with the researcher adopting an analytical and flexible perspective to develop relevant coding categories.

The researcher adopted three kinds of qualitative data coding: open, axial, and selective coding (Strauss, 1987). During the earlier open coding, the researcher looked for general themes, and assigned initial codes in an attempt to categorise the data. The researcher was not concerned with making connections among the themes, but rather attempted to condense the interviews into manageable categories. In contrast, during the next stage of axial coding, the researcher reviewed the initial codes by examining the linkages between themes and concepts. Axial coding stimulates thinking about the connection between themes, raises new questions, and helps reinforce the connections between concepts. In the final selective coding of the data, the researcher searched for cases that illustrated themes, looking for comparisons and contrasts in the interview data (Neuman, 2003). The outcome of selective coding was the identification of the major themes ultimately guiding this program of research. The following section elaborates on the six environmental attributes identified from detailed analysis of the inductive qualitative in-depth interviews from Study 1.

4.6 Study 1: Results

Key environmental attributes identified in the exploratory research included positive affective and behavioural responses associated with:

1. An **open** rather than closed feeling in retailscapes;
2. A **natural** rather than unnatural feeling in retail environments;
3. Retailscapes that feel like they have **evolved** and grown organically instead of appearing artificial and contrived;
4. Retailscapes with a **village-like** rather than a non-villagy feel;
5. Retailscapes with an **historical** feel instead of a non-historical feel; and,
6. Retail environments with **social spaces** as opposed to no social spaces.

Each of the six environment attributes identified in the qualitative research are discussed in further detail in the following sections.

4.6.1 Environmental Attribute 1 – Open Feeling

Respondents indicated that they preferred an open rather than closed feeling in retailscapes. A key attribute identified in the in-depth interviews related to spaciousness in retail environments where shoppers experienced an open and uncluttered feeling. Respondents indicated that an open retail environment made them feel comfortable and relaxed. Conversely, retailscapes that were closed made shoppers feel claustrophobic and confined. Consequently, this closed-in feeling affected the length of time shoppers spent in retailscapes, with respondents stating they felt an urge to leave this type of environment. A summary of qualitative comments reflecting the environmental attribute of openness is presented in Table 4.3.

Table 4.3: Typical Qualitative Comments for Open Feeling

You've got to have space, like it's not cluttered and not shop on shop, with racks out front.
You don't feel claustrophobic, it's just really open and wide.
I find it, being enclosed, it's like, you feel pressured and you just want to escape ... that's why I can't stand shopping centres, because I just can't wait to get out of there.
Having wide spaces, room to move without the feeling that, you know, the shopping centre was trying to get every square metre rented out.
... with the shopping centres, I find them claustrophobic because they've got a roof over them, I think.
... my favourite shopping centre because it's open ...
... some areas are sort of narrow ... and they're sort of claustrophobic I suppose, I feel like they are closing in on me.
I think the space thing makes you feel comfortable, just sort of looking around having a look.
I try to avoid to shop where there are really narrow hallway where they've got everyone squashed in together.... You just can't relax while you shop, you just don't feel comfortable when you walk in. You just feel frustrated, that there's too many things just everywhere.
Shopping centres ... make me feel claustrophobic, I just don't like to go there ...
The [name of Centre] is a horrible and depressing place, because again it is closed in ...
I don't like to shop in a very enclosed area, you can't really see what's really in the shop. If it is more open, you can see what's inside the shops and you feel more comfortable.

4.6.2 Environmental Attribute 2 – Natural Feeling

Respondents in Study 1 also indicated a preference for a natural rather than unnatural feeling in retailscapes. For instance, shoppers commented on the fresh, light feeling associated with outdoor retail environments, with natural ventilation and light. Positive associations were linked with a landscaped retailscape with trees and other vegetation. Shoppers also preferred water features, whether natural or man-made, such as fountains. On the other hand, negative comments related to the unnatural and synthetic feeling of some retail environments. The negative feelings associated with an unnatural retail environment affected shoppers' behavioural intentions in terms of their desire to stay in that retailscape. Table 4.4 lists a summary of qualitative comments reflecting the environmental attribute of naturalness.

Table 4.4: Typical Qualitative Comments for Natural Feeling

I don't like shopping centres ... they've got no natural light, so you feel like you are in an office building with no windows ... it just looks boring. I just don't want to shop there.
... that's another thing that's really nice is that being on the street cause there are trees ...
Yeah, just a little bit more inviting I think, partly because its got fresh air and sunshine. ... its got trees ... I feel a bit more comfortable in that environment I think.
I do like being outdoors, I prefer a more natural environment, I hate air-conditioning because I'm in air-conditioning all week with work.
... and I like that because it's quiet and there's lots of big trees. I love all the trees. I feel it's fresh, there's like water features, it's more natural.
[Shopping centres] ... not beautiful architecture, you're not interacting with the non-manmade environment ...
... my preference would be lots of light, light and air. It's refreshing ...

4.6.3 Environmental Attribute 3 – Evolved Feeling

Respondents preferred retail environments that appeared to have evolved without feeling artificial and contrived. Respondents commented on the manufactured and fabricated feeling associated with purpose built shopping centres. Overall, respondents felt bored with the sameness and lack of individuality of shopping centre environments. On the other hand, respondents felt that elements of the city centre and some street shopping precincts appear to have evolved over the years, exuding character, charm, and individuality, in their retail development. Table 4.5

summarises a number of comments illustrating respondents' preference for an evolved retailscape.

Table 4.5: Typical Qualitative Comments for Evolved Feeling

... it doesn't have that artificial, let's throw up a building, divide it up, and you know, make them go this way and that. It's kind of grown over the years, and it seems to be comfortable with itself.
... very pleasant experience as you walk along, the shops seem to be quite naturally where they are ...
I'm not into that whole mass market shopping experience, I like to shop where the shops are unique, they don't look all the same, all new and plastic ...
... I think the big suburban shopping centres, there's a sameness about them all, they all have the same artificial feeling ... I feel pretty bored really.
In the CBD people can customise their buildings more, and the individual buildings are different and it has more of an atmosphere.

4.6.4 Environmental Attribute 4 – Village-like Feeling

The results from Study 1 indicated that shoppers preferred retailscapes with a village-like feel. An overarching theme encapsulating this environmental attribute is a preference for authenticity in the retailscape. For example, shoppers like the local feeling of smaller, more traditional, retail environments, with a community oriented feeling. Respondents indicated a more wholesome, genuine feeling, captured in a street shopping precinct, as opposed to larger retail environments such as shopping centres. Qualitative comments, illustrating a preference for a village-like feeling in retailscapes are summarised in Table 4.6.

Table 4.6: Typical Qualitative Comments for Village-like Feeling

I really like that more sort of, it's like a local village, and the local village might have a few fashion shops and might have a homeware store and a bookstore. It's very villagy and you feel it is more community sort of focused.
Oh, it's villagy, ... and it's very intimate.
... I'd rather be in that sort of suburban sort of village type environment ... it's less business like, and I don't like shopping centres at all, cause they're not the slightest bit charming ...
They've made a big effort to put up umbrellas, you know, just get this villagy feel happening and it's packed.
It just seems like more pleasant ... it's kind of like a market you'd have in a village, I suppose a village. So it's got that kind of feel about it.

4.6.5 Environmental Attribute 5 – Historical Feeling

Respondents indicated a preference for retailscapes with an historical feel. Retail environments that had maintained their historical character in both the city centre and street shopping precincts were considered to have old-world charm reminiscent of a previous era. A key theme encapsulating comments relating to this environmental attribute was nostalgia for a bygone era. Overall, shoppers felt comfortable, contented, and more relaxed when shopping in retail environments with an historical feel. A summary of comments made by respondents exemplifying positive affect associated with an historical feel in retailscapes is found in Table 4.7.

Table 4.7: Typical Qualitative Comments for Historical Feeling

In the CBD you've got old world heritage buildings in there ... shopping there is associated with warmth, good positive feelings ...
I like the architectural style of arcades ... by and large arcades are quite beautiful and quite interesting and a lot of them are quite old, so you can see rows of shops, with little rails, verandahs around them, quite lovely architecture. I like that.
... is a really nice place, it hasn't lost a lot of its old charm, it's still got the really old buildings.... It's still got a lot of character because it's kept the old buildings.
I do like the QVB because it does have that heritage, architectural grand demeanour about it ... it feels old-worldly, a bit more charming than some of these new centres.
Architecturally I think I prefer their old fashioned touches that they have around the ridges ... it just seem more laid back, you know homely sort of ...
... has an old world sort of atmosphere about it ... it makes me feel comfortable being there I suppose because it is an atmosphere I appreciate. Anything that is brand spanking new, I'm not so comfortable with ...
I think I find arcades and old places, even if they are busy, gentler than the sort of superfast suburban shopping centre.

4.6.6 Environmental Attribute 6 – Social Spaces

Qualitative comments made by respondents emphasised the importance of social spaces in the retailscape. Indeed, for many shoppers the social aspect of shopping is an integral part of the shopping experience. While shopping, many respondents met with friends or family for coffee or lunch. Others shopped with children and enjoyed the spaces for entertainment and refreshments. Respondents also utilised social spaces in the retailscape to relax, recharge, and enjoy the surrounding atmosphere. Therefore, the presence of social spaces was identified as a key environmental

attribute in the retailscape influencing shoppers' affective and behavioural responses, as illustrated in the comments summarised in Table 4.8.

Table 4.8: Typical Qualitative Comments for Social Spaces

You might meet someone for lunch or meet someone for breakfast, and then you go for a 'mooch' afterwards and you might bump into a great pair of shoes.
So that kind of atmosphere, that happens, all about eating out and taking the family, really is very attractive for a lot of people around there I'd say.
... being part of the bustling sort of thing, and buskers, I always like to stop and watch them.
So you can go and sit outside, and the kids can run around, and there's a big fountain in the centre stage, where they have performers and things like that ... and there's plenty of seating.
They've got a big fountain and a sort of sitting down area, [the fountain] shoots up all the different water, and the kids can jump around and play on it. So you can be sitting there, having a coffee watching your children play.
I just like the whole experience of mooching around, and I'm a big observer of life. So, I'm just as happy to sit in a café, in between visiting shops, and just watch what is going on.
Leather lounges and chairs, and they'll have maybe two, two-seater leather lounges ... and people just sit there. Elderly sit down for half an hour, and then they'll get up and they'll do more shopping.
... I might go there because it's an environment in which you can ... stop and have a cup of coffee and read the paper, and there's a whole sort of relaxation experience, time stopping experience about it, so that's the positives, it's sort of relaxation, time stopping, slowing down.

4.6.7 Variation of Environmental Attributes across Retailscapes

The results of the exploratory research indicated that the six environmental attributes varied across the three retailscapes including shopping centres, the city centre, and street shopping precincts. For example, one respondent highlighted four of the key attributes when comparing the retail environment of the city centre with a shopping centre:

... I find places that have developed and adapted and grown and have some trees and some space and you can see a bit of sky and somewhere to sit, attracts me more than the purpose built shopping centre ... (evolved, natural, open, social spaces).

Whereas, another respondent referred to three of the key attributes when discussing the retailscape of a shopping centre:

... it seems to be a very unnatural environment because you are completely closed off from the exterior environment, so you are not shopping where you can look out the window and see the sky or you are not ducking in and out of a shop, where there might be cafes and trees and nice sidewalk environment or beautiful buildings around you ... (artificial, closed, limited social spaces).

The street 'strip' shopping experience is encapsulated in the following description of village-like feel of the local retail precinct:

... there's nothing contrived about it as well. It's kinda like a villagy atmosphere ... it's like the local villagy ... but it is very villagy, and you feel, it's very more community sort of focused (evolved, village-like).

4.7 Study 1: Limitations

One of the key limitations of Study 1 is the use of non-probability sampling, whereby the researcher used personal judgement to select respondents. As respondents were not selected probabilistically, this precludes an assessment of 'sampling error'. Subsequently, there is no way to identify error attributed to sampling procedures and the researcher cannot place bounds on the precision of the estimates. Further, the researcher had no way of knowing if those included in the sample are representative of the target population. Despite these limitations, judgement sampling was considered appropriate in the early stages of this research, to offer some perspective on the research questions, where respondent ideas and insights are being sought, as in Study 1 (Churchill & Iacobucci, 2002).

Other sampling limitations related to the three cities selected, the size of the sample in each city, and the gender of the respondents. All respondents lived in three Australian capital cities, with no respondents living in non-metropolitan and regional and country towns. The sample in each city was limited to fourteen shoppers, representing a small number of shoppers from each city. Only female shoppers were invited to participate, based on the assumption that women traditionally undertake

most of the shopping related activities in most households. Generally women represent a significant percentage of the shopping public and tend to be more motivated by the experiential benefits of shopping (Bellenger & Korgaonkar, 1980; Jones, 1999). Given the changing roles of both men and women in society, this assumption may not hold in today's society with a larger percentage of men undertaking an increased share of retail buying. For this reason Study 2, the main quantitative study in this program of research, included both male and female respondents in the sampling frame.

Finally, Study 1 relied on memory-based responses where respondents were asked to recall attributes in the retailscape influencing their shopping experiences. Alternatively, qualitative interviews could have been undertaken with actual shoppers while they were visiting a retail precinct, taking into consideration an individuals' ongoing goals and objectives which may influence responses. However, consideration was also given as to the impact of situational influences distorting the research findings.

4.8 Conclusion

This chapter presented Study 1, the initial qualitative research, where in-depth interviews were undertaken with shoppers to identify key environmental attributes influencing shoppers' affective and behavioural responses to retailscapes. This qualitative research identified six environmental attributes positively influencing shoppers' affective and behavioural responses: 1) retailscapes with an **open** feeling; 2) retail environments with a **natural** feeling; 3) retailscapes that feel like they have **evolved** and grown organically; 4) retailscapes with a **village-like** feeling; 5) retailscapes with an **historical** feeling; and 6) retail environments with **social spaces**, enhancing the social benefits of shopping.

These six attributes underpin the theoretical model and central research hypothesis presented in the next chapter of this thesis. Chapter 5 presents two key research questions, the research model, and the central hypothesis guiding this program of research.

Chapter 5 Theoretical Model and Research Hypothesis

5.1 Introduction

The findings from the exploratory research (Study 1) presented in the previous chapter, identified six environmental attributes in the retailscape that influence the affective and behavioural responses of shoppers. Chapter 5 presents two central research questions, the theoretical model, and the central research hypothesis underpinning this program of research. The literature review, presented in Chapters 2 and 3, provided a theoretical foundation for the proposed 'Model of Consumer Response to Retailscapes'. Further, the exploratory research undertaken in Study 1 and presented in Chapter 4, provide further support for the research questions, conceptual framework, and the central research hypothesis, presented in this chapter.

5.2 Research Questions

The overall aim of this research program is to reach a deeper understanding of consumers' affective and behavioural responses to key environmental attributes in the interior and exterior retailscape. The two central research questions addressed in this research are:

1. What effects do key environmental attributes in the interior and exterior retailscape have on shoppers' affective and behavioural responses?
2. How do shoppers' affective and behavioural responses vary as they move through a retailscape?

5.3 Proposed 'Model of Consumer Response to Retailscapes'

The results from the exploratory research, together with a comprehensive multidisciplinary literature review, and industry consultation, have sharpened the research focus by aiding the development of a new conceptual framework – the proposed 'Model of Consumer Response to Retailscapes'. As seen in Figure 5.1, the

proposed framework guiding this research is based on the S-O-R paradigm, comprising three main components:

1. Six environmental attributes representing the environmental stimuli (S);
2. Consumers' affective responses of pleasure and arousal, reflecting the internal processes of the organism (O); and,
3. Consumers' approach-avoidance behaviours reflecting their behavioural responses (R).

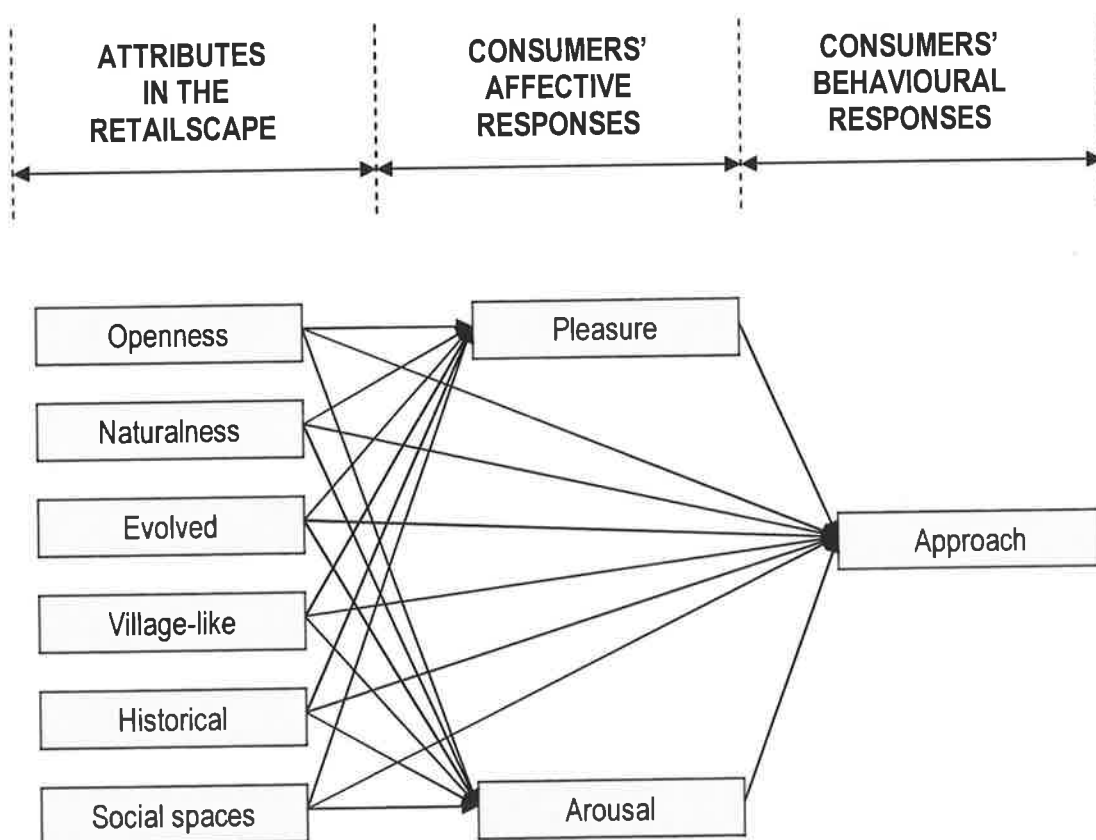


Figure 5.1: Proposed ‘Model of Consumer Response to Retailscapes’

As noted earlier, the proposed theoretical framework is based on the S-O-R paradigm, building on Mehrabian and Russell’s (1974) Environmental Psychology Model and Donovan and Rossiter’s (1982) approach-avoidance framework.

5.4 Central Hypothesis Derived from the Model

The following overarching hypothesis was developed to reflect the interrelationships hypothesised in the model:

It is hypothesised that the six exogenous environmental attributes have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.

The hypothesised direct influences are represented by the direct paths linking the exogenous environmental variables to the dependent variable of 'approach'. The hypothesised indirect influences are represented by indirect paths linking the exogenous environmental variables to the mediator variables of 'pleasure' and 'arousal', and sequentially to the dependent variable of 'approach'.

This central hypothesis derived from the proposed 'Model of Consumer Response to Retailscapes' reflects the impact of each of the six environmental attributes of the retailscape on shoppers' affective and behavioural responses. The hypothesised relationships between the six environmental attributes and consumer responses are discussed in further detail in the following sections, examining six sub-hypotheses derived from the central hypothesis.

5.4.1 Environmental Attribute 1 – Open Feeling

Based on the results of the qualitative research undertaken in Study 1 and the literature reviewed for this research, it was proposed that a retailscape perceived as having an open feeling would induce a more positive affective response from shoppers and subsequently influence their approach behaviour. Research reviewed in Chapter 3 indicated that individuals prefer an open rather than closed environment (Nasar, 1998). Spaciousness has been identified as an important environmental element in both the city (Lynch & Rivkin, 1959) and in retailscapes (Haytko & Baker, 2004). Likewise, trends in the retail industry indicate that shoppers prefer the openness of 'strip' shopping environments. Retail designers are incorporating open-

air retail environments such as alfresco town centres in retail precincts (Dimasi, 2004). Therefore, it is hypothesised:

*The environmental attribute of **openness** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.*

5.4.2 Environmental Attribute 2 – Natural Feeling

In addition, the results from the exploratory research in Study 1 identified that shoppers preferred a retailscape perceived as having a natural feeling, and this in turn influenced their affective and behavioural responses. Research in the environmental psychology literature indicates that individuals prefer a more natural environment (Kaplan & Kaplan, 1989; Nasar, 1998). These findings have been supported by industry trends where retail architecture and landscape architecture are integrating natural light, vegetation, and water courses, in retail design, to provide shoppers with more natural shopping precincts. Subsequently, it is hypothesised:

*The environmental attribute of **naturalness** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.*

5.4.3 Environmental Attribute 3 – Evolved Feeling

The in-depth interviews with shoppers in Study 1 indicated that retailscapes that appear to have evolved rather than appearing contrived and fabricated have a positive influence on shoppers' affective and behavioural responses. Industry trends indicate that shoppers are craving for old-fashioned shopping neighbourhoods referred to as 'organic street life', where shopping precincts have evolved over the years with a city's natural growth. Nostalgia for a street shopping experience contrasts with the lack of individuality found in traditional box-like suburban shopping centre (Borschke, 2003; Lyon, 2003). Therefore, in this research it is hypothesised:

*The environmental attribute of **evolved** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.*

5.4.4 Environmental Attribute 4 – Village-like Feeling

Comments made by respondents in the in-depth interviews in Study 1 indicated positive affective responses associated with a village-like feeling. This in turn influenced shoppers' behavioural responses in terms of their desire to stay in that environment. Likewise, industry trends have indicated that old-fashioned city life, with the familiarity and intimacy of local shops in a village-like atmosphere, is preferred by some shoppers looking for more authentic retail environment (Borschke, 2003; Jackson, 2004). Thus, it is hypothesised:

*The environmental attribute of **village-like** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.*

5.4.5 Environmental Attribute 5 – Historical Feeling

In Study 1, an historical feeling was identified as a key environmental attribute in retailscapes. This finding was supported in the literature reviewed in Chapter 3, which indicated that the appearance of historical significance enhances favourable responses to the environment (Lynch, 1981). From an industry perspective, a number of established retail precincts, surrounded by historic buildings or located in heritage buildings, have capitalised on the historical significance of their surroundings (Cincotta, 2006; Lyon, 2003; Stappmanns, 2004). Therefore, it is hypothesised:

*The environmental attribute of **historical** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.*

5.4.6 Environmental Attribute 6 – Social Spaces

The results of the exploratory research from Study 1 identified that shoppers considered the presence of social spaces was a key environmental attribute in retail environments. The literature review in Chapter 3 identified that social spaces enhance social interaction, leisure and relaxation for shoppers (Feinberg et al., 1989; Isaacs, 2000; Montgomery, 1998). Retail industry designers have integrated social spaces into their retail developments, aimed at enhancing the social aspects of the shopping experience (Southworth, 2005). Finally, it is hypothesised:

*The environmental attribute of **social spaces** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.*

5.5 Conclusion

The current chapter presented the research questions, conceptual model and central hypothesis developed from the multi-disciplinary literature review (Chapters 2 and 3), in conjunction with the key findings of the exploratory research undertaken in Study 1 (Chapter 4). Chapter 5 introduced the proposed 'Model of Consumer Response to Retailscapes', to be tested empirically in Study 2. The proposed conceptual framework introduced in Chapter 5 is based on S-O-R paradigm, where the six environmental attributes identified in Study 1 provided the environmental cues or stimuli. Further, the six environmental attributes provided the foundation for the central hypothesis presented in this chapter. In the following chapter, Study 2 is presented, where evaluative mapping from environmental psychology is adopted in a retail context.

Chapter 6 Study 2: Evaluative Mapping Methodology

6.1 Introduction

The previous chapter presented the research questions, conceptual model and central research hypothesis guiding this program of research. The findings from the exploratory research aided in the development of a new conceptual framework – the proposed ‘Model of Consumer Response to Retailscapes’. The purpose of Chapter 6 is to introduce Study 2, the main quantitative component of the two-stage program of research. This chapter introduces evaluative mapping from environmental psychology, the research methodology adopted in Study 2. The application of Nasar’s (1990; 1998; 2000) evaluative mapping methodology in the context of this research is presented. Justifications are given for the choice of research location, as well as an overview of the data collection procedure. In addition, the questionnaire format and construct measurement scales are presented, followed by details of the pre-testing procedure. Finally, data collection, including sampling issues, and the recruitment of respondents for Study 2, are examined.

6.2 Study 2: Objectives

While the in-depth interviews from Study 1 provided an understanding of consumers’ affective and behavioural responses to retailscapes, the aim of Study 2 was to test empirically the proposed ‘Model of Consumer Response to Retailscapes’ in a number of different locations in an established retail precinct. Further, the aim of Study 2 was to address the key knowledge gaps identified in Chapters 2 and 3. Evaluative mapping from environmental psychology (Nasar, 1990, 1998, 2000) was selected as an appropriate research methodology designed to test the proposed conceptual framework with shoppers in an existing retail precinct. Another important objective of Study 2 was to develop an evaluative map of a retail precinct, highlighting specific locations and environmental attributes influencing shoppers’ affective and behavioural responses.

6.3 Study 2: Research Setting

This research adopted a field experiment where respondents were asked to directly experience their surroundings in a number of different locations in a retail precinct. Rather than attempting to simulate the environment using photographs, video, or other forms of environmental display, this research was located in the field so respondents could experience the full nature and richness of their surroundings (Craik, 1968). Research based in the field, or natural environment, is endorsed by Lewin's (1951) applied research which advocates: 1) a non-reductionist and macro-level approach; 2) a problem focused orientation; 3) utilisation of current theory; and 4) research designed to score high on ecological validity (Cassidy, 1997).

When selecting an appropriate mode of presentation of the environment in research, Nasar (1998) advocates direct exposure to the actual environment as it reflects how individuals experience their surroundings. As summarised in Table 6.1, researchers trade off between 'similarity to actual experience' and 'experimental control'. For instance, research undertaken in the field may be considered inefficient as it requires bringing respondents to the site. Further, field research may include numerous extraneous factors that may interfere with experimental control. The use of some form of simulation of the environment, such as photography, video, or computer simulation, can increase efficiency and experimental control, but lacks the advantages associated with a direct on-site experience.

Table 6.1: Veridicality and Experimental Control of Media of Presentation

Similarity to Actual Experience	Presentation of Media	Experimental Control
More Realistic	Direct on-site exposure to a place Color video or films of the place Color photos or slides of the place Color photos of model	Less Control
↓		↓
Less Realistic	Drawings and models	More Control

Source: Nasar (1998 p. 146)

A field setting was selected for Study 2 as it was considered important to capture a shopper's kinaesthetic experience in a real-world setting. As shoppers move sequentially through a retail precinct (that is, from one location to another during a period of time), they evaluate their surroundings from the perspective of a moving

person. Despite research advocating the use of environmental simulation using photographs and videotapes (Bosselmann & Craik, 1987), as well as desktop virtual environmental simulation (Cubukcu & Nasar, 2005), Study 2 was undertaken in the field where respondents were able to evaluate the surrounding retailscape through first-hand experience. The artificial nature of environmental simulations does not allow the 'study of real people in real environments' (Bell, Greene, Fisher, & Baum, 2001 p. 19) resulting in poor ecological validity or generalisation of laboratory research on human behaviour (Cassidy, 1997). As noted by Nasar (1994 p. 395) 'the static nature of scenes in most studies neglects the important influence of human movement through place on their experience of the place.' However, research undertaken in the field encapsulates many of the nuances of the shopping experience that could not easily be recreated through other forms of simulation (Zeisel, 1981). The following sections provide further detail on the research methodology of evaluative mapping, where respondents are asked to evaluate their surroundings in a real-world setting – that is, an existing retail precinct.

6.4 Background of Evaluative Mapping Methodology

As mentioned in Chapter 3, evaluative mapping is an extension of Lynch's (1960) seminal work on cognitive mapping in urban planning. Lynch was interested in identifying community consensus on the elements in the urban environment which enhance the identity and structure of a city, defined as its *imageability* or *legibility*. However, Nasar (1990, p. 42) argued that the cognitive orientation of imageability is not enough for planning a city's appearance as 'humans have feelings, both negative and positive, about their surroundings and the imageable elements'. As discussed in Chapter 3, Nasar (1998) used the term *likability* to refer to the favourable emotional meaning experienced in relation to the environment. Evaluative mapping is a research methodology developed by Nasar (1990; 1998; 2000) to identify individuals' evaluative responses to an urban environment. In urban planning, the creation of evaluative maps reveals the memorable features of the city as well as the evaluative quality of these elements. Nasar (1998) advocates a multi-method approach to evaluative mapping by integrating both qualitative and quantitative research methods. For example, recommended research methodologies range from

qualitative open-ended interviews to quantitative methodologies including multidimensional scaling techniques or computer mapping.

In evaluative mapping research undertaken by Nasar (1990; 1998; 2000), respondents were asked about the areas in a city that they liked and disliked visually, and their reasons. The results of this qualitative research were overlaid into an evaluative map to develop an evaluative image of two cities. Nasar suggests that the evaluative image of an urban environment is hierarchical. For instance, maps can be developed at smaller scales of a city such as a neighbourhood or a block level. These smaller, more focused maps could identify more detailed elements when compared with maps developed for the city as a whole. Nasar (1998) recommended that future research go beyond city-scale maps to districts, neighbourhoods and individual blocks of the city, allowing more precise mapping of the urban environment.

With the exception of research undertaken by Nasar (1998) to develop the evaluative image of three-blocks in a commercial precinct, no known research has applied evaluative mapping to a retail precinct. Hence, a unique contribution of this research is the adoption of Nasar's research methodology from environmental psychology in a marketing context. Nasar's evaluative mapping methodology forms the foundation for Study 2, and is discussed in further detail in the following section.

6.5 Study 2: Application of Evaluative Mapping in a Retailscape

The evaluative mapping procedure adopted in this research applies quantitative research methodologies to specifically examine shoppers' affective and behavioural responses to the six environmental attributes in five typical locations of a retail precinct. The findings from the in-depth interviews from Study 1 provide the foundations for the evaluative mapping methodology applied in Study 2. A stepwise approach was recommended by Nasar (1998) who suggested that identification of key environmental attributes from earlier qualitative research could make quantification more objective in subsequent research. The application of evaluative mapping in this research consisted of four fundamental steps:

1. A retail precinct was divided into five different research locations;
2. At each location, respondents were asked to evaluate the environment in terms of the six environmental attributes identified in Study 1;
3. Respondents' affective and behavioural responses to the surrounding retailscape were quantitatively measured at each location; and
4. An evaluative map was subsequently developed for a retail precinct, based on the quantitative results.

In the following sections, the choice of research location is justified, followed by a detailed description of data collection undertaken in Study 2.

6.6 Study 2: Choice of Research Location

When selecting an appropriate research location for Study 2, a key aim was to ensure that the retailscape reflected all six attributes identified in Study 1. Based on the findings of the in-depth interviews undertaken with shoppers in Study 1, as well as site visits and industry consultation, the Sunshine Plaza, Maroochydore, Queensland, was selected as an appropriate research location. This retail precinct displayed variation in terms of the six attributes identified in Study 1. For instance, the outdoor Riverwalk area of the Sunshine Plaza is characterised by five attributes – open, natural, evolved, village-like, and social spaces. A more traditional shopping centre environment is also found within the Sunshine Plaza, reflecting a more closed, artificial, contrived, non-village-like, non-historical environment, with limited social spaces.

Lend Lease Retail, the management company for Sunshine Plaza, were approached by the researcher in August 2005 to negotiate access to the retail precinct for Study 2. A mutually beneficial agreement was arranged, where Lend Lease Retail funded the research in the form of \$30 Sunshine Plaza gift vouchers for each respondent who participated in the research. Lend Lease Retail also hired an independent marketing research firm to recruit a sample of shoppers to undertake the self-administered questionnaire. The results from this program of research were subsequently made available to Lend Lease Retail.

6.7 Study 2: Application of Evaluative Mapping

During the evaluative mapping procedure, respondents were asked to undertake a self-completion questionnaire during a predetermined shopping trip through the Sunshine Plaza. During this pre-arranged shopping task, respondents were instructed to visit five locations in the Sunshine Plaza in a specific order. At each location, respondents were asked to stop, evaluate the surrounding retailscape, and then complete a section of the questionnaire.

As this research adopted a self-completion questionnaire, it was important that all instructions were logically ordered and self-explanatory. On the questionnaire specific instructions outlined where the respondent should answer each set of questions related to the five locations. Throughout the questionnaire a stop sign symbol indicated to respondents when they should move to the next location. Overall, the final design and layout of the questionnaire conveyed a professional appearance, in terms of instructions, spacing, and number of questions per page (Lukas, Hair, Bush, & Ortinau, 2004). For ease of completion, the questionnaire was copied on single-sided paper and respondents were given a clipboard. A copy of the questionnaire is found in Appendix A.

After preliminary analysis of traffic flow and consultation with Centre Management, five research locations at Sunshine Plaza were selected for Study 2. These research locations were selected as they reflected the six environmental attributes of the retailscape identified in Study 1. For example, two locations on Riverwalk were characterised by a more natural, open retail environment, whereas the other three locations were characterised by a more closed, artificial retail environment. A summary Task Procedure for respondents is described in Table 6.2, outlining the specific instructions given to respondents during self-completion of the questionnaire. The Task Procedure lists the five designated locations at Sunshine Plaza where respondents were instructed to evaluate the surrounding retailscape on the self-completion questionnaire. Further description of the five locations is found in Chapter 7.

Table 6.2: Study 2 Task Procedure for Self-Completion Questionnaire

Location	Instructions
Entrance	Enter the Sunshine Plaza at the entrance door from the car park near Suncorp Metway Bank. At this point you can answer the introductory questions in the first section. Next, go to the Fresh Food Hall, near Coles Supermarket.
1	Answer all questions at the Fresh Food Hall outside Coles Supermarket. Now walk to Location 2.
2	Answer all questions outside Starbucks Coffee on Riverwalk. Now walk to Location 3.
3	Answer all questions outside Gloria Jean's Coffees near Myer. Now walk to Location 4.
4	Answer all questions outside Lowes , on the way to Kmart. Now walk to Location 5.
5	Answer all the remaining questions outside Zarrafra's Coffee on Riverwalk. Complete the final sections of the questionnaire at this location.
Exit	After you have completed the final sections of your questionnaire, please return it to either Centre Management or Customer Service and collect your \$30 gift voucher: Weekday: Return your questionnaire to Centre Management Office , located upstairs opposite St George Bank at the exit to the car park. Weekend: Return your questionnaire to the Customer Service Centre , located in the walkway next to the newsagents close to Kmart.

To prevent any bias in terms of the order of the five locations, the sequencing of the locations was reversed for half the respondents. In version A of the questionnaire, respondents were instructed to enter the Sunshine Plaza at Suncorp Metway and move through the shopping centre from the Fresh Food Hall to Zarrafra's Coffee as outlined in Table 6.2. In Version B, respondents were instructed to enter at St George Bank and move through the Sunshine Plaza in the reverse direction. Figure 6.1 illustrates the five research locations at Sunshine Plaza.



Location 1
Fresh Food Hall



Location 2
Starbucks Coffee



Location 3
Gloria Jean's Coffees



Location 4
Lowes



Location 5
Zarraffa's Coffee

Figure 6.1: Five Research Locations at Sunshine Plaza

Sunshine Plaza is built along a natural waterway, located on both sides of Cornmeal Creek. Walkways along Riverwalk have capitalised on the outdoor environment where both Starbucks Coffee (Location 2)⁶ and Zarraffa's Coffee (Location 5) are located. A more traditional closed shopping environment is found at the Fresh Food Hall near Coles (Location 1), Gloria Jean's near Myer (Location 3) and at Lowes near Kmart (Location 4). A map of the five research locations is found in Figure 6.2.

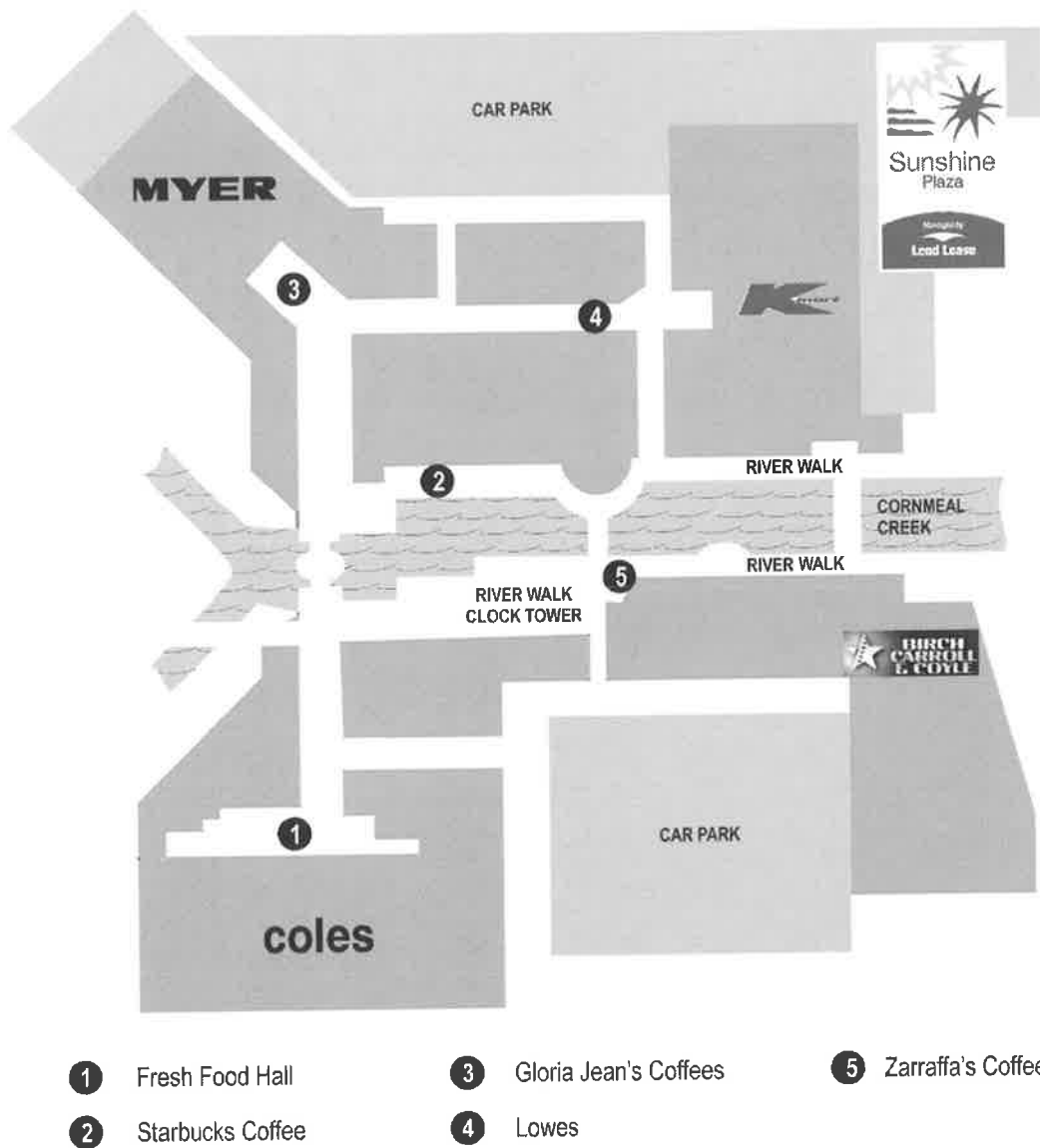


Figure 6.2: Map of Five Research Locations at Sunshine Plaza

⁶ Locations at Sunshine Plaza based on Questionnaire A.

When respondents arrived at each of the five designated research locations at Sunshine Plaza, they were asked to rate their surroundings according to the six environmental attributes in the proposed 'Model of Consumer Response to Retailscapes'. At each location, respondents' affective responses to the retailscape were measured using Mehrabian and Russell's (1974) pleasure and arousal scale, as adapted by Donovan and Rossiter (1982). In addition, respondents' approach-avoidance behaviours were measured using eight items on a seven-point Likert scale (Donovan & Rossiter, 1982). A summary of the construct measurement scales is found in Table 6.3.

Table 6.3: Variable Measurement and Question Format

Variables Measured	Measurement Origin	Format	Location and Question⁷
Environmental attributes	Attributes identified in exploratory research undertaken in Study 1, in-depth interviews with shoppers.	6-items developed on a 7 point semantic differential scale	Location 1: Q. 8 Location 2: Q. 15 Location 3: Q. 22 Location 4: Q. 29 Location 5: Q. 36
Affective responses	Dimensions from Mehrabian and Russell's (1974) semantic differential scale of emotional situations and environments for both pleasure and arousal.	5-item scale from a 7 point semantic differential scale for pleasure 6-item scale from a 7 point semantic differential scale for arousal	Location 1: Q. 7 Location 2: Q. 14 Location 3: Q. 21 Location 4: Q. 28 Location 5: Q. 35
Behavioural responses	Measures of approach-avoidance from Donovan and Rossiter's (1982) adaptation of the original Mehrabian and Russell scale (1974).	8-item scale from a 7 point semantic differential scales measures of approach-avoidance	Location 1: Q. 9 Location 2: Q. 16 Location 3: Q. 23 Location 4: Q. 30 Location 5: Q. 37

Version A of the questionnaire is found in Appendix A. As seen in the questionnaire, a number of questions were also included in the test instrument to fulfill the research brief outlined by Lend Lease Retail. Overall, the additional questions did not significantly add to the overall length of the questionnaire.

⁷ Locations refer to version A of the questionnaire.

Open-ended qualitative comments were solicited by the researcher from a subsample of 69 respondents when they returned the completed questionnaire. These respondents were asked the following open-ended qualitative questions:

1. Out of the five locations, what was your preferred location(s)? Why? How did that location make you feel?
2. What was your least preferred location(s)? Why? How did that location make you feel?

During data analysis, the qualitative comments were analysed in conjunction with quantitative research findings, as discussed in Chapter 7.

6.8 Study 2: Pre-testing Procedure

The questionnaire was pre-tested over a three day period in late October and early November 2005 with a convenience sample of ten (10) shoppers residing on the Sunshine Coast. Pre-testing of the questionnaire was carried out at the Sunshine Plaza, the research context for Study 2. Initial contact was made with respondents by telephone when they were invited to participate in the pre-test study. A day, time, and location were arranged for a meeting with the researcher at Sunshine Plaza, where each respondent was given an overview of the purpose of the study. Respondents were asked to complete the questionnaire according to the research instructions outlined on the title page of the questionnaire. When complete, respondents met with the researcher to discuss all aspects of the questionnaire including question content, wording sequence, layout and form, instructions, and question difficulty. Because extra time was required for debriefing during the pre-testing phase, each respondent received a \$40 Sunshine Plaza gift voucher. As Study 2 used a self-completion questionnaire, the main aim of pre-testing both the questionnaire and the task procedure was to identify any potential problems respondents may have completing the questionnaire at the research site, so that revisions could be made prior to undertaking the main study (Malhotra et al., 2004).

6.8.1 Respondent Feedback

Individual debriefing occurred after the questionnaire had been completed by each of the pre-test respondents. After six (6) respondents had pre-tested the questionnaire, it became evident that the use of semantic differential scales with numbers from one to seven was confusing to respondents unfamiliar with this form of scaling. This problem was identified in two main sections of the questionnaire including the affect measures and the six environmental attribute measures. For example, the semantic differential scale included bipolar opposites anchoring the scale – for example, ‘happy’ versus ‘unhappy’ (Mehrabian & Russell, 1974). Respondents were required to circle a number from 1 to 7, to indicate what side of the scale represented their emotional response to the retailscape. The inclusion of numbers in a semantic differential scale was confusing to two respondents who thought that the higher the number, the more ‘happy’ they were, rather than the opposite scale item of ‘unhappy’. During revision of the questionnaire the numbers were removed and replaced by seven boxes for both the affect measures and the environmental attribute measures. In the revised questionnaire, respondents were asked to tick the appropriate response in one of the boxes.

During the debriefing stage respondents commented on the length of time required to complete the questionnaire. The initial questionnaire included two open-ended qualitative comments at each of the five locations in Sunshine Plaza, which substantially increased the time taken to complete the questionnaire. When reviewing the qualitative comments made by respondents during the pre-test procedure, it was found that the answers respondents gave to these open-ended questions were only brief comments and in some cases no answer was given. Therefore, the qualitative questions were removed from the test instrument to reduce the length of time taken to complete the questionnaire. Instead, during data collection in Study 2, the researcher solicited qualitative feedback from a sub-sample of respondents when they returned the completed questionnaire.

Feedback from the pre-test respondents also indicated two problems with the locations selected in Sunshine Plaza. First, two of the external locations were situated opposite each other across a footbridge on Riverwalk and were characterised

by similar environmental attributes. This problem was accentuated as respondents were asked to evaluate the retailscape in these two similar locations consecutively. Respondents commented there was not much difference in their responses in both locations. Second, another specified location inside the Sunshine Plaza was close to a busy walkway which included a nearby internal stairway. Consequently, there was little space for the respondent to stop, evaluate the surrounding retailscape and complete that section of the questionnaire. Based on this feedback, the route of the shopping trip was modified to ensure there was variation in the environmental attributes in each consecutive location and that the respondent had enough space at each location to evaluate their surroundings and complete the questionnaire.

Other revisions were made to the questionnaire based on comments made by respondents related to the wording of the example given in the instructions for completing the questionnaire. In addition, revisions were made to the skip questions to improve the clarity of the instructions. After the questionnaire was revised, the edited pre-test questionnaire was completed by four (4) respondents to determine whether the identified problems had been eliminated. As no problems were found, no further pre-testing was required.

6.9 Study 2: Data Collection

6.9.1 Ethical Considerations

As discussed in Chapter 4, an ethical requirement for research is informed consent from respondents. During the initial meeting with respondents, the researcher provided an outline of the purpose of the research. Confidentiality of data and of any identifying information obtained from respondent was assured. Respondents were informed that participation was completely voluntary and that they could withdraw from the study at any time without prejudice. Agreement to participate in Study 2 was confirmed through a signed and dated consent form obtained from all 160 shoppers who completed the questionnaire. A copy of the consent form is found in Appendix B.

6.9.2 *Sampling Issues and Recruiting Respondents*

Prior to data collection, the sampling frame for this research was established as regular shoppers to the Sunshine Plaza, who had shopped at the centre at least once in the last two months and lived on the Sunshine Coast, Queensland. Since the main focus of Study 2 was the retailscape of Sunshine Plaza, shoppers were recruited when they entered the shopping centre. A Brisbane-based marketing research firm was employed to recruit shoppers through mall intercepts at three main entrances to the Sunshine Plaza. Prior to commencing any recruitment of respondents the market researchers employed by the marketing research company, for the purposes of this research, were thoroughly briefed by the researcher as to the research requirements. In addition, the market researchers participated in the compulsory Occupational Health and Safety training required by Lend Lease Retail. As the researcher was on site during all stages of data gathering, on-going supervision was available during all stages of the data gathering process.

Mall intercepts were used in this research to recruit shoppers for Study 2. In the more traditional sense, mall intercepts interviews involve intercepting mall shoppers and interviewing them face to face (McDaniel & Gates, 2002). However, in this research, data gathering involved a two-step process: 1) recruitment of shoppers through mall intercepts; and 2) self-completion of a questionnaire by participating shoppers. The invitation given to potential respondents inviting them to participate in the research is found in Appendix C.

Mall intercepts were considered a convenient and cost-effective way to recruit respondents for Study 2. However, as with all data collection methods, there are a number of limitations associated with mall intercepts and self-administered questionnaires. First, the nonprobabilistic nature of mall intercepts means that the researcher has no way of identifying exactly what the chance is of selecting any particular element in the sample. Therefore, estimates are not statistically projectable to the entire population and sampling error cannot be calculated (Bush & Grant, 1995; Gates & Solomon, 1982).

Second, another potential sampling error associated with mall intercepts is length bias sampling where shoppers who spend more time at the shopping centre are more likely to be included in the final sample (Nowell & Stanley, 1991). Research has indicated that recreational shoppers were over-represented in mall intercept samples. Recreational shoppers were found to spend more time shopping, possess opinion leadership qualities, are more self confident, and have more time to undertake research studies (Bush & Grant, 1995). Therefore, the researcher needs to consider sampling error associated with the under-representation of task-oriented shoppers, and those who do not frequently visit shopping centres.

Despite the sampling limitations associated with the recruitment of respondents by mall intercepts, recruiting at the actual research location was considered an appropriate way to reach shoppers when compared with telephone or door-to-door recruitment (Frost-Norton, 2005). In addition, as respondents were subsequently asked to undertake a self-completion questionnaire throughout the Sunshine Plaza, recruitment through mall intercepts at the research location was considered an appropriate method for data gathering.

By using self-administered questionnaires in Study 2 the researcher was able to gather quantitative data from a larger sample of respondents in a shorter period of time. A key limitation associated with self-completion by respondents is lack of control during the data gathering process when compared with face-to-face interviewing. In earlier qualitative research in urban design, Lynch and Rivkin (1959) interviewed respondents while they walked through an urban environment. However, this method of data collection was not feasible due to the quantitative nature of this research and the sample size required for statistical analysis. Moreover, the presence of a researcher precludes or hampers consumers' individual emotional response.

As the researcher was coordinating the data collection process at Sunshine Plaza, respondents were thoroughly briefed before they started the self-completion questionnaire. Despite the size of the research location, the researcher was able to observe data collection with a sample of shoppers to ensure that data collection was

undertaken according to the task procedure outlined in Table 6.2. Those respondents who were accompanied by a relative or friend were given specific instructions to complete the questionnaire individually without any assistance from another person.

It was estimated that the researcher would need to recruit 180 shoppers to obtain a final sample of more than 150 respondents. As self-completion of the questionnaire required 45 to 60 minutes of the respondent's time, a \$30 Sunshine Plaza gift voucher was considered by both Lend Lease Retail and the researcher as a realistic incentive to reduce respondent frustration and avoid subsequent withdrawal from the study (Frost-Norton, 2005). Hence, the final sample size was constrained by the costs associated with reimbursing respondents.

To overcome some of the potential problems associated with non-random sampling, a number of steps were implemented to obtain variation in the type of person recruited to the sample. First, to obtain a representative sample of shoppers, recruitment was carried out over a weekend and two week days at three of the main entrances to the Sunshine Plaza. Second, quota sampling was employed to ensure that the final sample represented a broad cross-section of shoppers in terms of age and gender. The quotas employed during the recruitment of respondents are summarised in Table 6.4.

Table 6.4: Study 2 Quotas for Recruitment of Respondents

Demographic	Categories	Number	Total
Gender	Female	120	180
	Male	60	
Age	18-35 years	60	180
	36-55 years	60	
	56 years and over	60	

Over a four day period from 5-8 November 2005, including both weekend and week day trading, 779 shoppers at Sunshine Plaza were approached and invited to participate in the research. During this period of time, there were no shopping centre promotions. Of those approached, 108 shoppers did not qualify to participate in the

research. For example, they were tourists and not regular shoppers in the Centre. Over the four days, a total of 180 shoppers were recruited to undertake Study 2. Overall, the response rate was 27 percent, with shoppers citing the following reasons for refusal: not enough time; not interested; or the questionnaire was too long. Table 6.5 summarises response rate for the recruitment of respondents.

Table 6.5: Study 2 Response Rate for Recruitment of Respondents

Description	Number of Shoppers
Total shoppers approached	779
Reasons for not qualifying:	
- Tourist or non-regular shopper	80
- Did not fit quota	11
- Under 18 years	8
- Working at Sunshine Plaza	4
- Language difficulties	5
SUBTOTAL	108
Shoppers approached who qualified	671
Refusals	491
Response Rate	27%
TOTAL (number of shoppers recruited)	180

During the recruitment phase, the names and addresses of the shoppers recruited for Study 2 were obtained. Each person was given a one-page overview of the research including: details of where to collect and return the questionnaire; the payment of the \$30 gift voucher; and contact information of the researcher. To ensure data collection was completed within a specific timeframe, a 14 November 2005 deadline was stipulated on the one-page overview. During data collection there were no shopping centre or school holiday promotions underway.

Recruited shoppers were given the option of completing the questionnaire the same day they were recruited, or given the opportunity to return to the Sunshine Plaza to collect the questionnaire from the researcher for subsequent completion. Respondents were instructed to undertake the self-completion questionnaire after they had been briefed by the researcher. During the data gathering period, the

researcher was on site to ensure that all respondents were briefed with the same instructions. Likewise, all completed questionnaires were returned to the researcher where they were checked for completeness. Respondents were given a Sunshine Plaza visitor's name tag for security reasons. For convenience, respondents were given a clipboard to use while completing the questionnaire. Respondents were also asked to record both their start and finish time for the self-completion questionnaire to check the length of time taken to complete the task procedure.

Five days prior to the data collection deadline, reminder phone calls were made to those shoppers who had been recruited but had not returned to the Sunshine Plaza to complete the questionnaire. Of the 180 shoppers recruited, a total of 160 respondents completed the questionnaire. Reasons given for not returning to complete the study included: not enough time; out of town; work commitments; not interested; or unable to be contacted by the researcher. The final sample consisted of 155 useable questionnaires. During review of the completed questionnaires, the researcher identified five questionnaires not suitable for inclusion in the final sample. For instance, two respondents were identified as having a learning disability and had difficulty completing the questionnaire. Also, response bias (McDaniel & Gates, 2002) was evident in two questionnaires completed by two elderly respondents (over 65 years) who rated all six environmental attributes the same for all five locations. As outliers were identified during preliminary screening of the data, a fifth questionnaire was removed from the sample, as discussed in Chapter 7.

6.10 Conclusion

This chapter presented Study 2, the main quantitative study, where evaluative mapping was applied in a retail context. Nasar's evaluative mapping methodology from environmental psychology was discussed, followed by details of how evaluative mapping was applied at Sunshine Plaza. Sampling issues were examined, including an overview of respondent recruitment using mall intercepts. Next, the pre-testing procedure and data collection for Study 2 was discussed. The following chapter presents the data analysis undertaken to empirically test the central research hypothesis derived from the proposed 'Model of Consumer Response to

Retailscapes'. In Chapter 7, the results of the data analysis from Study 2 are presented. Data collected from five locations at Sunshine Plaza was analysed separately using exploratory factor analysis followed by path analysis using stepwise multiple regression. Chapter 7 concludes with an evaluative map of Sunshine Plaza, highlighting specific locations and environmental attributes influencing the affective and behavioural responses of shoppers.

Chapter 7 Study 2: Results of Evaluative Mapping

7.1 Introduction

The previous chapter described and justified the research methodology of evaluative mapping. This chapter reports the results of data analysis conducted to test the central hypothesis underpinning the proposed 'Model of Consumer Response to Retailscapes'. An overview of the preliminary steps undertaken prior to analysing the data is presented, followed by a summary of the demographic profile of respondents. Descriptive statistics for each of the five research locations are presented. Data collected in each of the five locations at Sunshine Plaza was analysed separately using exploratory factor analysis followed by path analysis using stepwise multiple regression. Finally, the chapter concludes with an evaluative map of Sunshine Plaza highlighting specific locations and environmental attributes influencing the affective and behavioural responses of shoppers.

7.2 Study 2: Preliminary Analysis

First, a number of preliminary steps were necessary prior to applying appropriate statistical techniques. Five key steps were undertaken during preliminary analysis of the data: 1) data preparation; 2) analysis and treatment of missing data; 3) identification and examination of outliers; 4) assessment of normality; 5) analysis of residuals; and 6) examination of multicollinearity (Hair, Anderson, Tatham, & Black, 1998; Kumar, Aaker, & Day, 2002; Miles & Shevlin, 2001). An overview of the key steps and findings of the preliminary analysis of the data is presented in the following sections.

7.2.1 Data Preparation

As discussed in the previous chapter, all self-completion questionnaires were returned to the researcher after respondents had completed the task procedure at Sunshine Plaza. Each questionnaire was checked for errors, omissions, and ambiguities during the data collection process (Kumar et al., 2002). After data

collection was completed, all quantitative questions were coded and entered into SPSS (v14). Once all data had been entered into SPSS, the researcher inspected each questionnaire against the complete data set to ensure accuracy. Next, out-of-range scores were examined using frequency distributions and descriptive statistics. Open-ended qualitative comments were summarised in table format.

7.2.2 Missing Data

All self-completion questionnaires were returned to the researcher and were examined for missing data. Thorough checking of the questionnaires by the researcher, while the respondent was present, ensured that the final data set was complete. Therefore no remedies to deal with missing data were required.

7.2.3 Outliers

To identify outliers in the data, both univariate and multi-variate assessments were undertaken. Univariate assessment included inspection of frequency tables for each measurement variable. Preliminary analysis identified a small number of univariate outliers requiring examination of the mean score and 5% trimmed mean score for these variables. As the values for each were found to be similar, the outlying cases were retained. Although a small number of outliers were identified, it was believed that these observations reflected the intended population and were therefore retained in the data set. Multivariate assessment required examination of the Mahalanobis d^2 distance (Hair et al., 1998; Tabachnick & Fidell, 2001). As mentioned previously, one extreme multivariate outlier was identified during preliminary analysis. Examination of the original questionnaire and associated qualitative comments identified that a respondent had a negative experience at Location 3 (Gloria Jean's Coffees), which subsequently influenced his responses to further questions. Therefore, this questionnaire was deleted from the sample.

7.2.4 Normality

Preliminary analysis included both statistical and graphic tests for normality. Shapiro-Wilks test and Kolmogorov-Smirnov tests of distribution normality assessed

the degree of normality in the data. The results indicated that both the independent and the dependent variables were somewhat non-normal ($p < 0.05$). Likewise, visual inspection of the normal Q-Q plots and detrended Q-Q plots for each independent variable and the dependent variables indicated some non-normality in the data. Violation of the assumption of normality are not considered a major problem in social science research where scores on the dependent variable do not usually fit nicely into a normal distribution (Pallant, 2002). As larger sample sizes often reduce the negative impact of non-normality, it was not expected that non-normality in the data would impact on data analysis in this research (Hair et al., 1998; Tabachnick & Fidell, 2001). As pointed out by Pallant (2002), most statistical techniques are reasonably 'robust' or tolerant to the violations of the assumption of normality. Analysis of the residuals for the mediator and dependent variables was undertaken to further test the assumption of normality.

7.2.5 Residuals: Normality, Linearity, and Homoscedasticity

Analysis of residuals simultaneously assessed the three assumptions of normality, linearity and homoscedasticity. Examination of residual scatterplots for the mediator and dependent variables (DV) in the five locations was undertaken during the preanalysis screening procedures. Results indicated that the residuals were normally distributed about the predicted scores on the mediator and DV scores. The residual scatter plots indicated that the residuals had a straight-line relationship with predicted mediator and DV scores, indicating no major deviation from normality and no evidence of multicollinearity or singularity (Pallant, 2002; Tabachnick & Fidell, 2001). Further testing for multicollinearity is described in the next section.

7.2.6 Multicollinearity

Multicollinearity was examined by assessing both variance inflation factor (VIF) and tolerance in multiple regression analysis. In each of the five locations, the independent variables were assessed against the mediator and dependent variables. Preliminary data analysis indicated that none of the variables had a VIF index > 10 or tolerance values < 0.10 , providing evidence that multicollinearity does not present a

potential problem in data analysis (Ho, 2006; Miles & Shevlin, 2001; Tabachnick & Fidell, 2001).

7.2.7 Questionnaire Versions A and B

As outlined in the task procedure presented in Chapter 6, two versions of the questionnaire were used (Version A and B). The only difference between these two versions was the reversing of the order of the five locations. For instance for Version A, half the sample was asked to commence the task procedure at the Fresh Food Hall (Location 1). For Version B respondents were asked to start at Zarraffa's Coffee (Location 5). To test the assumption that the two samples were obtained from populations with equal variances, Levene test for equality of variances was undertaken. The results indicated that out of the 15 dependent and mediator variables⁸ for the five locations, two (2) mediator variables and two (2) dependent variables violated this assumption ($p < 0.05$) indicating that equality of variance could not be assumed for the two samples. Hence, a more conservative alpha level of 0.025 was then adopted for these variables.

7.3 Study 2: Respondent Profile

The profile of respondents for Study 2 are summarised in Table 7.1. The typical respondent was an Australian born female, aged between 18-45 years, either married or in a de facto relationship. The respondents' main occupational category was home duties, with total household income per year distributed almost evenly across income categories of less than \$75,000 per year.

⁸ In each location there were two mediator variables (pleasure and arousal) and one dependent variable (approach). Therefore, in total there were 15 mediator and dependent variables in the five locations.

Table 7.1: Study 2 Demographic Characteristics of Respondents

Demographic Characteristic	Frequency	Percentage
<i>Gender</i>		
Female	111	71.6%
Male	44	28.4%
<i>Age</i>		
18-25 years	37	23.9%
26-35 years	26	16.8%
36-45 years	24	15.5%
46-55 years	27	17.4%
56-65 years	25	16.1%
Over 65 years	16	10.3%
<i>Occupation</i>		
Home duties	32	20.6%
Student	15	9.7%
Sales/personal services	19	12.3%
Operator/labourer	2	1.3%
Retired/superannuated	26	16.8%
Para-professional	17	11%
Professional/manager	27	17.4%
Trades	11	7.1%
Unemployed	5	3.2%
Other	1	.6%
<i>Household structure</i>		
Single living at home (e.g. with parents)	18	11.6%
Single living at or sharing with others, no children at home	20	12.9%
Married/de facto, no children at home	46	29.7%
Married/de facto with children at home	43	27.7%
Single parent/widowed/divorced/separated, no children at home	9	5.8%
Single parent/widowed/divorced/separated, with children at home	19	12.3%
<i>Country of birth</i>		
Australia	123	79.4%
Asia	2	1.3%
Europe	4	2.6%
Pacific Islands	2	1.3%
Africa	2	1.3%
North America	1	.6%
New Zealand	10	6.5%
Great Britain	11	7.1%
South America	0	0%
<i>Household income before tax</i>		
Less than \$18,000	26	16.8%
\$18,001 - \$30,000	28	18.1%
\$30,001 - \$42,000	22	14.2%
\$42,001 - \$60,000	22	14.2%
\$60,001 - \$75,000	28	18.1%
\$75,001 - \$90,000	11	7.1%
\$90,001 - \$120,000	2	1.3%
\$120,000 +	4	2.6%
Don't know	12	7.7%

7.4 Study 2: Overview of Data Analysis

As one of the goals of this research is to develop an evaluative map of Sunshine Plaza, the data was analysed separately for each of the five locations. Prior to testing the central hypothesis, an overview of each location is presented. Descriptive statistics indicating respondents' perceptions of the six environmental attributes in each location is presented.

Exploratory factor analysis (EFA) was undertaken on both the affective and behavioural response measures in each of the five locations. Based on the results of the exploratory factor analysis, composite measures were formed for the mediator and dependent variables. By combining individual items for 'pleasure' and 'arousal' (affective response measures) and approach-avoidance measures (behavioural response measures) in each location, multiple indicators were combined into a single measure for use in subsequent data analysis (Hair et al., 1998). When creating a composite measure for behavioural response, approach-avoidance was labelled 'approach' after reverse-scoring the negatively worded 'avoidance' items.

The central research hypothesis underpinning the proposed 'Model of Consumer Response to Retailscapes' was tested using path analysis with stepwise multiple regression in the five research locations. The aim of the data analysis was to find structural relationships between the posited multivariate relationships hypothesised in the theoretical framework presented in Chapter 5 (Ho, 2006). Finally, an evaluative map of the five locations of Sunshine Plaza is presented in Figure 7.17, highlighting locations and specific environmental attributes influencing respondents' affective and behavioural responses.

7.5 Study 2: Exploratory Factor Analysis

As discussed in Chapter 6, during the evaluative mapping methodology, respondents' affective and behavioural responses to the surrounding retailscape were measured at five different locations at Sunshine Plaza. Measurement scales from environmental psychology subsequently adopted in a marketing context were applied in this research. As noted in Chapter 6, respondents' affective responses to the surrounding

retailscape were measured using pleasure and arousal items from Mehrabian and Russell's PAD scale. In addition, approach-avoidance measures assessed respondent's behavioural response to the surrounding retailscape (Donovan & Rossiter, 1982; Mehrabian & Russell, 1974).

First, exploratory factor analysis (EFA) and scale reliability analyses were undertaken on both the affective (pleasure and arousal) and behavioural response (approach-avoidance) measures to examine the underlying factor structure of the items used and to assess the internal consistency of each measure. Diagnostic measures for scale reliability analysis including item-to-total correlations, inter-item correlations, and Cronbach's alpha were used to assess the internal consistency of the scale (Coakes & Steed, 2003; Hair et al., 1998). Sample size ($n=155$) was within the acceptable limits for factor analysis, with the minimum sample stipulated as having at least five times as many observations as there are variables (Hair et al., 1998).

Prior to undertaking exploratory factor analysis, four tests confirmed the suitability of the data to factor analysis. First, inspection of the correlation matrix indicated sizable inter-item correlation values (e.g. >0.30). Second, measures of sampling adequacy in the anti-image correlation matrix revealed values greater than 0.50. Third, Bartlett's Test for Sphericity was significant and finally, the Kaiser-Meyer-Olkin (KMO) measure was greater than 0.06⁹. Collectively, these four tests indicated that the data collected in each of the five locations was suitable for exploratory factor analysis (Hair et al., 1998; Pallant, 2002).

This research adopted principal components method of factor extraction in order to minimise the number of factors which account for the maximum portion of variance. Factor rotation was applied to increase interpretability. As the factors were expected to be correlated, the factors were obliquely rotated using the direct oblimin rotation (Hair et al., 1998; Ho, 2006). The results of the exploratory factor analyses for the affective and behavioural response measures are discussed in the following sections.

⁹ The KMO measures of sampling adequacy were >0.80 for Locations 1-4 and >0.07 for Location 5.

7.5.1 Affective Responses – Pleasure and Arousal

Exploratory factor analysis and scale reliability analyses were undertaken to examine the underlying factor structure and to assess the internal consistency of the affective response measures of ‘pleasure’ and ‘arousal’. In deciding how many factors to extract, a number of predetermined criteria were adopted. In this research, a two-factor solution was justified based on the ‘a priori criterion’ (Hair et al., 1998). As noted in Chapter 2, previous research in marketing had extracted two factors representing ‘pleasure’ and ‘arousal’. Table 2.3 summarised over 40 research studies in the marketing literature adopting Mehrabrian and Russell’s (1974) affect measures of ‘pleasure’ and ‘arousal’. In addition, Kaiser’s rule which specifies a minimum eigenvalue of 1.0 was adopted and the Cattell scree plot was used as a diagnostic indicator for factor extraction. When interpreting the factor matrix, items with communalities of <0.05 were excluded from further analysis and the factor model respecified. Subsequently, a new factor solution was derived without those variables (Hair et al., 1998).

Table 7.3 summarises the results of the exploratory factor analysis for the two affective response measures of ‘pleasure’ and ‘arousal’ in each of the five locations. The results of the factor pattern emerging from the separate analyses of the items measuring ‘pleasure’ explained 44.4% (Location 1), 40.1% (Location 2), 42.0% (Location 3), 42.1% (Location 4), and 36.4% (Location 5) of the variance respectively. Diagnostic measures to assess internal consistency of the ‘pleasure’ scale in the five locations indicated that item-to-total correlations exceeded .50 and the inter-item correlations exceeded .30. In addition, the coefficient alpha values ranged from .84 to .90, supporting the internal consistency and reliability of the ‘pleasure’ scale.

In contrast, the factor pattern for the items measuring ‘arousal’ was problematic. For instance, in each of the five separate factor analyses, the item ‘wide-awake’ loaded on ‘pleasure’ rather than ‘arousal’. In addition, the item ‘aroused’ cross-loaded on both ‘pleasure’ and ‘arousal’ in three locations (Locations 2, 3, 4). The EFA results for Location 1 indicated that the item ‘frenzied’ cross-loaded on both ‘pleasure’ and ‘arousal’ and the item ‘jittery’ demonstrated a low communality. Subsequently,

those 'arousal' items identified as being problematic in each location were excluded from further analysis and the factor model respecified. Table 7.2 summarises the results of the EFA, reporting only those items loading on 'arousal' after the factor model had been respecified. The results of the new factor solution indicated that the factor 'arousal' explained 19.8% (Location 1), 20.7% (Location 2), 19.6% (Location 3), 18.9% (Location 4), and 18.7% (Location 5) of the variance respectively.

Results of diagnostic measures did not support the internal consistency and reliability of the 'arousal' scale in each of the five locations. For instance, all of the item-to-total correlations did not exceed .50 and the inter-item correlations did exceed .30 in four out of five of the locations. The coefficient alpha values ranging from .57 to .65 were found to be low given that the generally agreed upon lower limit is .70. However, in exploratory research, a coefficient alpha of .60 is considered acceptable (Hair et al., 1998). Appendix D presents the scale statistics, including item-to-total correlations, mean and standard deviations for both the 'pleasure' and 'arousal' scales in the five locations.

Table 7.2: Five Locations EFA Affective Response Measures

Items Pleasure and Arousal	LOCATION				
	1 Food Hall	2 Starbucks	3 Gloria Jean's	4 Lowes	5 Zarraffas
Factor 1: Pleasure					
Happy	.78	.89	.86	.86	.79
Hopeful	.74	.76	.72	.79	.72
Interested	.77	.77	.78	.77	.73
Satisfied	.87	.89	.90	.86	.86
Contented	.88	.84	.86	.91	.79
Eigenvalue	3.55	3.61	3.78	3.79	3.27
% Variance explained	44.4	40.1	42.0	42.1	36.4
Coefficient Alpha	.87	.89	.89	.90	.84
Factor 2: Arousal					
Excited	.77	.70	.62	.73	.69
Frenzied		.66	.66	.63	.59
Stimulated	.82	.70	.74	.76	.71
Aroused	.61				
Wide-awake					
Jittery		.67	.72	.57	.66
Eigenvalue	1.58	1.87	1.77	1.70	1.68
% Variance explained	19.8	20.7	19.6	18.9	18.7
Coefficient Alpha	.62	.61	.65	.61	.57
% Cumulative Variance Explained	64.2	60.9	61.2	61.0	55.1

7.5.2 Behavioural Response – Approach

In addition, the eight approach-avoidance items were factor analysed using the principal components method of factor extraction with the factors obliquely rotated using a direct oblimin procedure. As noted in Chapter 2, the approach-avoidance measures have been extensively adopted in the marketing literature (see Table 2.3) justifying the extraction of one factor, based on the 'a priori criterion'. The behavioural response measures for 'approach' were analysed separately for each of the five locations. Items with communalities of <0.05 were excluded from the analysis and the factor model respecified.

The new factor solution resulted in five 'approach' items retained for Locations 1, 2 and 3 and four items retained for Locations 4 and 5 as summarised in Table 7.3. As

a result of this analysis, one factor (eigenvalue >1.0) was extracted, accounting for 63.8% (Location 1), 67.9% (Location 2), 72.5% (Location 3), 78.8% (Location 4), and 72.9% (Location 5) of the variance respectively. Diagnostic measures to assess internal consistency of the ‘approach’ scale in the five locations indicated all item-to-total correlations exceeded .50 and the inter-item correlations exceeded .30. Further analysis of the coefficient alphas provided support for the internal consistency of the scale with the Cronbach’s alpha for each location ranging from .86 to .91.

Table 7.3: Five Locations EFA Behavioural Response Measures

Items Approach	LOCATION				
	1 Food Hall	2 Starbucks	3 Gloria Jean’s	4 Lowes	5 Zarraffas
AA1 ¹⁰ (time)	.76	.76	.82	.91	.85
AA2 (time)					
AA3 (affiliation)		.80	.87		.74
AA4 (affect)	.89	.92	.94	.92	.90
AA5 (affect)	.86	.92	.92	.95	.91
AA6 (affiliation)	.71	.71	.67		
AA7 (spend)	.77				
AA8 (spend)				.77	
Eigenvalue	3.19	3.40	3.62	3.15	2.92
% Variance explained	63.8%	67.9%	72.5%	78.8%	72.9%
Coefficient Alpha	.86	.88	.90	.91	.87

Appendix E presents the scale statistics, including item-to-total correlations, mean and standard deviations for ‘approach’ items in the five locations. The next section presents the results of the path analysis for the five research locations at Sunshine Plaza.

7.6 Study 2: Data Analysis for Study 2

The central hypothesis which guides this research and which was tested in each of the five research locations at Sunshine Plaza is as follows:

¹⁰ AA1-8 represents the eight approach-avoidance (AA) items.

It is hypothesised that the six exogenous environmental attributes have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.

The hypothesised direct influences are represented by the direct paths linking the exogenous environmental variables to the dependent variable of 'approach'. The hypothesised indirect influences are represented by indirect paths linking the exogenous environmental variables to the mediator variables of 'pleasure' and 'arousal', and sequentially to the dependent variable of 'approach'.

Path analysis using stepwise multiple regression was used to test the central research hypothesis in each of the five locations at Sunshine Plaza. The aim of path analysis was to test the entire structure of linkages between the independent, mediating and dependent variables (Ho, 2006). Figure 7.1 depicts the direct and indirect linkages between the six exogenous environmental attributes, the two mediator affective variables of 'pleasure' and 'arousal', and the dependent variable of behaviour responses (approach).

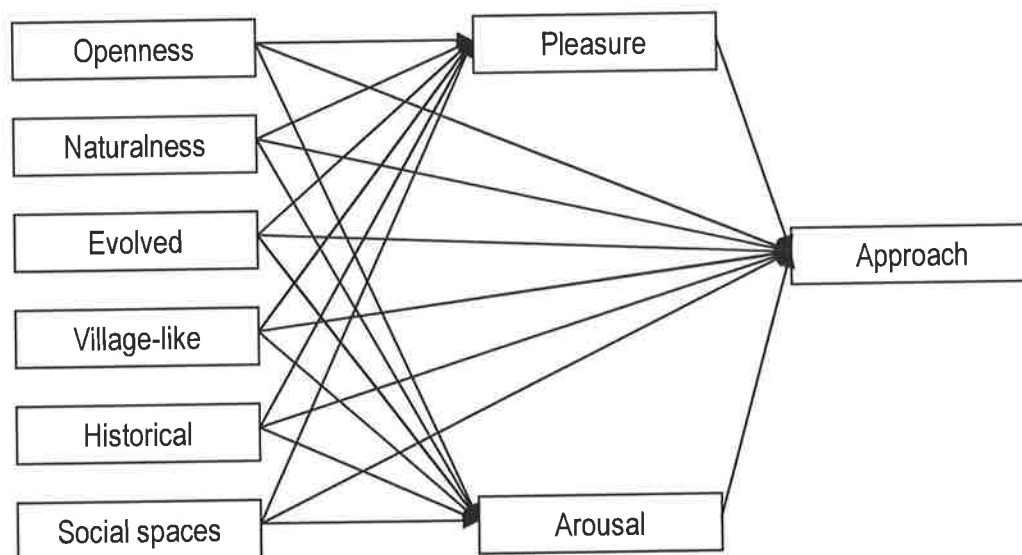


Figure 7.1: Path Model for Study 2

More specifically, the hypothesised relationship between the six environmental attributes and consumers' affective and behavioural responses are summarised below:

- Openness: The environmental attribute of **openness** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.
- Naturalness: The environmental attribute of **naturalness** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.
- Evolved: The environmental attribute of **evolved** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.
- Village-like: The environmental attribute of **village-like** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.
- Historical: The environmental attribute of **historical** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.
- Social Spaces: The environmental attribute of **social spaces** will have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.

In the following sections, the results of the data analysis are presented according to the five research locations at Sunshine Plaza. As noted, in each location, path analysis was conducted using stepwise multiple regression analysis. The path analysis for the model presented in Figure 7.1 required two regression analyses. For the first analysis, the dependent variable of 'approach' was regressed onto the two affective variables of 'pleasure' and 'arousal' and the six environmental attributes. This analysis identified the significant direct parameters linking all eight predictor

variables (six environmental variables and two affective response variables) with the dependent variable of 'approach'. For the second analysis, the two affective factors of 'pleasure' and 'arousal' were regressed onto the six environmental factors. This analysis identified the significant parameters linking the six environmental attributes with the mediator variables of 'pleasure' and 'arousal'.

7.7 Location 1: Fresh Food Hall

The first designated location of the evaluative mapping methodology was the Fresh Food Hall. Located inside Sunshine Plaza, the Fresh Food Hall comprises a number of food related traders including Coles supermarket which fronts one side of the retail space. Other retailers at Location 1 include fruit and vegetables, health food and takeaway food traders, as seen in Figure 7.2.



Figure 7.2: Location 1 at Fresh Food Hall

As discussed in Chapter 6, at each research location, respondents were asked to rate the surrounding retailscape according to the six environmental attributes in the proposed 'Model of Consumer Response to Retailscapes' on a scale from 1 to 7. Ratings of 1-3 indicated that respondents perceived the location as being more open,

natural, and so on. A rating of 4 indicates a neutral response, whereas ratings from 5-7 indicated that the location was perceived as being more closed, unnatural, and so forth. Table 7.4 summarises how respondents rated each environmental attribute at Location 1, with their associated means and standard deviations.

Table 7.4: Location 1 Fresh Food Hall Environmental Attributes Results

Fresh Food Hall Environmental Attributes	Scale Rating (1-7) Percentage							Mean	SD
	1	2	3	4	5	6	7		
Open feeling	25.2	22.6	14.2	7.7	12.9	10.3	7.1	3.20	1.97
Natural feeling	12.3	12.9	21.3	10.3	14.8	11.6	16.8	4.05	1.99
Evolved naturally	5.2	9.0	12.9	10.3	14.8	23.9	23.9	4.88	1.86
Village-like feeling	7.7	12.3	16.1	7.1	12.9	19.4	24.5	4.61	2.03
Historical feeling	0	2.6	8.4	9.0	5.8	16.1	58.1	5.99	1.48
Social spaces	25.8	20.6	20.0	4.5	12.3	7.7	9.0	3.16	1.98

The mean responses for each of the six environmental attributes are graphically displayed in Figure 7.3. The results indicated that respondents rated the surrounding retailscape at the Fresh Food Hall as feeling non-historical, as having evolved artificially, non village-like and unnatural. Respondents rated Location 1 as being almost neutral for the two environmental attributes of open/closed and social spaces/no social spaces.

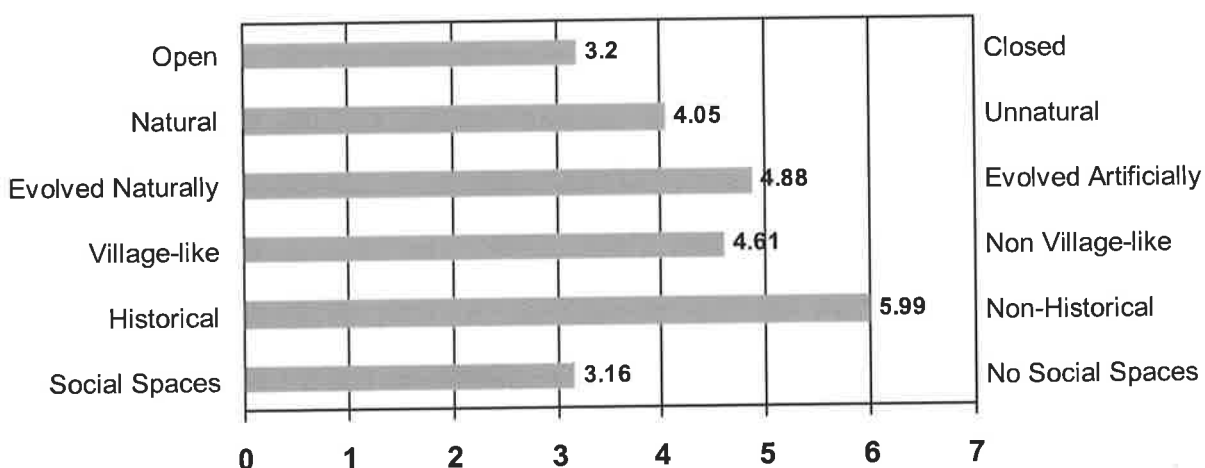


Figure 7.3: Mean Responses for Fresh Food Hall Attributes

Qualitative comments made by respondents relating to the Fresh Food Hall reinforced the results summarised in Figure 7.3. For instance, comments related to the unnatural feeling associated with the bright fluorescent lighting. Another respondent described the closed-in feeling near Coles made them feel that the Food Hall was ‘not a place you feel like sitting too long’.

7.7.1 Location 1 Fresh Food Hall – Hypothesis Testing

Location 1 Parameters:

The path analysis for Location 1 indicates that of the 6 environmental attributes, only two attributes, ‘naturalness’ and ‘social spaces’, have direct influences on the dependent variable of ‘approach’. Thus, the more natural respondents perceived the surrounding location at the Food Hall to be, and the more they perceived the surrounding retailscape as providing more social spaces, the more they will approach the Food Hall, (Beta=0.26), $t=3.67$, $p < .001$; (Beta=0.20), $t=3.06$, $p < .01$ respectively.

The path analysis also shows that the three environmental attributes of ‘openness’, ‘naturalness’, and ‘social spaces’ have indirect influences on the dependent variable of ‘approach’, being mediated by the affective response factor of ‘pleasure’. Thus, the more respondents perceived the surrounding location at the Food Hall to be open, natural, and providing more social spaces, the more pleasurable they found the Food Hall to be, (Beta=0.29), $t=3.31$, $p < .01$; (Beta=0.33), $t=4.27$, $p < .001$; (Beta=0.18), $t=2.37$, $p < .05$ respectively. The more pleasurable respondents found the surrounding retailscape at the Food Hall to be, the more they will approach that location at Sunshine Plaza, (Beta=0.42), $t=5.72$, $p < .001$.

The path model in Figure 7.4 presents the results of the path analysis for Location 1. The results indicated that only one of the indirect paths linking the six environmental predictor variables to the mediator variable ‘arousal’, and sequentially to the

dependent variable 'approach' were significant. To facilitate interpretation of the path model, non-significant paths are not shown.

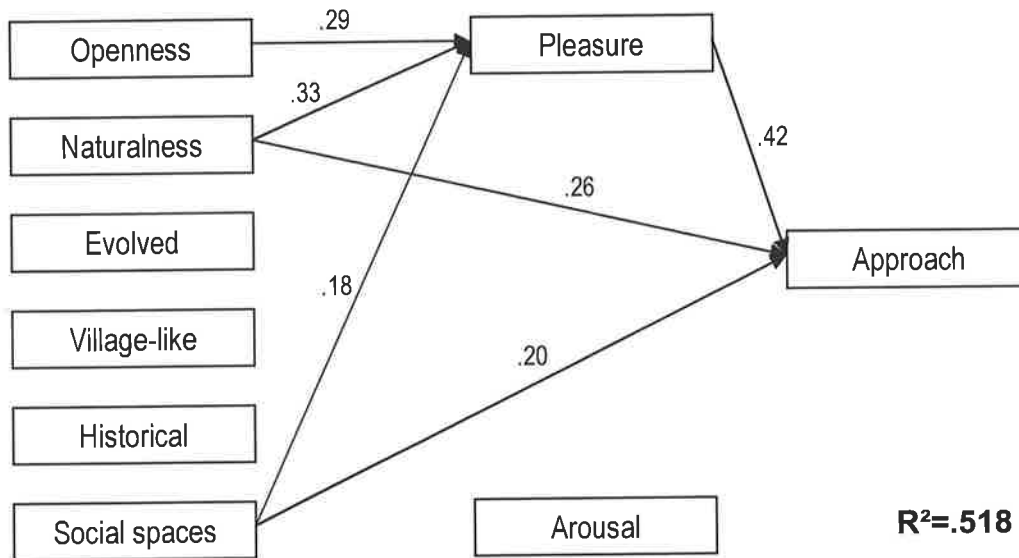


Figure 7.4: Path Diagram for Location 1 Fresh Food Hall

Location 1 Explanatory Power of the Path Model:

The Food Hall path model, which incorporates the three significant predictors of pleasure, naturalness, and social spaces, accounted for 51.8% ($R^2=.518$) of the variance in the dependent variable of 'approach'. Thus, the posited path model, which incorporates only three significant predictor variables accounted for over 50% of the variance in the model's dependent variable. Subtracting R-square from 1 ($1 - R^2$) shows that 48.2% (.482) of the variance in the dependent variable of 'approach' is not accounted for by the posited path model (residual).

7.8 Location 2: Starbucks Coffee

Located on Riverwalk, in the exterior retail environment, the second research location was at Starbucks Coffee, as shown in Figure 7.5. The surrounding retailers are predominantly food retailers, fronting onto a natural waterway. The view from

Starbucks incorporates a footbridge crossing the waterway and a clock tower simulating a village square.



Figure 7.5: Location 2 at Starbucks Coffee

Table 7.5 summarises how respondents rated each environmental attribute at Starbucks Coffee, with the associated means and standard deviations.

Table 7.5: Location 2 Starbucks Coffee Environmental Attributes Results

Starbucks Coffee Environmental Attributes	Scale Rating (1-7) Percentage							Mean	SD
	1	2	3	4	5	6	7		
Open feeling	52.3	21.9	11.6	3.2	3.9	4.5	2.6	2.08	1.58
Natural feeling	36.8	28.4	20.6	6.5	3.9	3.2	.6	2.25	1.35
Evolved naturally	17.4	18.1	25.8	9.7	12.9	7.1	9.0	3.40	1.85
Village-like feeling	17.4	21.9	18.1	10.3	12.9	6.5	12.9	3.50	1.99
Historical feeling	1.3	3.2	7.7	12.9	14.2	16.8	43.9	5.61	1.58
Social spaces	49.0	25.8	9.0	4.5	6.5	2.6	2.6	2.12	1.55

The mean responses for the six environmental attributes are graphically displayed in Figure 7.6. Respondents perceived the surrounding retailscape at Starbucks Coffee as feeling open and natural. A number of tables and chairs are provided along Riverwalk providing social spaces for shoppers, as reflected in the responses given by respondents for this environmental attribute. Respondents indicated a neutral response for the two environmental attributes of evolved naturally/artificially and village-like/non village-like feeling. In addition, the results showed that respondents felt that Starbucks has a non-historical feel.

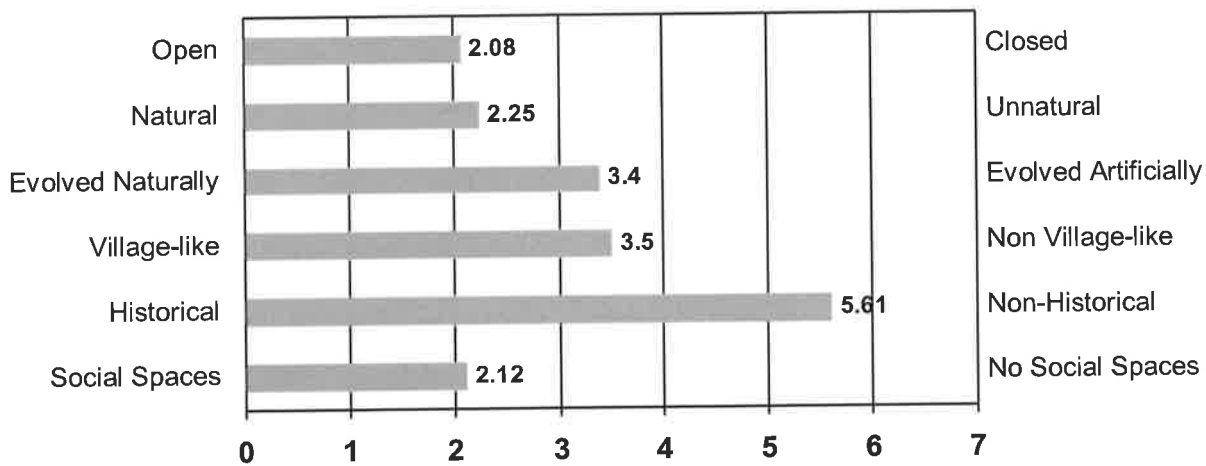


Figure 7.6: Mean Responses for Starbucks Coffee Environmental Attributes

Qualitative feedback made by respondents reinforced the finding highlighted in Figure 7.6, with positive comments relating to the open air, natural feeling along Riverwalk near Starbucks. For instance, one respondent commented on ‘the feel of relaxation and socialising’, as there was ‘plenty of space to sit down and have a chat’. Another respondent explained that the ‘whole river area, near Starbucks, feels relaxing, makes me feel like a beer’.

7.8.1 Location 2 Starbucks Coffee – Hypothesis Testing

Location 2 Parameters:

The path analysis for Location 2 indicates that of the 6 environmental attributes at Location 2, ‘naturalness’, ‘social spaces’ and ‘historical’ have direct influences on the dependent variable of ‘approach’. Therefore, the more natural respondents perceived Location 2 to be, the more they perceived surrounding retailscape at Starbucks as providing more social spaces, and the more historical they perceived the location to be, the more they will approach that location at Sunshine Plaza, (Beta=0.19), $t=2.53$, $p < .05$; (Beta=0.19), $t=2.74$, $p < .01$; (Beta=0.12), $t=2.03$, $p < .05$ respectively.

The path analysis also demonstrated that the two environmental attributes of ‘openness’ and ‘social spaces’ have indirect influences on the dependent variable of ‘approach’, being mediated by the affective response factor of ‘pleasure’. Thus, the more the respondents perceived the surrounding retailscape at Starbucks to be open and providing more social spaces, the more pleasurable they found the retailscape at this location of Sunshine Plaza to be, (Beta=0.42), $t=5.48$, $p < .001$; (Beta=0.23), $t=2.90$, $p < .01$ respectively. The more pleasurable respondents found the surrounding retailscape at Starbucks to be, the more they will approach that location, (Beta=0.43), $t=6.11$, $p < .001$.

The results of the path analysis for Location 2 are found in the path model presented in Figure 7.7. The results indicated that none of the indirect paths linking the six environmental predictor variables to the mediator variable ‘arousal’, and sequentially to the dependent variable ‘approach’ were significant.

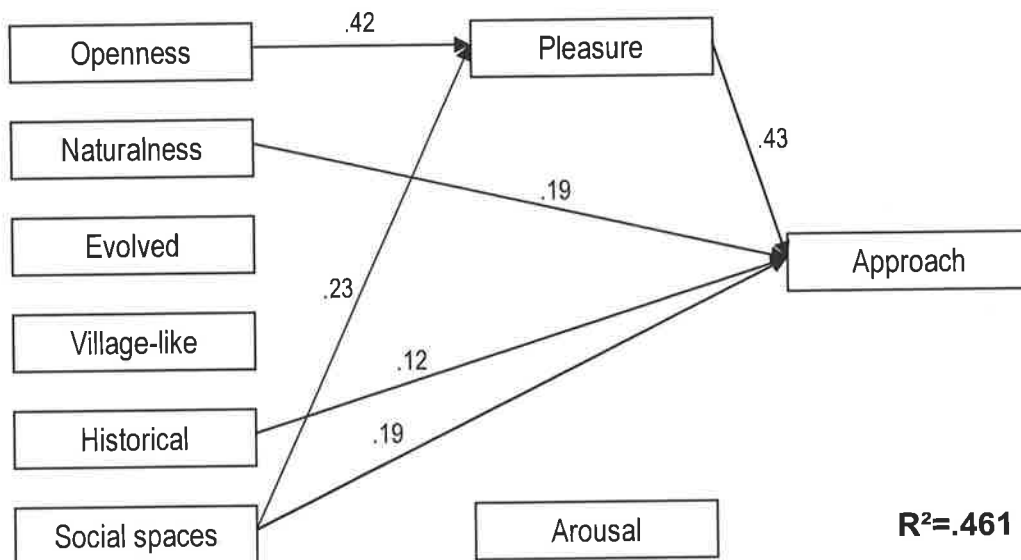


Figure 7.7: Path Diagram for Location 2 Starbucks Coffee

Location 2 Explanatory Power of the Path Model:

The Starbucks path model, which incorporates the four significant predictors of pleasure, naturalness, social spaces, and historical, accounted for 46.1% ($R^2=.461$) of the variance in the dependent variable of ‘approach’. Thus, the posited path model, which incorporates four significant predictor variables accounted for over 40% of the variance in the model’s dependent variable. Subtracting R-square from 1 ($1 - R^2$) shows that 53.9% (.539) of the variance in the dependent variable of ‘approach’ is not accounted for by the posited path model (residual).

7.9 Location 3: Gloria Jean’s Coffees

The third research location was at Gloria Jean’s Coffees, close to the entrance to Myer department store. This interior location at Sunshine Plaza (shown in Figure 7.8) is surrounded by retailers specialising in clothing and household items.



Figure 7.8: Location 3 at Gloria Jean's Coffees

Table 7.6 summarises how respondents rated each environmental attribute at Gloria Jean's Coffees, with the associated means and standard deviations.

Table 7.6: Location 3 Gloria Jean's Environmental Attributes Results

Gloria Jean's Environmental Attributes	Scale Rating (1-7) Percentage							Mean	SD
	1	2	3	4	5	6	7		
Open feeling	27.1	26.5	18.7	5.8	11.0	7.7	3.2	2.83	1.75
Natural feeling	14.8	18.1	22.6	6.5	20.6	14.8	2.6	3.55	1.77
Evolved naturally	8.4	11.0	12.9	12.3	18.7	19.4	17.4	4.45	1.90
Village-like feeling	7.1	8.4	21.9	13.5	16.1	16.1	16.8	4.39	1.84
Historical feeling	.6	2.6	4.5	11.0	12.9	21.3	47.1	5.85	1.42
Social spaces	34.2	27.7	14.8	4.5	7.7	4.5	6.5	2.63	1.82

Figure 7.9 displays the mean responses for each of the six environmental attributes in Location 3. Overall, respondents perceived the surrounding retailscape at Gloria Jean's as having spaces for socialising and an open feeling. Further, respondents indicated that the surrounding retailscape at Gloria Jean's Coffees had a non-

historical, evolved artificially and non village-like feel. Respondents rated Location 3 as neutral on the natural/unnatural attribute.

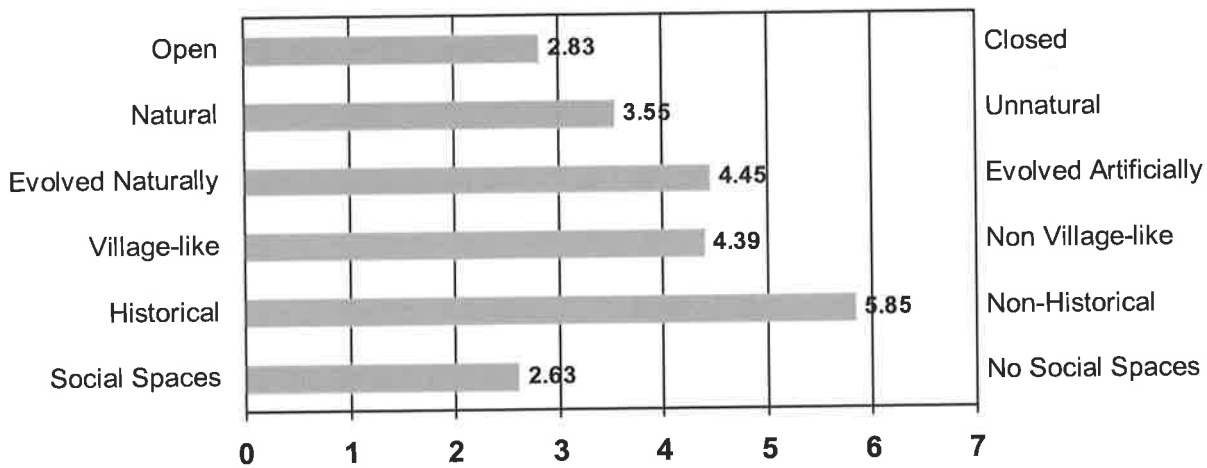


Figure 7.9: Mean Responses for Gloria Jean’s Environmental Attributes

Many of the positive qualitative comments made by respondents related to the presence of social spaces in the retailscape surrounding Gloria Jean’s Coffees. One respondent commented on the ‘comfortable feeling being there, the lounges, great to sit in and relax and watch people go by’. Another respondent stated that he ‘liked the atmosphere, the couches, the laid back feeling’.

7.9.1 Location 3 Gloria Jean’s Coffees – Hypothesis Testing

Location 3 Parameters:

The path analysis for Location 3 indicates that of the 6 environmental attributes, only two attributes, ‘social spaces’ and ‘openness’ have direct influences on the dependent variable of ‘approach’. Thus, the more respondents perceived the surrounding retailscape at Gloria Jean’s as providing more ‘social spaces’, and the more ‘open’ respondents perceived Location 3 to be, the more they will approach this location at Sunshine Plaza, (Beta=0.32), $t=5.27$, $p < .001$; (Beta=0.26), $t=4.29$, $p < .001$ respectively.

The path analysis also shows that the two environmental attributes of ‘naturalness’ and ‘social spaces’ have indirect influences on the dependent variable of ‘approach’, being mediated by the affective response factor of ‘pleasure’. Thus, the more respondents perceived the surrounding retailscape at Gloria Jean’s to be natural and providing more social spaces, the more pleasurable they found the Location 3 to be, (Beta=0.35), $t=4.46$, $p < .001$; (Beta=0.23), $t=2.92$, $p < .01$ respectively. The more pleasurable respondents found the surrounding retailscape at the Gloria Jean’s to be, the more they will approach this location at Sunshine Plaza, (Beta=0.42), $t=7.33$, $p < .001$.

Results of the path analysis for Location 3 are presented in the path diagram found in Figure 7.10. As identified in the previous two locations, none of the indirect paths linking the six environmental predictor variables to the mediator variable ‘arousal’, and sequentially to the dependent variable ‘approach’ were significant.

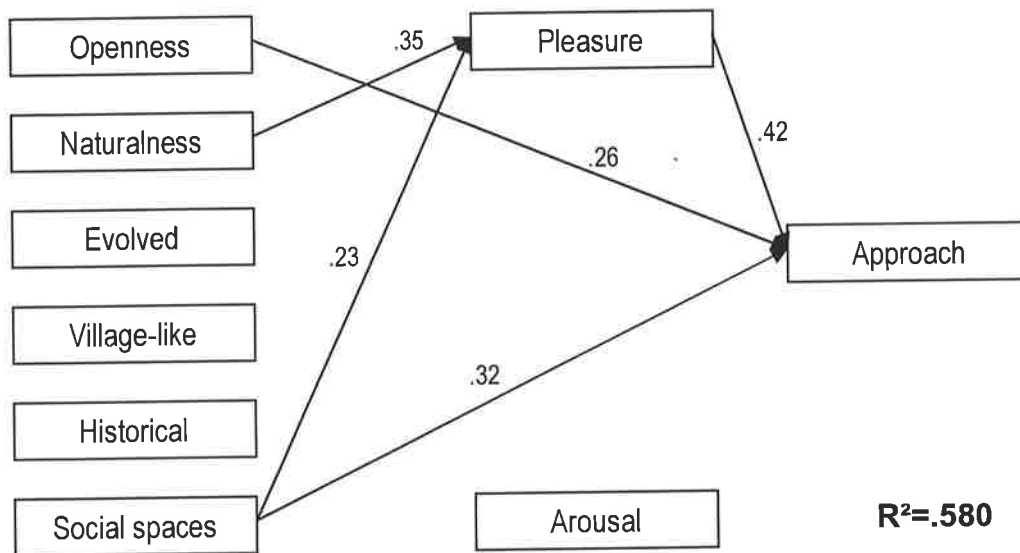


Figure 7.10: Path Diagram for Location 3 Gloria Jean’s Coffees

Location 3 Explanatory Power of the Path Model:

The Gloria Jean's path model, which incorporates the three significant predictors of pleasure, social spaces, and openness, accounted for 58.0% ($R^2=.580$) of the variance in the dependent variable of 'approach'. Thus, the posited path model, which incorporates only three significant predictor variables accounted for over 50% of the variance in the model's dependent variable. Subtracting R-square from 1 ($1 - R^2$) shows that 42.0% (.420) of the variance in the dependent variable of 'approach' is not accounted for by the posited path model (residual).

7.10 Location 4: Lowes

Located along an internal walkway between two major traders of Myer and Kmart, the fourth research location was outside Lowes, the men's fashion retailer, Sunshine Plaza. As shown in Figure 7.11, the surrounding retail outlets specialise in fashion and household items.



Figure 7.11: Location 4 at Lowes

Table 7.7 reports how respondents rated the six environmental attribute in the retailscape surrounding Sunshine Plaza, with the associated means and standard deviations.

Table 7.7: Location 4 Lowes Environmental Attributes Results

Sunshine Plaza Environmental Attributes	Scale Rating (1-7) Percentage							Mean	SD
	1	2	3	4	5	6	7		
Open feeling	6.5	10.3	12.9	9.7	20.0	25.2	15.5	4.64	1.83
Natural feeling	6.5	9.7	10.3	11.0	20.6	25.8	16.1	4.72	1.81
Evolved naturally	3.2	6.5	7.1	8.4	22.6	26.5	25.8	5.23	1.65
Village-like feeling	1.9	5.2	7.7	10.3	15.5	21.9	37.4	5.48	1.64
Historical feeling	.6	1.3	2.6	7.1	13.5	20.0	54.8	6.11	1.25
Social spaces	1.3	5.2	9.0	6.5	12.9	24.5	40.6	5.61	1.62

As shown in Figure 7.12, respondents perceived the surrounding retailscape at Sunshine Plaza as non-historical, no social spaces, non village-like, evolved artificially, unnatural, and closed.

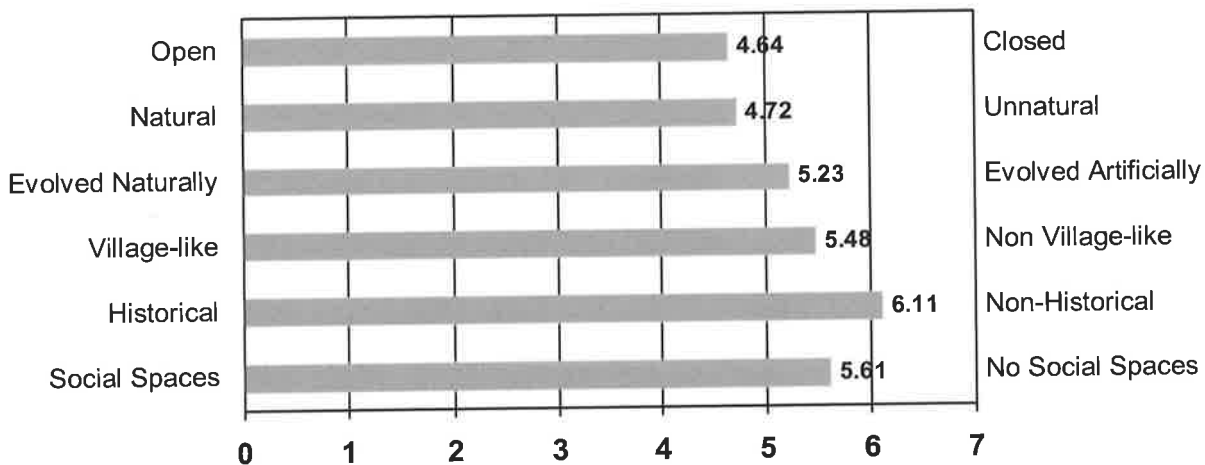


Figure 7.12: Mean Responses for Lowes Environmental Attributes

A number of qualitative comments reinforced these findings with respondents commenting on the closed-in feeling at Sunshine Plaza. One respondent suggested the surrounding retailscape at Sunshine Plaza was ‘almost like being in a submarine,

shops just seem to be on top of each other, there's a bit of a space problem'. Other respondents commented on the cramped feeling, with the corridor feeling 'a bit like a tunnel'.

7.10.1 Location 4 Lowes – Hypothesis Testing

Location 4 Parameters:

The path analysis for Location 4 indicates that of the 6 environmental attributes, only one attribute, 'openness' has a direct influence on the dependent variable of 'approach'. Thus, the more open consumers perceived the surrounding location at the Sunshine Plaza to be, the more they will approach Location 4 at Sunshine Plaza, (Beta=0.24), $t=4.02$, $p < .001$.

The path analysis also indicates that the two environmental attributes of 'naturalness' and 'evolved naturally' have indirect influences on the dependent variable of 'approach', being mediated by the affective response factor of 'pleasure'. Thus, the more consumers perceived the surrounding location at the Sunshine Plaza to be natural and feeling like it has evolved naturally, the more pleasurable they found the surrounding retailscape at Sunshine Plaza to be, (Beta=0.30), $t=3.23$, $p < .01$; (Beta=0.23), $t=2.44$, $p < .05$ respectively. The more pleasurable consumers found the surrounding retailscape at Sunshine Plaza to be, the more they will approach that location at Sunshine Plaza, (Beta=0.62), $t=10.56$, $p < .001$.

The path model for Location 4 is presented in Figure 7.13 indicating the significant paths between the exogenous, mediator, and dependent variables. Similar to the results identified in previous locations, none of the indirect paths linking the six environmental predictor variables to the mediator variable 'arousal', and sequentially to the dependent variable 'approach' were significant.

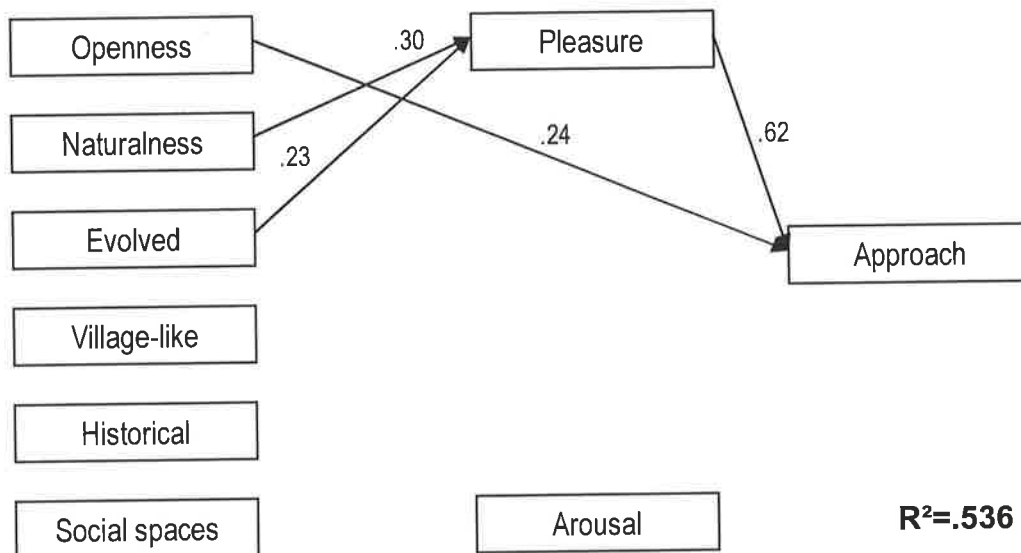


Figure 7.13: Path Diagram for Location 4 Lowes

Location 4 Explanatory Power of the Path Model:

The Sunshine Plaza path model, which incorporates the two significant predictors of pleasure and openness, accounted for 53.6% ($R^2=.536$) of the variance in the dependent variable of ‘approach’. Thus, the posited path model, which incorporates only two significant predictor variables accounted for over 50% of the variance in the model’s dependent variable. Subtracting R-square from 1 ($1 - R^2$) shows that 46.4% (.464) of the variance in the dependent variable of ‘approach’ is not accounted for by the posited path model (residual).

7.11 Location 5: Zarraffa’s Coffee

Located on Riverwalk near the clock tower, Zarraffa’s Coffee was the final research location. As depicted in Figure 7.14, the surrounding retailers outlets are predominantly food outlets located close to the cinema complex at Sunshine Plaza.



Figure 7.14: Location 5 at Zarraffa's Coffee

Table 7.8 summarises how respondents rated each environmental attribute at Zarraffa's Coffee, with the associated means and standard deviations.

Table 7.8: Location 5 Zarraffa's Coffee Environmental Attributes Results

Zarraffa's Environmental Attributes	Scale Rating (1-7) Percentage							Mean	SD
	1	2	3	4	5	6	7		
Open feeling	51.0	23.2	14.8	1.9	5.8	2.6	.6	1.99	1.36
Natural feeling	38.1	31.0	16.1	7.1	5.2	1.3	1.3	2.19	1.34
Evolved naturally	20.0	22.6	16.8	6.5	18.1	10.3	5.8	3.34	1.89
Village-like feeling	15.5	22.6	20.6	10.3	12.3	11.0	7.7	3.45	1.87
Historical feeling	1.3	5.8	9.0	9.7	15.5	18.1	40.6	5.49	1.66
Social spaces	45.8	23.9	14.2	4.5	6.5	3.2	1.9	2.19	1.53

Figure 7.15 illustrates the mean responses for each of the six environmental attributes. The results indicate that respondents rated the surrounding retailscape at Zarraffa's Coffee as having an open and natural feeling, with spaces for socialising. Further, respondents rated Location 5 as neutral on the evolved naturally/artificially

and village-like/non village like attribute. Respondents perceived this location to have a non-historical feel, similar to the results obtained for the previous four locations.

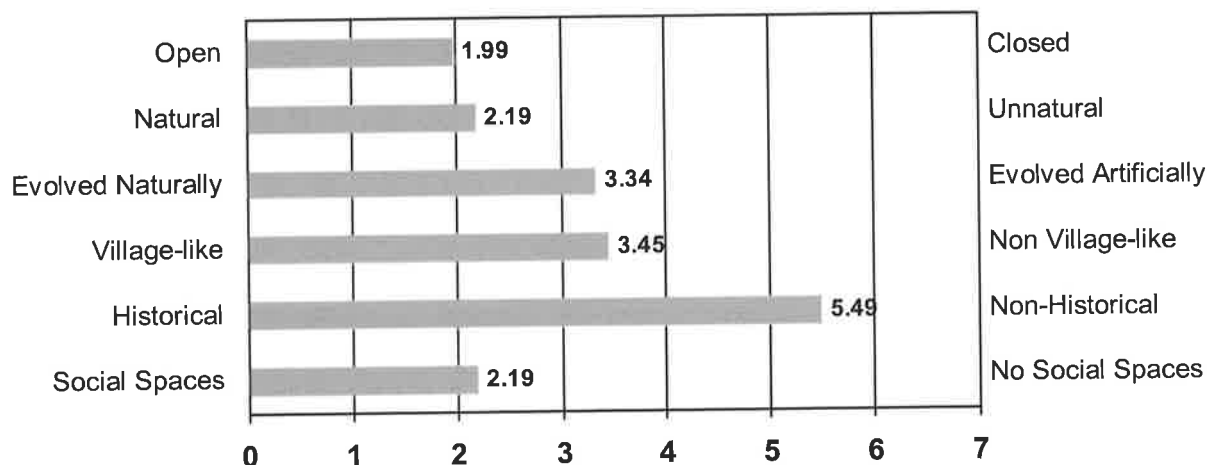


Figure 7.15: Mean Responses for Zarraffa's Coffee Environmental Attributes

Qualitative comments made by shoppers reinforced the results summarised in Figure 7.15. Positive comments related to the presence of open space, trees and the surrounding waterway. Respondents commented on the freshness of the outdoor environment with natural vegetation and open-air seating. For instance, one respondent commented on the natural feeling along the water, where shoppers can sit and relax and 'just get out of the rat race'. Another respondent preferred Zarraffa's location because 'I just like to be outside, best thing about this centre is outside on Riverwalk, it's a very good experience'.

7.11.1 Location 5 Zarraffa's Coffee – Hypothesis Testing

Location 5 Parameters:

The path analysis for Location 5 indicates that of the 6 environmental attributes, 'social spaces', 'village-like', and 'evolved naturally', have direct influences on the dependent variable of 'approach'. Therefore, the more respondents perceived the

surrounding retailscape at Zarraffa's as providing more social spaces, the more they perceived it as village-like, and the more they perceived this location as having evolved naturally, the more respondents will approach Location 5 at Sunshine Plaza, (Beta=0.22), $t=2.93$, $p < .01$; (Beta=0.20), $t=3.02$, $p < .01$; (Beta=0.15), $t=2.18$, $p < .05$ respectively.

The path analysis also shows that the three environmental attributes of 'naturalness', 'social spaces' and 'village-like' have indirect influences on the dependent variable of 'approach', being mediated by the affective response factor of 'pleasure'. Thus, the more respondents perceived the surrounding location at Zarraffa's to be natural, as providing more social spaces, and to be village-like, the more pleasurable they found this location at Sunshine Plaza to be, (Beta=0.27), $t=3.46$, $p < .01$; (Beta=0.19), $t=2.50$, $p < .05$; (Beta=0.19), $t=2.47$, $p < .05$ respectively.

The more 'pleasurable' respondents found the surrounding retailscape at Zarraffa's to be, the more they will approach Location 5 at Sunshine Plaza, (Beta=0.28), $t=4.14$, $p < .001$. As identified in the previous locations, none of the indirect paths linking the six environmental predictor variables to the mediator variable 'arousal' were significant. However, the indirect paths linking the mediator variable 'arousal' to the dependent variable 'approach' were significant. In other words, the more 'arousing' respondents found the surrounding retailscape at Zarraffas to be, the more they will approach Location 5 at Sunshine Plaza, (Beta=0.13), $t=2.24$, $p < .05$. Figure 7.16 presents the path model for Location 4.

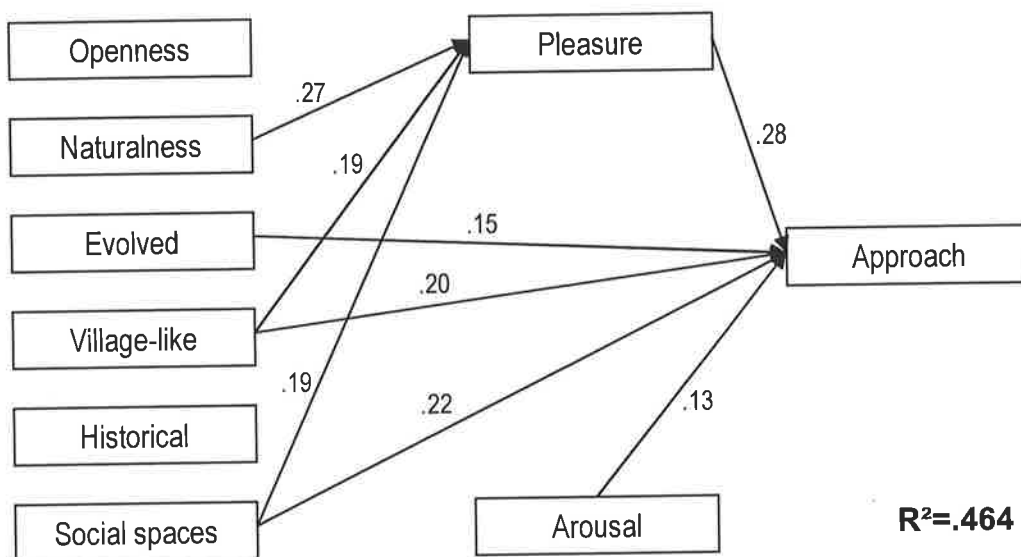


Figure 7.16: Path Diagram for Location 5 Zarraffa's Coffee

Location 5 Explanatory Power of the Path Model:

The path model, which incorporates the four significant predictors of pleasure, social spaces, village-like, evolved naturally, and arousal, accounted for 46.4% ($R^2 = .464$) of the variance in the dependent variable of 'approach'. Thus, the posited path model, which incorporates five significant predictor variables accounted for over 40% of the variance in the model's dependent variable. Subtracting R-square from 1 ($1 - R^2$) shows that 53.6% (.536) of the variance in the dependent variable of 'approach' is not accounted for by the posited path model (residual).

7.12 Study 2: Summary of Path Analysis Five Locations

In the following sections the results from the five separate path analyses are summarised, highlighting results of the direct and indirect paths between the six exogenous environmental variables, the mediating variables of 'pleasure' and 'arousal', and the dependent variable of 'approach'.

7.12.1 Results of Hypothesised Indirect Paths

The results of the regression analysis for the hypothesised indirect paths linking the exogenous environmental variables to the mediator variables or affective responses of ‘pleasure’ are summarised in Table 7.9.

Table 7.9: Regression Results – Influence of Environmental Attributes on Affective Response of Pleasure in Five Locations

Predictor variable	Pleasure β coefficients				
	Location 1	Location 2	Location 3	Location 4	Location 5
Open feeling	.286**	.424**			
Natural feeling	.330**		.345**	.300**	.273**
Evolved naturally				.230*	
Village-like feeling					.189*
Historical feeling					
Social spaces	.176*	.225**	.226**		.190*
R^2	.440	.327	.221	.228	.231
Model F	39.501	36.989	22.796	22.490	15.095
(significance)	(.000)	(.000)	(.000)	(.000)	(.000)

* Statistically significant at .05 level.

** Statistically significant at .01 level.

The results summarised in Table 7.9 indicate that four significant environmental attributes of social spaces, naturalness, openness, and village-like, accounted for between 22% (Locations 4, 5) to 43% (Location 1) of the variance in the mediating variable ‘pleasure’. Further, the influence of social spaces on ‘pleasure’ was significant in four out of the five locations (Locations 1, 2, 3, 5). The influence of naturalness on ‘pleasure’ was significant in four locations (Locations 1, 3, 4, 5), and the influence of openness on ‘pleasure’ was significant in two locations (Locations 1, 2). A ‘village-like’ feeling was significant in one location (Location 5). However, both ‘evolved naturally’ and ‘historical’ feeling were not significant predictors of ‘pleasure’ in any of the five locations.

In contrast, the results indicated that none of the six environmental predictor variables were found to be significant predictors of ‘arousal’. Consequently, no results are reported for the mediator variable ‘arousal’.

7.12.2 Results of Hypothesised Direct Paths

Table 7.10 summarises the results of the path analysis testing the hypothesised direct paths linking the six exogenous environmental variables to the dependent variable ‘approach’; and the direct paths linking the two mediator variables of ‘pleasure’ and ‘arousal’ to the dependent variable ‘approach’.

Table 7.10: Regression Results – Influence of Environmental Attributes and Affective Responses on Behavioural Responses in Five Locations

Predictor variable	Approach β coefficients				
	Location 1	Location 2	Location 3	Location 4	Location 5
Open feeling			.257**	.236**	.190*
Natural feeling	.257**	.185*			
Evolved naturally					
Village-like feeling					.253**
Historical feeling		.124*			
Social spaces	.198**	.190**	.318**		.197*
PLEASURE	.417**	.431**	.420**	.619**	.302**
AROUSAL					.136*
R^2	.518	.475	.589	.542	.485
Model F	54.130	33.895	71.986	89.934	23.211
(significance)	(.000)	(.000)	(.000)	(.000)	(.000)

* Statistically significant at .05 level.

** Statistically significant at .01 level.

The results presented in Table 7.10 indicate that the presence of social spaces is a significant predictor of ‘approach’ in four locations at Sunshine Plaza (Locations 1, 2, 3, 5). Further, an open feeling was a significant predictors of ‘approach’ in three locations (Locations 3, 4, 5); and a natural feeling was a significant predictor of ‘approach’ in two locations (Locations 1, 2). In addition, the results show that the environmental attribute of ‘village-like’ and ‘historical’ were significant in one location (Location 5 and Location 2 respectively). Whereas the attribute ‘evolved naturally’ was not significant in any of the five locations.

Further, the results indicate that the mediator variable of ‘pleasure’ is a significant predictor of ‘approach’ in five locations. Overall, the affective response of ‘pleasure’ accounted for over 50% of the variance in the behavioural response ‘approach’ in three out of the five locations (Locations 1, 3, 4), and accounted for

over 46% of the variance in the other two locations (Locations 2, 5). Hence, the results of the path analysis indicate that the pleasure experienced by the respondents increases their 'approach' behaviour. In contrast, the results show that the mediator variable of 'arousal' is not significant in four out of the five locations – but significant in Location 5. The theoretical implications of the results are discussed in further detail in Chapter 8.

7.13 Evaluative Map: Five Locations Sunshine Plaza

Based on the results of the data analysis from Study 2 an evaluative map of the five research locations at Sunshine Plaza was developed, as shown in Figure 7.17. The primary aim of the evaluative map was to summarise the results of the evaluative mapping methodology from Study 2. The evaluative map of Sunshine Plaza highlighted the results of the hypothesised direct paths linking the six environmental attributes with the dependent variable 'approach', and the hypothesised indirect paths linking the six environmental attributes with the mediator variables of 'pleasure' and 'arousal', and sequentially to the dependent variable of 'approach', for each of the five research locations. The managerial implications of evaluative mapping, as a methodology applied to retail precincts, are discussed in Chapter 8.

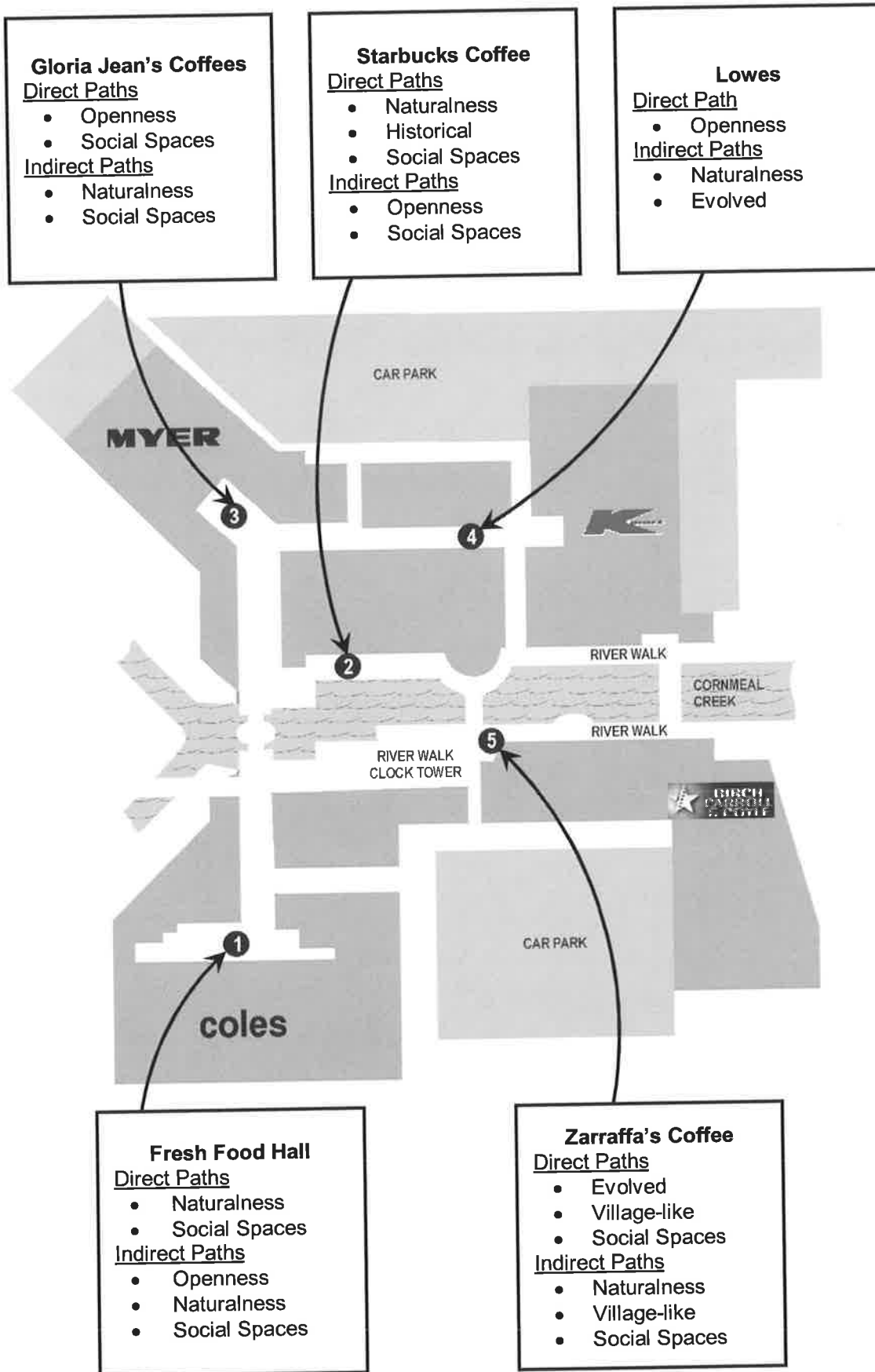


Figure 7.17: Evaluative Map of Sunshine Plaza Based on Five Locations

7.14 Conclusion

This chapter tested the central hypothesis derived from the proposed 'Model of Consumer Response to Retailscapes' and summarised the findings of the research. After preliminary analysis of the data, a two-step approach to data analysis was implemented. First, affective and behavioural response measures were analysed using exploratory factor analysis in each of the five locations. Based on the results, composite measures were formed for the mediator and dependent variables for inclusion in subsequent analysis. Second, path analysis using stepwise multiple regression was used to test the linkages between the six exogenous environmental attributes, the mediating variables of 'pleasure' and 'arousal', and the dependent variable of 'approach'. Based on the results of the path analysis, an evaluative map of Sunshine Plaza integrating five separate locations was developed, highlighting specific locations and environmental attributes influencing the affective and behavioural responses of shoppers. Chapter 8, the final chapter of the thesis, discusses the managerial implications of the research conclusions, contributions, as well as the limitations of the study, and a possible future research agenda.

Chapter 8 Research Conclusions and Implications

8.1 Introduction

The previous chapter reported the results of the evaluative mapping methodology undertaken in Study 2. Chapter 8, the final chapter of this thesis, presents the research conclusions and implications, as well as the research contributions and directions for future research. This chapter consists of five main sections. First, the research problem, including the two primary research questions, is reintroduced. Second, the three research themes summarising the knowledge gaps are presented, followed by key findings related to each theme. Third, the conclusions and implications of the results of the evaluative mapping methodology are discussed. Fourth, the theoretical and managerial contributions of this research are examined. Finally, the chapter concludes with a discussion of the limitations of this research and possible directions for future research.

8.2 Reviewing the Research Problem

As emphasised in this thesis, there is limited research in the marketing literature examining how key environmental attributes from both the interior and exterior retailscape influence the affective and behavioural responses of shoppers. Further, very little research focused on how shoppers respond to these environmental attributes as they move through a retail precinct. Therefore, the overall aim of this research was to address two primary research questions:

1. What effects do key environmental attributes in the interior and exterior retailscape have on shoppers' affective and behavioural responses?
2. How do shoppers' affective and behavioural responses vary as they move through a retailscape?

These primary research questions were identified from a comprehensive review of the literature from both a marketing and multidisciplinary perspective, found in Chapters 2 and 3 of this thesis. An inductive approach was adopted in Study 1 to

explore consumers' affective and behavioural responses to the surrounding retailscape. The six environmental attributes identified in Study 1 provided the foundations for the new conceptual framework – the proposed 'Model of Consumer Response to Retailscapes', tested in Study 2 using Nasar's (1990; 1998; 2000) evaluative mapping methodology. The research location selected for Study 2 was an established retail precinct at Sunshine Plaza, located at Maroochydore on the Sunshine Coast, Queensland.

8.3 *Reviewing the Research Themes and Gaps*

As discussed in detail in Chapter 1, Section 1.3, three research themes summarised the key knowledge gaps identified from a comprehensive review of literature from a marketing and multidisciplinary perspective. In the following sections, each research theme will be reviewed in terms of the research results and conclusions.

8.3.1 *Research Theme 1 – Key Environmental Attributes*

The first research theme emphasised the lack of understanding in relation to the key environmental attributes in the interior and exterior retailscape most likely to influence shoppers' affective and behavioural responses. As discussed in Chapter 2, much of the previous research in retail atmospherics had tended to adopt a unidimensional approach by investigating consumer responses to discrete variables in the interior rather than exterior retailscape – for example, colour, music, and aromas. To address this gap in the marketing literature, this research adopted a holistic perspective of the retailscape by focusing on both the interior and exterior components of the retailscape.

Turley and Milliman (2000) emphasised the importance of the exterior of a retail precinct as this component of the environment is usually the first set of cues seen by shoppers. Likewise, when shoppers visit a retail precinct, they usually move from the exterior to the interior of the retailscape. Clearly it would be difficult for shoppers not to be influenced by the exterior aspects of the retailscape as they pass through a retail precinct. As emphasised in the summary of gaps identified in the marketing literature (Section 2.5), very little research has focused on both the interior

and exterior retailscape, nor emphasised the close interrelationships between these two components.

Study 1 adopted an inductive approach designed to explore how shoppers respond to the physical surroundings in retail precincts. Six key themes influencing consumer affective and behavioural responses to the retailscape were identified, that to date, have not been adequately explored in the marketing literature:

1. An **open** rather than closed feeling in retailscapes;
2. A **natural** rather than unnatural feeling in retail environments;
3. Retailscapes that feel like they have **evolved** and grown organically instead of appearing artificial and contrived;
4. Retailscapes with a **village-like** rather than a non-villagy feel;
5. Retailscapes with an **historical** feel instead of a non-historical feel; and,
6. Retail environments with **social spaces** as opposed to no social spaces.

The results of the initial qualitative research provided pivotal input into the development of the conceptual framework guiding this research. This model was developed from a review of the marketing literature, the immediate academic discipline associated with this research. In addition, a multidisciplinary approach was adopted by examining relevant research from environmental psychology, urban design, and architecture. From this review of the multidisciplinary literature, the second and third research themes and associated knowledge gaps were identified.

8.3.2 Research Theme 2 – Shopper's Kinaesthetic Experience

The second research theme highlighted the lack of recognition of the kinaesthetic experience of shoppers as they move through a retail precinct. As noted in Chapter 2, current conceptualisations of the retailscape in the marketing literature have adopted a static, unidimensional perspective, adopting a cross-sectional research design where data is gathered at one point in time. However, the shopping experience is far from unidimensional in nature. For instance, shoppers evaluate the

surrounding retailscape from the perspective of a moving person. That is, they experience the environment sequentially.

As shoppers move through a retail precinct from exterior to interior locations, the surrounding environmental attributes may vary substantially. As mentioned previously, Study 1 identified six key environmental attributes influencing the affective and behavioural responses of shoppers. Many retail precincts are characterised by different environmental attributes in different locations. For example, some locations possess a more open, natural feel, while others feel closed and unnatural. Shoppers' affective and behavioural responses to their surrounding retailscape may also vary as they move through a retailscape. Hence, this research adopted a dynamic, multi-dimensional view of the retail environment, designed to encapsulate the kinaesthetic experience of shoppers as they move through space over intervals of time (Carmona et al., 2003; Cullen, 1961; Thiel, 1997).

To address this gap in the marketing literature, Study 2 applied Nasar's (1990; 1998; 2000) evaluative mapping methodology in an established retail precinct – the Sunshine Plaza. In environmental psychology, Nasar developed the evaluative mapping method to highlight both the memorable features of the city and the evaluative quality of those features. Evaluative mapping was selected as an appropriate research methodology in Study 2 allowing the researcher to capture the kinaesthetic experience of shoppers as they move through a retail precinct. By examining how shoppers respond to the six environmental attributes (identified in Study 1) in a number of different locations at Sunshine Plaza, an evaluative map of the retail precinct was developed. The implications of the research conclusions from Study 2 are discussed in further detail in Section 8.4.

8.3.3 Research Theme 3 – Social Spaces in the Retailscape

Finally, the third research theme addressed the limited knowledge of consumers' affective and behavioural responses to social spaces in a retailscape. In the urban design and architecture literature, social spaces are considered an integral part of the built environment by influencing human activity and social life (Carmona et al.,

2003). Qualitative comments made by respondents in Study 1, and presented in Chapter 4, highlighted numerous examples of how social spaces in a retailscape influenced shoppers' affective and behavioural responses. Consequently, 'social spaces' was integrated into the proposed 'Model of Consumer Response to Retailscapes' as one of the six environmental attributes influencing the affective and behavioural responses of shoppers. The research conclusions relating to the presence of social spaces in retailscapes is discussed in further detail in the following section.

8.4 Study 2: Research Conclusions and Implications

One of the primary aims of this research was to empirically test the proposed 'Model of Consumer Response to Retailscapes' in a number of different retail locations in an established retail precinct. The six environmental attributes identified in Study 1 provided the foundation for the central hypothesis underpinning the theoretical framework:

The six exogenous environmental attributes have both direct and indirect influences on consumers' behavioural response (approach), being mediated by the affective responses of pleasure and arousal.

The hypothesised direct influences are represented by the direct paths linking the exogenous environmental variables to the dependent variable of 'approach'. The hypothesised indirect influences are represented by indirect paths linking the exogenous environmental variables to the mediator variables of 'pleasure' and 'arousal', and sequentially to the dependent variable of 'approach'. The path model tested in five locations at Sunshine Plaza in Study 2 is shown in Figure 8.1.

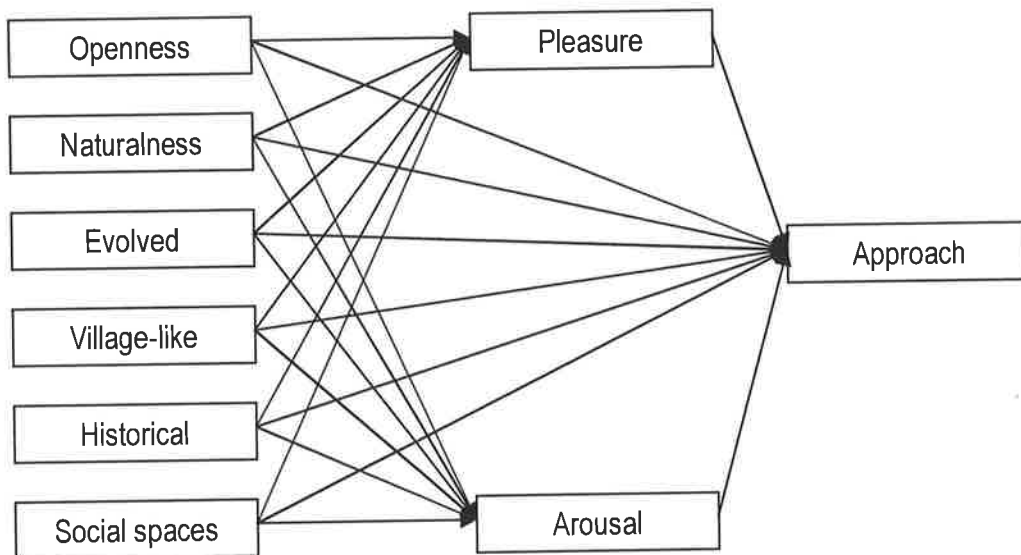


Figure 8.1: Path Model for Study 2

Table 8.1 summarises the results of the data analysis, testing the direct influence of the six environmental attributes on the behavioural response variable ‘approach’ in five locations at Sunshine Plaza. In addition, Table 8.1 summarises the results of testing the indirect influence of the six exogenous environmental attributes on ‘pleasure’ in each of the five locations. As none of the six environmental variables had a statistically significant indirect influence on ‘arousal’, these results were not reported. Finally, Table 8.1 summarises the results of testing the indirect influence of the two affective responses factors of ‘pleasure’ and ‘arousal’ on the dependent variable ‘approach’.

Table 8.1: Summary Results for Study 2

DIRECT INFLUENCE OF ENVIRONMENTAL ATTRIBUTES ON APPROACH					
Environmental Attributes	Location 1	Location 2	Location 3	Location 4	Location 5
Openness	No	No	Yes	Yes	No
Naturalness	Yes	Yes	No	No	No
Evolved	No	No	No	No	Yes
Village-like	No	No	No	No	Yes
Historical	No	Yes	No	No	No
Social Spaces	Yes	Yes	Yes	No	Yes

INDIRECT INFLUENCE OF ENVIRONMENTAL ATTRIBUTES ON PLEASURE					
Environmental Attributes	Location 1	Location 2	Location 3	Location 4	Location 5
Openness	Yes	Yes	No	No	No
Naturalness	Yes	No	Yes	Yes	Yes
Evolved	No	No	No	Yes	No
Village-like	No	No	No	No	Yes
Historical	No	No	No	No	No
Social Spaces	Yes	Yes	Yes	No	Yes

INDIRECT INFLUENCE OF PLEASURE AND AROUSAL ON APPROACH					
Affective Responses	Location 1	Location 2	Location 3	Location 4	Location 5
Pleasure	Yes	Yes	Yes	Yes	Yes
Arousal	No	No	No	No	Yes

EXPLANATORY POWER OF THE REGRESSION EQUATION					
	Location 1	Location 2	Location 3	Location 4	Location 5
R²	.518	.461	.580	.536	.464

A second aim of this research was to develop an evaluative map of Sunshine Plaza based on the results of the data analysis. A number of overall conclusions and research implications can be made for each of the six environmental attributes in the five research locations.

Open Feeling

The results of the path analysis indicated that the environmental attribute of 'openness' has both an indirect influence on the dependent variable 'approach', being mediated by the affective response factor of 'pleasure' and a direct influence

on the dependent variable 'approach'. The indirect mediating influence of 'openness' on 'pleasure' was significant in two locations – that is, at the Fresh Food Hall (Location 1), and Starbucks Coffee (Location 2). Further, an open feeling was a significant predictor of 'approach' in the other three locations (Locations 3, 4, 5).

The non-significant paths between the environmental attribute of 'openness' and 'pleasure' was unexpected at Location 4 (outside Lowes), as qualitative comments made by respondents referred to the 'closed in' feeling associated with this location. However, there was a significant direct path between 'openness' and respondents' 'approach' behaviour. One explanation for this result could be due to the fact that respondents use this particular location as a thoroughfare to walk from one retailer to the next as shown in Figure 8.2. Consequently, respondents do not perceive this part of the centre as a shopping destination. For instance, one respondent commented that 'Lowes is not a place you want to stop, you just go there when you have to, when you are trying to get somewhere'.



Figure 8.2: Thoroughfare near Lowes

The indirect mediating influence of 'openness' on pleasure was not significant at Zarraffa's Coffee (Location 5). This result is surprising given that Zarraffa's is located on Riverwalk, in an open, outdoor environment. A possible explanation for

this non-significant result for ‘openness’ could be due to the narrowness of the walkway in front of Zarraffa’s Coffee, which may reflect respondents’ perceptions of crowding at this location – as shown in Figure 8.3. Further, Zarraffa’s is located near one of the main entrances to Sunshine Plaza, which may have influenced this non-significant result. As one respondent commented ‘it feels quite fast, everyone is going somewhere’.



Figure 8.3: Walkway near Zarraffa’s Coffee

Two busy fast-food outlets, McDonald’s and KFC are located near Zarraffa’s Coffee and appear to be regularly patronised by younger segments of shoppers. Further, a number of qualitative comments were made by respondents relating to the type of person found at this location, described by one respondent as ‘drop-kick city’ as illustrated in the following comment:

Zarraffa’s near McDonald’s, a fair few ‘deros’ hang around, young gothic ratty people, got nothing better to do, not good to look at.

These sentiments were reinforced by another respondent who not only commented on the type of person found outside Zarraffa's Coffee but also noted the amount of rubbish found nearby:

Zarraffa's is right next door to KFC, McDonald's, there's lots of rubbish. Also the type of people, rowdy, bad swearing, makes your time unpleasant near some people ... it's really off-putting.

Negative comments relating to the type of person in the social context reinforced the importance of the social-servicescape in a retail setting (Tombs & McColl-Kennedy, 2003). Earlier research has found that the behaviour and appearance of other customers in a service environment affects the satisfaction of patrons (Martin & Pranter, 1989; Martin, 1996). The qualitative comments made by respondents in Study 2, highlighted the importance of customer compatibility in a retailscape, indicating that other customers may influence how individuals evaluate the surrounding retail environment. Further, the maintenance of the physical facilities in a retailscape – referred to by Nasar (1998) as the upkeep/civilities, also contributed to how respondents evaluated the retailscape at this location of Sunshine Plaza.

By testing the environmental attribute of 'openness' in an actual shopping centre, as opposed to a simulated retail environment, crowding issues, and the type of customer, may have introduced uncontrollable variables. In this research, where evaluative mapping methodology has been applied in a 'real' shopping environment at Sunshine Plaza, it would have been difficult to control for both crowding and the type of shopper visiting the retail precinct. However, future research could consider replicating this research in a simulated retail environment, controlling for both human and spatial dimensions of retail crowding (Eroglu, Machleit, & Barr, 2005).

Natural Feeling

The results of the path analysis indicated that the indirect mediating influence of the environmental attribute of 'naturalness' on 'pleasure' was significant in four of the five locations (Locations 1, 3, 4, 5). A natural feeling was a significant predictor of 'approach' in two locations (Locations 1, 2). This result was reinforced by

qualitative feedback where respondents commented on the positive feelings associated with being outdoors, with natural light, trees, and water features, as illustrated in Figure 8.4, and in the following comments made by respondents:

Feels great along Riverwalk, love waterfalls The whole feeling along the river, like the plants, water, it's a nice feeling. Love the skylights inside, give natural light.

I like the way they have kept it natural, keeping the greenery here There's a few big trees, and the waterfall, it's not really like a normal sort of boxy shopping centre.

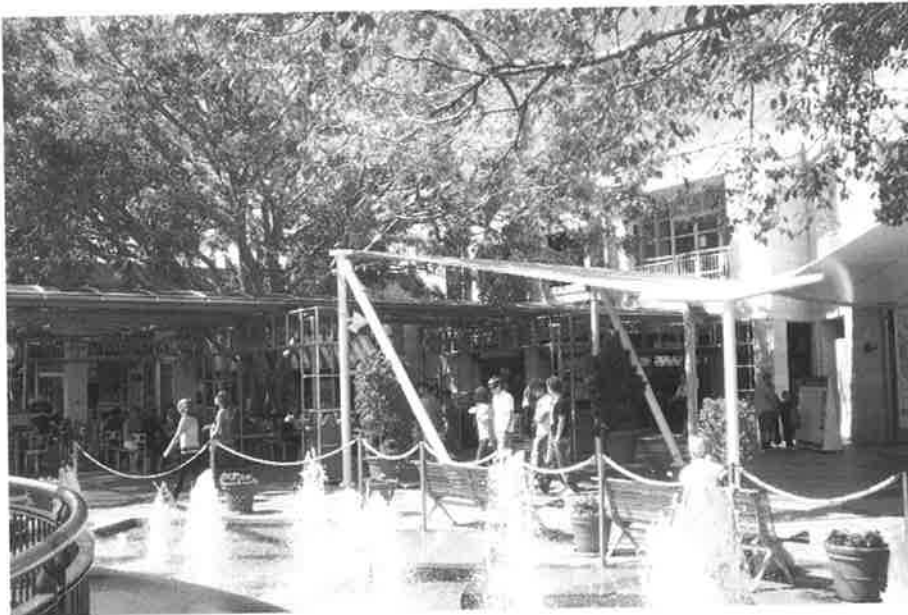


Figure 8.4: Naturalness along Riverwalk

These results are consistent with previous research in the environmental psychology literature. Research has indicated that people prefer naturalness and that naturalness is a powerful predictor of preference (Herzog, 1989; Kaplan, Kaplan, & Ryan, 1998).

The results indicated the indirect mediating influence of 'naturalness' on 'pleasure' was not significant at Starbucks (Location 2) on Riverwalk. This result was

unexpected given that ‘naturalness’ was significant at Zarraffa’s (Location 5), which has comparable surroundings located across the waterway along Riverwalk. Intuitively, one would expect that respondents’ affective and behavioural responses to environmental attributes in both these locations would be similar given that both locations have a similar aspect along Riverwalk.

Evolved Feeling

The hypothesised direct influence of the environmental attribute of ‘evolved’ was not a significant predictor of ‘approach’ in any of the five research locations. The indirect influence of ‘evolved’ on ‘pleasure’ was significant at Location 5, outside Zarraffa’s. Given that the retailscape at Sunshine Plaza is relatively new compared with the retail environments of some city centres and street ‘strip’ retail precincts that have evolved over a number of years, this result is not surprising. Although Sunshine Plaza does not fit with the traditional box-like suburban shopping centre, the environmental attribute of ‘evolved’ did not significantly influence shoppers’ affective and behavioural responses in all but one of the five research locations. Further testing of this environmental attribute in other retail precincts that have evolved over a number of years may provide additional insight.

Village-like Feeling

The results of the path analysis found that the environmental attribute of ‘village-like’ had a direct influence on the dependent variable ‘approach’, and an indirect influence on ‘approach’ at one of the five locations – Zarraffa’s (Location 5). This environmental attribute may have been significant at this particular location as the clock tower on Riverwalk is located nearby – as shown in Figure 8.5.



Figure 8.5: Riverwalk Clock Tower

Although attempts have been made to enhance the village-like atmosphere at the Fresh Food Hall with a lower ceiling and enhanced lighting, the results of the path analysis did not reflect a significant influence on respondents' affective and behavioural responses in this location. Again, further research could examine this environmental attribute in more established retailscapes located in local street 'strip' retail precincts, which may possess a village-like feeling – as identified in Study 1.

Historical Feeling

The hypothesised direct influence of the environmental attribute 'historical' on the dependent variable 'approach' was significant at Location 2 (Starbucks). Further, the hypothesised indirect path linking 'historical' to the mediator variable of 'pleasure' was not significant in any of the five locations. As this research is limited to a single-site, further research in established retailscapes such as the city centre or street 'strip' retail precincts may find a significant direct and indirect relationship between the environmental attribute 'historical' and the mediating and dependent variables. As discussed in Chapter 3, historical significance tends to evoke a favourable response. For instance, historical context may or may not be authentic depending on the perspective of the observer (Nasar, 1998). Future research could test this environmental attribute in more established retailscapes characterised by the

historical features of older buildings. Comparisons could be made with recently built retailscapes which have incorporated features of older buildings in their architecture to provide visual richness in their design (Herzog & Gale, 1996).

Social spaces

The results of the path analysis found that the presence of social spaces had a direct and indirect influence on the dependent variable 'approach' in four out of the five research locations at Sunshine Plaza (Locations 1, 2, 3, 5). These results highlight the importance of social spaces at Sunshine Plaza, with this environmental attribute having an indirect influence on 'approach', mediated by the affective response factor of 'pleasure'.

Throughout Sunshine Plaza a number of retailers including coffee shops, cafes, and restaurants, provide shoppers with spaces for socialising as shown in Figure 8.6. Further, there are a number of areas along Riverwalk where seating is provided for shoppers away from specific retailers. Qualitative comments made by respondents in Study 2 reinforced the importance of social spaces along Riverwalk at Sunshine Plaza as illustrated and in the following quotes:

Starbucks, like that environment there on the water. Can sit down, meet friends, have a chat

I come to the Plaza for the experience rather than the shopping, and spend more time eating and drinking at the outlets. I like meeting my friends here

Have a special friend I meet there [Gloria Jean's Coffees] We always meet up there and go to the movies here.



Figure 8.6: Social Spaces along Riverwalk

The results indicated that the environmental attribute of ‘social spaces’ was not significant for Lowes (Location 4). As mentioned previously, this non-significant result may reflect that this particular section of the Sunshine Plaza is a thoroughfare with limited space available for seating in the narrow corridor.

The social benefits of the shopping experience are supported in the marketing literature, with socialising with family and friends emerging as the highest reported factor characteristic of entertaining shopping experiences (Jones, 1999). Social spaces in a retail precinct enhance the overall shopping experience by providing shoppers with a retailing environment where they can enjoy the social benefits of shopping (Backstrom & Johansson, 2006; Southworth, 2005). As mentioned previously, there is limited empirical research focusing on how shoppers respond to the presence of social spaces in the marketing literature. This research has addressed this under-researched topic, highlighting the importance of social spaces in a retail precinct.

Pleasure

The results indicated that the mediator variable of ‘pleasure’ is a significant predictor of ‘approach’ in five locations. Overall, the affective response of ‘pleasure’

accounted for over 50% of the variance in the behavioural response 'approach' in three out of the five locations (Locations 1, 3, 4), and accounted for over 46% of the variance in the other two locations (Locations 2, 5). Hence, the results of the path analysis indicate that respondents' 'pleasure' increased their 'approach' behaviour.

These findings support the finding of Donovan and Rossiter (1982 p. 54) who found that store-induced pleasure is a determinant of approach-avoidance behaviours as 'the emotional responses induced by the environment within the store are primary determinants of the extent to which the individual spends beyond his or her original expectations'. The review of the marketing literature summarised in Chapter 2, Table 2.3 found that the affective response factor of 'pleasure' was significantly and positively related to the behavioural response factor of 'approach' (Foxall, 1997; Mummalaneni, 2005; Sweeney & Wyber, 2002; Tai & Fung, 1997).

There are a number of practical implications associated with the finding of this research. Pleasure induced by the retail environment appears to be a strong cause of shoppers spending extra time in a store, and spending more money than intended (Donovan et al., 1994). Further, when shoppers experience a pleasurable shopping trip, they are more likely to share their experience with others through positive word-of-mouth communications to encourage others to patronise that retailer (Babin, Lee, Kim, & Griffin, 2005; Jones, Reynolds, & Arnold, 2006).

Arousal

As reported in Chapter 7, the results indicated that only one of the indirect paths linking the six environmental variables to the mediator variable 'arousal', to the dependent variable 'approach' was significant. The results showed that the mediator variable of 'arousal' was not significant in four out of five locations – that is, significant only in Location 5.

In Kaltcheva and Weitz's (2006) review of the empirical research investigating environmental effects on shopping behaviour, pleasantness was found to have a consistently positive effect on shopping behaviour. However, the impact of arousal varied across the studies reviewed. Research by Donovan and Rossiter (1982) found

that arousal had a positive effect on many of the dependent variables in pleasant retail environments. However, subsequent research by Donovan et al. (1994) did not confirm this relationship.

The lack of support for the affective response factor of 'arousal' indicates that further research is required. Intuitively, one would expect modern retail environments to induce high levels of both high pleasure and arousal. Indeed, the experiential aspects of the shopping experience suggest that a certain degree of arousal would be felt by shoppers. As discussed in Chapter 2, Wirtz, Mattila and Tan (2000) introduced a new moderating variable labelled 'target-arousal level', based on earlier work in psychology, which holds that the impact of arousal on response behaviour can be situation, time, and place-specific (Berlyne, 1960). In addition, optimum stimulation theories propose that the amount of stimulation individuals prefer in their surrounding environment depends on their arousal-seeking disposition (Mehrabian & Russell, 1974). In the services marketing literature, Ang, Leong and Lim (1997) proposed that consumers of different types of services seek different levels of arousal – that is, overt or passive, during the consumption of services.

Given this background, it is reasonable to consider a shopper's 'target-arousal level' as contributing to the non-significant results for 'arousal', at least for some of the research locations found along Riverwalk. In qualitative comments, respondents commented on the relaxing atmosphere along the water, as suggested in the following comments:

I like the natural feeling, gives a relaxed sense when outside ...

Don't mind the openness of places along the river, quite relaxing near the water ...

Therefore, further research could explore the relationship between arousal and the six environmental attributes identified in Study 1. As mentioned previously, the qualitative results indicated that shoppers who perceived the surrounding retailscape as being natural to be more relaxing than arousing. Likewise, shoppers may find that

the presence of social spaces in a retailscape would be positively related to arousal. These relationships could be explored in more detail in future research. In the following section the theoretical contributions of this research are examined.

8.5 Contributions to Marketing Theory

The research undertaken in this thesis contributes to marketing theory in several significant ways. First, the current research developed and tested a new conceptual framework, the proposed 'Model of Consumer Response to Retailscapes'. The multidisciplinary focus of this research provided new insights into the field of consumer behaviour and services marketing by identifying and testing environmental attributes in both the interior and exterior retail environment not previously considered in the marketing literature.

In a related contribution, this research acknowledges the kinaesthetic experience of shoppers by focusing on the dynamic relationship between individuals and their environment as they move through space and time. As noted previously, shoppers experience the retail environment sequentially. However, existing research in the marketing literature has adopted a unidimensional or static perspective, in that consumer responses are measured at one location, at one point in time. By acknowledging the kinaesthetic experience of shoppers, this research contributes to the marketing literature by measuring consumers' affective and behavioural responses in five locations at Sunshine Plaza. Nasar's (1990; 1998; 2000) evaluative mapping methodology was adopted from environmental psychology to capture the kinaesthetic experience of shoppers, taking into account the temporal and spatial qualities of the retailscape. As evaluative mapping has not been previously applied in a retail context, the research offers a new insight into how shoppers evaluate their surroundings, providing a more realistic representation of the shopping experience.

Finally, the current research also provides empirical evidence strongly supporting the role of social spaces in a retailscape. By building on research from environmental psychology, urban design, and architecture, this research contributes to the marketing literature by highlighting social spaces as a key environmental attribute in both the

interior and exterior retailscape influencing consumers' affective and behavioural responses. To date, no previous research in marketing has empirically tested the presence of social spaces as an integral component of the retailscape.

In sum, the current research makes a significant contribution to marketing theory by providing a more comprehensive conceptualisation of the retailscape by adopting a multidisciplinary perspective. Both interior and exterior environmental attributes underpin the new theoretical framework developed for this research, which was subsequently tested using evaluative mapping as a methodology, designed to capture the kinaesthetic experience of shoppers as they move through a retail precinct.

8.6 Contributions to Marketing Practice

Equally significant is the practical contribution of this research. The initial exploratory research in Study 1 identified six environmental attributes influencing the affective and behavioural responses of shoppers. Practitioners involved in the design, development, and management of retail precincts could consider integrating or enhancing these environmental attributes into future retail design and redevelopments. The findings of Study 1 provide valuable input into the design of new retail precincts such as new shopping centres, in the redevelopment of inner city retail precincts, or the upgrading of existing streetscapes in street 'strip' retail precincts.

Evaluative mapping offers marketing practitioners in the retail industry a unique methodology, providing more detailed research results when compared to the cross-sectional design adopted in earlier retailing research. By adopting evaluative mapping the researcher is able to identify and measure consumer responses to the surrounding retailscape at multiple locations within a retail precinct. Environmental attributes in the retail environment may vary substantially from location to location. Likewise, as shoppers move through a retail precinct, their affective and behavioural responses to these attributes may also vary. Evaluative mapping is designed to capture the kinaesthetic experience of shoppers as they move sequentially through the surroundings in a retail precinct.

In recent years, retail developers have spent millions of dollars integrating social spaces into new retail developments for shoppers to enjoy their surroundings. From a marketing perspective, there has been limited research focusing on the importance of social spaces in retail precincts. The results of both Study 1 and Study 2 highlighted that the presence of social spaces was an important environmental attribute in retailscapes. Indeed, the results of the evaluative mapping methodology at Sunshine Plaza indicated that the presence of social spaces had a significant influence on the respondent's 'pleasure' and their subsequent 'approach' behaviour. From a practical perspective, these findings accentuate the importance of social spaces retail architecture.

Further, the results indicate that management of Sunshine Plaza could focus on appealing to particular segments of shoppers motivated by the social benefits of the shopping experience. Marketing communications could emphasise the experiential aspects of the retailscape, positioning the shopping experience as a chance to socialise, meet with friends and family, while at the same time enjoying the surrounding retailscape at Sunshine Plaza (Arnold & Reynolds, 2003).

In many retail developments, the physical facilities of the retailscape represent a substantial capital investment, with any redevelopment requiring significant capital outlay. Practitioners in architecture and urban design could benefit from the findings of this research undertaken from a consumer perspective, focusing on the end-user, or shopper. Given the competitive marketplace within the retail industry, adopting a consumer orientation appears to offer the greatest room for creating a competitive advantage in the future.

As mentioned previously, the evaluative map developed for Sunshine Plaza highlighted specific locations and environmental attributes influencing the affective and behavioural responses of shoppers. As Lend Lease Retail, the management company for Sunshine Plaza, are planning redevelopment of the retail precinct, the findings of the current research are expected to be particularly relevant for future design considerations.

8.6.1 Future Redevelopment of Sunshine Plaza

Based on the results of the evaluative mapping undertaken in Study 2, a number of environmental recommendations could be considered in future redevelopment at Sunshine Plaza:

- Complement social spaces throughout the retail precinct by providing seating and shade structures to enhance leisure and relaxation during the shopping experience.
- Provide social spaces for community related functions such as, concerts, theatre, musical performances, and art shows.
- Better manage the upkeep/civilities of the retailscape near Zarraffa's Coffee.
- Enhance an open feeling near Zarraffa's Coffee by improving pedestrian access and flow.
- Incorporate natural light, vegetation, and water features where possible throughout the centre.
- Alleviate the 'closed in' feeling outside of Lowes by reducing the amount of clutter in the retailscape.

8.7 Limitations of this Research

Although this research has provided insights into consumer responses to the retail environment, a number of limitations should be acknowledged.

First, as Study 2 was based on five specific research locations at Sunshine Plaza, respondents were subsequently required to take a path through the retail precinct that may appear to be unnatural and irrelevant. A less structured approach to Study 2 using qualitative research methodologies could further explore the kinaesthetic experience of shoppers reflecting how shoppers experience their surrounding retailscape in a dynamic, unfolding and sequential manner (Carmona et al., 2003).

Second, the six environmental attributes identified in Study 1, and subsequently included in the research model, represent a limited set of environmental attributes influencing the affective and behavioural responses of shoppers. For instance, the in-

depth interviews were restricted to a convenience sample of 42 shoppers in three Australian cities. As Study 1 adopted non-probability sampling, there is no assurance that the sampling process was unbiased. Therefore, further research could be undertaken to confirm the findings of Study 1, and to identify other possible attributes in the retail environment that may influence consumers' responses to the surroundings in a retail precinct.

Third, the six environmental attributes identified in Study 1 were associated with three different types of retail precincts – shopping centres, the street 'strip' retail precincts, and the city centre or CBD. In Study 2, the proposed 'Model of Consumer Response to Retailscapes' was tested in only one retail precinct – that is, a shopping centre environment. Further research is recommended to test the conceptual framework in different types of retail precincts to confirm that it may be generalised across retail environments. The purpose built shopping centre Sunshine Plaza may display different environmental attributes when compared with the established retailscapes of street 'strip' retail precincts and the city centre (CBD), which usually have developed over a number of decades and therefore may reflect an 'evolved', 'village-like', and 'historical' feeling.

Fourth, Study 2 was limited to one retail precinct in one geographic location – the Sunshine Plaza, on the Sunshine Coast, Queensland. Therefore, care must be taken when generalising the research findings to other retail precincts, in other locations. Given that one of the primary goals of this research was to develop an evaluative map of Sunshine Plaza, the results of Study 2 are specific to this particular research location.

Fifth, the sample was derived from respondents who were residents on the Sunshine Coast and regular shoppers at the Sunshine Plaza. Although quotas were used to establish a representative sample of respondents, the sampling frame was limited to shoppers who were familiar with the shopping centre. Screening questions on the questionnaire were included to identify whether respondents were familiar with each of the five locations. However, there were insufficient numbers of respondents who were unfamiliar with each of the five locations to adequately test whether there were

significant differences between those who were 'unfamiliar' and 'familiar' with the retailscape at each location. As discussed by Donovan et al. (1994), respondents familiar with a retail environment may experience a pre-conditioned emotional approach or avoidance response, which would subsequently override the emotions elicited by the retail environment. Future research could apply quotas and seek to elicit responses from shoppers both familiar and unfamiliar with the retail environment in order to determine if there are significant differences in how each segment responds to the surrounding retailscape.

Finally, there are a number of limitations associated with adopting mall intercept as a method for recruiting respondents in Study 2. As discussed in Section 6.9.2, recreational shoppers tend to be over-represented in mall intercept samples. For instance, recreational shoppers differ from task-oriented shoppers in that they spend more time shopping, possess opinion leadership qualities, are more self confident, and have more time to undertake research studies (Bush & Grant, 1995). Further, Nowell and Stanley (1991) noted length bias sampling as another potential sampling error associated with mall intercepts, where shoppers who spend more time at the shopping centre are more likely to be included in the final sample. A potential limitation associated with this research is the sampling error associated with the under-representation of task-oriented shoppers and those individuals who do not frequently visit a retail precinct.

8.8 Directions for Future Research

As discussed in the previous section, a number of the limitations highlighted possible directions for future research. In addition, a number of further areas of research could be addressed in the future to enhance our understanding of how consumers respond to the retail environment.

One extension of the current research could be to complete the evaluative mapping methodology for the whole retail precinct at Sunshine Plaza. In this research, five key locations were selected on the ground floor of the shopping centre. Another level of retail outlets is located on the western side of the centre, with access via

escalators and stairs near Coles and Myer. A complete evaluative map of the Sunshine Plaza would provide management with more thorough research on which to base future decisions regarding redevelopment of the shopping centre.

As mentioned previously, further research could be undertaken to identify if there are additional environmental attributes which have not been included in the proposed 'Model of Consumer Response to Retailscapes'. For instance, qualitative interviews could be undertaken with shoppers while they are visiting a retail precinct, rather than relying on memory-based responses as in Study 1. Eliciting open-ended responses from actual shoppers when they are completing a shopping task in a retail environment takes into consideration individuals' ongoing goals and objectives which may influence responses.

Future research could test consumer responses to the six environmental attributes identified in Study 1 in a controlled experiment using video simulation. Another possible methodological alternative includes the use of desktop virtual environmental simulation (VEs) to undertake evaluative mapping of retail precincts. Recently, Cubukcu and Nasar (2005) simulated large-scale environments allowing respondents to visualise and interact with a virtual, three-dimensional space in real time. Simulated retail environments could be considered as an alternative in future research.

Another extension of the current study could be to test the research model in different retail precincts. As noted in the previous section, the six environmental attributes from Study 1 were identified as influencing the affective and behavioural responses of shoppers in three different types of retailscapes. Therefore, the model could be tested in other shopping centres, as well as street 'strip' shopping precincts, and the city centre using evaluative mapping methodology. In addition, future research could be undertaken in other geographic regions. For instance, the moderate temperatures experienced on the Sunshine Coast in Queensland, may have influenced how shoppers feel while shopping in an exterior rather than interior retailscape. Seasonal differences between geographic areas may vary substantially,

influencing consumers' responses to the surrounding retailscape, therefore warranting further research.

To overcome the limitations associated with sampling only shoppers familiar with the retail environment at Sunshine Plaza, quotas could be applied to future research to ensure equal representation of both shoppers who are familiar and unfamiliar with the retailscape. Additional research could ascertain if there are significant differences between how familiar and unfamiliar shoppers respond to attributes in the surrounding retailscape, testing Donovan et al. (1994) assertion that respondents familiar with a retail environment may experience a pre-conditioned emotional approach or avoidance response, which in turn override the emotions elicited by the retail environment.

Rather than adopting quantitative methodologies to develop an evaluative map of Sunshine Plaza (or other retail precincts), future research could adopt qualitative research methodologies to provide a more detailed and insightful perspective of a shopper's kinaesthetic experience. For instance, interviewers could follow respondents through a retail precinct using semi-structured, concurrent verbal protocols as used by researchers in both environmental psychology and urban design. In earlier research by Lynch and Rivkin (1959), respondents were asked to describe how they felt about their surrounding visual environment while moving through the streets of a city, with follow-up research testing their memories both verbally and through photographic recognition. Recently, Isaacs (2000) adopted qualitative methodologies by asking respondents to take a guided walk through the city centre which had been divided into three segments. At the end of each segment, respondents were asked to draw maps and sketches of their walk and answer open ended questions. Indeed, Nasar (1990; 1998; 2000) advocated diverse qualitative methodologies to develop an evaluative image of the city, including face-to-face interviews using maps and photographs.

A further extension of this research could be the application of *visual quality programming* (Nasar 2000). The overall aim of visual quality programming is to develop design guidelines for the desired appearance of the physical environment.

After developing and implementing a unique solution for a specific location, follow-up evaluation could determine the performance of the visual quality program (Sanoff, 1989). Likewise, the results of this research could be extended to develop specific design guidelines for future redevelopment of Sunshine Plaza, which could be subsequently evaluated with shoppers after construction or redevelopment is complete.

Future research could also examine the applicability of Richin's (1997) Consumption Emotion Set (CES) in the context of this research. As discussed in Chapter 2, to date the CES has not been applied to measure shoppers' emotional responses to environmental attributes in the surrounding retailscape. Subsequent research could assess the ability of the CES to measure the affective responses of shoppers to the surrounding retailscape, relative to other emotional measures – for example, Mehrabrian and Russell's (1974) pleasure and arousal measures. Given the lengthy list of items used in the CES, researchers may choose to omit some of those emotional descriptors unlikely to be experienced in certain contexts (Richins, 1997).

In the marketing literature, very little research has specifically addressed how shoppers respond to the presence of social spaces in the retail environment. The results of in-depth interviews with shoppers in Study 1 highlighted the importance of social spaces to support the experiential benefits of shopping. For instance, respondents discussed how they used the social spaces in retail environments to meet friends or family for lunch or coffee while shopping. Other shoppers simply enjoyed just sitting and watching people pass by. The results from Study 2 clearly indicated that the presence of social spaces is important to shoppers at Sunshine Plaza. For instance, the results of the evaluative mapping methodology revealed that the presence of social spaces on 'pleasure' was significant in all five locations and a significant predictor of 'approach' in four of these locations. Given these results, future research could examine the relationship between arousal and the presence of social spaces in retailscapes. As mentioned previously, a social environment in a retailscape would seem to be positively related to arousal. In addition, further research could focus on consumers' responses to the presence of social spaces in

different types of retail precincts, such as the city centre and street shopping precincts.

Previous research has identified significant differences between task-oriented and recreational shoppers (Babin, Darden, & Griffin, 1994; Jones et al., 2006). Bellenger and Korgaonkar (1980) found that recreational shoppers enjoy shopping as a leisure activity, spend more time shopping per trip, and place higher importance on store décor. Arnold and Reynolds (2003) specifically examined hedonic shopping motivations and found that the aesthetic appeal of the retail environment correlated with all six categories of hedonic shopping motivations. As recreational shoppers derive more pleasure from the shopping experience, they may respond differently to environmental attributes in the retailscape when compared with task-oriented shoppers. Therefore, future research could recruit both recreational and task-oriented shoppers to examine if there are significant differences in how both segments of shoppers respond to attributes in the surrounding retailscape.

Further research could focus on the role of arousal in emotional experience and behaviour, as it relates to consumer responses to the retail environment (Bagozzi, Gopinath, & Nyer, 1999). As noted previously, a review of the empirical research on the impact of pleasure and arousal on shopping behaviour highlighted inconsistent results for arousal across a number of research studies (Kaltcheva & Weitz, 2006). Future research could investigate respondent's arousal levels using physiological, motor, or biological indicators (Bagozzi et al., 1999). The adoption of a psychobiological approach to measuring consumer emotions may provide added insight into respondents' arousal responses. Further research could focus on an individual's activation, or their level of arousal or alertness, resulting from physiological processes of the central nervous system (Kroeber-Riel, 1979).

Finally, further research could examine whether shoppers exhibit desired levels of arousal while shopping. When testing the conceptual framework in other retail precincts, future research could examine whether the concept of 'target-arousal' is applicable with shoppers in retail environments (Wirtz et al., 2000). Further research could integrate the new moderating variable 'target-arousal level' into the conceptual

framework to provide added insights into the relationship between shoppers' arousal levels and their subsequent behavioural response to the surrounding retailscape.

8.9 Conclusion

The final chapter of this thesis summarised the three research themes, the associated research gaps, and research conclusions and implications. Theoretical and practical contributions of this research were discussed, followed by a number of limitations associated with this program of research. Finally, recommendations for future research were presented.

In conclusion, this program of research is a first step in examining how shoppers respond to key environmental attributes in the retailscape. The conceptual model developed and tested in this research adopted a holistic approach by integrating environmental attributes from both the interior and exterior retailscape. Nasar's (1990; 1998; 2000) evaluative mapping methodology was adopted to capture the kinaesthetic experience of shoppers as they move through a retail precinct. Prior to this research, the retail environment had been viewed from a static, unidimensional viewpoint. Therefore, by adopting a multidisciplinary perspective, a more encompassing model of the retailscape was developed and tested in a marketing context, resulting in a more thorough understanding of how environmental attributes in the retailscape influence the affective and behavioural responses of shoppers. The research presented in this thesis highlighted a new direction for further research designed to enhance our understanding of how consumers respond to environmental attributes in both the interior and exterior retailscape, taking into account the kinaesthetic experience of shoppers as they move through a retail precinct.

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Glossary of Terms

<i>Affect</i>	<p>In the marketing literature <i>affect</i> is defined as a 'valenced feeling state', where both mood and emotion are examples. Mood is relatively low in intensity and not usually associated with a stimulus object. In contrast, emotion is higher in intensity, and is usually associated with a stimulus object (Cohen & Areni, 1991 p. 191).</p> <p>In the environmental psychology literature <i>affect</i> is defined 'as the emotion expressed in language, and the affective quality of the molar physical environment.' In other words, affect is the emotion-inducing quality that individuals verbally attribute to 'place' (Russell & Pratt, 1980b p. 311).</p>
<i>Affective primacy hypothesis</i>	<p>Suggests that affective responses do not depend on prior cognitions. Cognitive and affective processes are thought to be either wholly or partially independent of each other and can therefore occur separately (Zajonc, 1980; Zajonc & Markus, 1982).</p>
<i>Architecture</i>	<p>Defined as 'the art and science of designing and building structures, or large groups of structures, in keeping with aesthetic and functional criteria' (Pearall, 2002 p. 1376).</p>
<i>Atmospherics</i>	<p>Describes the designing of space or buying environments to produce specific emotional effects that enhance purchase probability (Kotler, 1973-4).</p>
<i>Built environment</i>	<p>Includes 'the aggregate of the physical surroundings and conditions constructed by human beings, in contrast to those surrounding conditions resulting from the natural environment' (Harris, 2000 p. 135).</p>
<i>CBD</i>	<p>Central Business District, or city centre.</p>
<i>City centre</i>	<p>Also referred to as the Central Business District (CBD) of a town or city.</p>
<i>Cognitive affective model</i>	<p>Suggests that affective responses follow cognitive processes. A series of cognitive processes are thought to occur before individuals can make an affective decision (Lazarus, 1982; Lazarus, 1984).</p>
<i>Ecological validity</i>	<p>Refers to 'the applicability of the results of laboratory analogues to nonlaboratory, real-life settings' (McKechnie, 1977 p. 169).</p>
<i>Environmental psychology</i>	<p>Defined as 'a behavioral science that investigates, with an eye towards enhancing, the interrelationships between the physical environment and human behavior' (Veitch & Arkkelin, 1995 p. 4).</p>

Glossary of Terms (Continued)

<i>Evaluative image</i>	Describes 'a psychological construct that involves subjective assessments of feelings about the environment' (Nasar, 1998 p. 25). An evaluative image refers to favourable emotions and meaning experienced in relation to the environment.
<i>Evaluative mapping</i>	Refers to a mapping of a city aimed at revealing the memorable features and evaluative qualities of those features (Nasar, 1998).
<i>Imageability of the cityscape</i>	Refers to the mental image of a city resulting from a two-way process between an individual and the environment (Lynch, 1960). See also <i>legibility</i> .
<i>Interspatialities</i>	Refers to the mapped paths of consumers through a store. As consumers move through the retail environment 'the most crucial factor was the sequence of visuals produced by their physical movement, as these trajectories played a key role in producing meaning' (Penaloza, 1999 p. 341).
<i>Intertextualities</i>	Refers to the principles by which displays, images and products were arranged in the store, with the aim of encouraging some meaning while precluding others. The consumer's physical mobility throughout the store places them in relation to both design and the surrounding displays in a retailscape (Penaloza, 1999).
<i>Legibility of the cityscape</i>	Refers to 'the ease with which its parts [cityscape] can be recognized and can be organized into a coherent pattern ... a legible city would be one whose districts or landmarks or pathways are easily identifiable and are easily grouped into an over-all pattern' (Lynch, 1960 p. 2-3). See also <i>imageability</i> .
<i>Likability</i>	'Refers to the probability that an environment will evoke a strong and favorable evaluative response among the groups or the public experiencing it' (Nasar, 1998 p. 3).
<i>Mall intercept interview</i>	'Interviews conducted by intercepting mall shoppers (or shoppers in other high traffic locations) and interviewing them face to face' (McDaniel & Gates, 2002 p. 173).
<i>Natural environment</i>	Includes 'the aggregate of the natural external surroundings and conditions, in contrast to the built environment (i.e. those surroundings and conditions resulting from construction by human beings)' (Harris, 2000 p. 613).
<i>Servicescape</i>	Describes the physical elements in a service environment, i.e., the man-made physical surroundings in a service setting (as opposed to the natural or social environment) (Bitner, 1992).

Glossary of Terms (Continued)

- Social space* Include 'spaces that support, enable or facilitate social and cultural interaction and public life' (Carmona et al., 2003 p. 114). Social space can include genuine 'public' space or private space that is publicly accessible.
- Street 'strip' shopping precinct* A shopping district made up of an interconnected network of streets and walkways in a retail shopping area that may have a distinct retail image. There may be a principal main street and adjoining narrow streets where the shop fronts are usually facing to the streetscape allowing for outdoor dining, street entertainment and activities (Ridgway et al., 1989).
- Third place* Defined as 'a generic designation for a great variety of public places that host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work'. Otherwise known as 'the core setting of informal public life' (Oldenburg, 1999 p. 16).
- Urban area* Refers to 'an area which is within the city limits, or closely linked to it by common use of public utilities or services' (Harris, 2000 p. 973).
- Urban design* An overarching definition is that 'urban design is about making places for people'. This definition asserts the importance of urban design concerned with people; valuing 'place'; operating in the 'real' world; and focusing on the design process (Carmona et al., 2003 p. 283).
- Visual Quality Programming* Reflects a connection to architectural programming. The role of the visual quality programmer is to investigate and develop design guidelines which support the overall goals for a facility. After construction and occupancy, the design guidelines are evaluated (Nasar, 2000; Sanoff, 1989).

Appendix A: Questionnaire Version A



THE UNIVERSITY
OF ADELAIDE
AUSTRALIA



Sunshine
Plaza



Respondent #: _____

Date: _____ Nov 2005

Questionnaire: A

Sunshine Plaza Questionnaire

As part of this research, you are to undertake a shopping trip at the Sunshine Plaza. During the shopping trip you will be asked a series of questions relating to the surrounding retail environment in **five different locations** in the Sunshine Plaza.

Below is a list of instructions, outlining where you should enter and exit the shopping centre, and the location where you should complete each section of the questionnaire. All five locations are found on the ground floor of Sunshine Plaza:

LOCATION	INSTRUCTIONS
Entrance	Enter the Sunshine Plaza at the entrance door from the car park near Suncorp Metway Bank. At this point you can answer the introductory questions in the first section. Next, go to the Fresh Food Hall, near Coles Supermarket.
1	Answer all questions at the Fresh Food Hall outside Coles Supermarket. Now walk to Location 2.
2	Answer all questions outside Starbucks Coffee on Riverwalk. Now walk to Location 3.
3	Answer all questions outside Gloria Jean's Coffees near Myer. Now walk to Location 4.
4	Answer all questions outside Lowes , on the way to Kmart. Now walk to Location 5.
5	Answer all the remaining questions outside Zarrafra's Coffee on Riverwalk. Complete the final sections of the questionnaire at this location.
Exit	After you have completed the final sections of your questionnaire, please return it to either Centre Management or Customer Service and collect your \$30 gift voucher: Weekday: Return your questionnaire to Centre Management Office , located upstairs opposite St George Bank at the exit to the car park. Weekend: Return your questionnaire to the Customer Service Centre , located in the walkway next to the newsagents close to Kmart.

On this shopping trip, it is important that you follow the **exact instructions** on the questionnaire, without any distractions. For example, you should not take a side trip to another store or meet with friends.

INSTRUCTIONS FOR FILLING IN THE QUESTIONNAIRE:

For most of the questions, there are no right or wrong answers. However, it is important that you participate in all parts of the study and answer all questions. You should check that you have completed all sections, ensuring that you haven't accidentally skipped a page.

EXAMPLE 1:

Most of the questions require you to simply circle a number corresponding to the best of the alternatives given. In the example question below:

- If you agree with the following statement circle either: 1, 2 or 3.
- If you are neutral (neither agree or disagree with the statement) circle 4.
- If you disagree with the statement circle either 5, 6 or 7.

a) I usually enjoy the shopping experience.

Strongly agree			Neutral				Strongly disagree
1	2	3	4	5	6	7	

In this example, the number 6 has been circled, indicating that the person **disagrees** with the statement.

EXAMPLE 2:

Other questions require you to tick (✓) one of the boxes to indicate how you feel. In the example question below:

- If you are feeling happy, tick a box to the left of the scale, close to the word 'happy'.
- If you are feeling unhappy, tick a box to the right of the scale, close to the word 'unhappy'.
- If you are neutral (neither happy nor unhappy) tick the box in the middle of the scale.

Happy Unhappy

In this example, the person is feeling **happy**, and has ticked a box to the left on the scale.

When answering the questions, try to respond as quickly and as honestly as possible. Please work through the questionnaire page-by-page, answering all the questions in the order given. Your responses are completely anonymous: I am interested in general trends, rather than identifying the responses of particular individuals.

THANK YOU FOR PARTICIPATING IN THIS RESEARCH

INTRODUCTORY QUESTIONS

The following introductory questions should be answered at the entrance door near Suncorp Metway Bank, adjoining the multi-storey car park at Sunshine Plaza.

1. First enter the **time you arrived** at the entrance to Sunshine Plaza:

Time: am/pm

2. How would you describe the **weather** today?

Sunny, fine day Overcast, light showers

Mainly fine, few clouds Heavy rain and storms

3. How **often** do you shop at Sunshine Plaza?

Daily Once a week Once a month

2-3 times per week Once a fortnight Once every 1-2 months

4. During the last two months, what are the **two main reasons** for visiting the Sunshine Plaza? Tick **any two** of the following:

Food, liquor and groceries General goods

Clothing and accessories Personal and household services

Homewares and household goods Professional and other services

Bulky goods Entertainment and leisure

Other (please specify)

5. Now consider the **type of person you are when shopping**. Please use the scales below to complete the following statements:

	Strongly Agree			Neutral			Strongly Disagree
	1	2	3	4	5	6	7
1. I continue to shop, not because I have to, but because I want to	1	2	3	4	5	6	7
2. During my shopping trips, I feel the excitement of the hunt	1	2	3	4	5	6	7
3. While shopping, I am able to forget my problems	1	2	3	4	5	6	7
4. I enjoy shopping for its own sake, not just for the items I may have purchased	1	2	3	4	5	6	7

6. I would like you to describe some of your **general feelings** at the moment. Please indicate the extent to which each word describes your feelings at the moment: (tick the appropriate box)

Happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unhappy
Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Hopeful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Despairing
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interested
Satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dissatisfied
Contented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depressed
Sluggish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Frenzied
Overcrowded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uncrowded
Stimulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Aroused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unaroused
Wide-awake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sleepy
Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Restricted
Dull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jittery



AT THIS POINT DO NOT ANSWER ANY MORE QUESTIONS.

Now you should enter Sunshine Plaza through the entrance door from Suncorp Metway Bank and walk towards the **Fresh Food Hall**. You should stop outside Coles Supermarket. Next you are to answer a number of questions at **Location 1** on the following pages.

LOCATION 1: FRESH FOOD HALL OUTSIDE COLES

7. Once you have arrived at the Fresh Food Hall, look around the retail environment near Coles to get a feeling for your surroundings. When considering the **surrounding retail environment** at the Fresh Food Hall, how do you feel: Remember your response here relates to the **surrounding environment**. Tick the appropriate box.

Happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unhappy
Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Hopeful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Despairing
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interested
Satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dissatisfied
Contented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depressed
Sluggish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Frenzied
Overcrowded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uncrowded
Stimulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Aroused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unaroused
Wide-awake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sleepy
Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Restricted
Dull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jittery

8. On the following scale, now rate the **surrounding retail environment** in this location, according to six environmental attributes: (tick the appropriate box)

Open feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed feeling
Natural feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unnatural feeling
Feels like it has evolved naturally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feels like it has evolved artificially
Village-like feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-villagy feeling
Historical feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-historical feel
Space for socialising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No space for socialising

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9. Based on your feelings towards the **surrounding retail environment** at the Fresh Food Hall, please use the scales below to complete the following statements:

	Strongly Agree		Neutral			Strongly Disagree	
	1	2	3	4	5	6	7
1. I would like to spend much more time browsing in the Fresh Food Hall	1	2	3	4	5	6	7
2. I want to avoid looking around or exploring at the Fresh Food Hall	1	2	3	4	5	6	7
3. This is a place in which I feel friendly and talkative to other people near me	1	2	3	4	5	6	7
4. I like the shopping environment in the Fresh Food Hall	1	2	3	4	5	6	7
5. I would enjoy shopping at the Fresh Food Hall	1	2	3	4	5	6	7
6. This is a place where I try to avoid other people, and avoid talking with them	1	2	3	4	5	6	7
7. I would avoid ever having to return to the Fresh Food Hall	1	2	3	4	5	6	7
8. This is the sort of place where I might end up spending more money than originally intended	1	2	3	4	5	6	7

10. Again, based on your feelings towards the **surrounding retail environment** at the Fresh Food Hall, please use the scales below to complete the following statements:

	Very Low		Neutral			Very High	
	1	2	3	4	5	6	7
1. The probability that I will visit the Fresh Food Hall again is...	1	2	3	4	5	6	7
2. The likelihood that I would recommend the Fresh Food Hall to a friend is...	1	2	3	4	5	6	7
3. If I were in the same situation again, the probability I would choose the Fresh Food Hall is...	1	2	3	4	5	6	7

11. Is this the **first time** you have visited the Fresh Food Hall at Sunshine Plaza?

Yes GO TO THE STOP SIGN BELOW No GO TO QUESTION 12

12. In the last two months **how often** have you visited the Fresh Food Hall at Sunshine Plaza?

Daily Once a week Once a month
 2-3 times per week Once a fortnight Once every 1-2 months
 It has been over 2 months since I have been to this location

13. On your last visit, what was the **main reason** for visiting the Fresh Food Hall at Sunshine Plaza?



AT THIS POINT DO NOT ANSWER ANY MORE QUESTIONS.

Next, you should walk towards Myer on the ground floor. Before you get to Myer, you should turn right opposite Muffin Break, and walk outside to the Riverwalk at Sunshine Plaza. Stop outside the front of **Starbucks Coffee**. Now answer the questions in the next section of the questionnaire at **Location 2**.

LOCATION 2: STARBUCKS ON RIVER WALK

14. Once you have arrived outside Starbucks, look around at the retail environment to get a feeling for your surroundings. When considering the **surrounding retail environment** outside Starbucks, how do you feel:
Remember your response here relates to the **surrounding environment**.
Tick the appropriate box.

Happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unhappy
Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Hopeful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Despairing
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interested
Satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dissatisfied
Contented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depressed
Sluggish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Frenzied
Overcrowded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uncrowded
Stimulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Aroused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unaroused
Wide-awake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sleepy
Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Restricted
Dull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jittery

15. On the following scale, now rate the **surrounding retail environment** outside Starbucks according to six environmental attributes: (tick the appropriate box)

Open feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed feeling
Natural feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unnatural feeling
Feels like it has evolved naturally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feels like it has evolved artificially
Village-like feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-villagy feeling
Historical feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-historical feel
Space for socialising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No space for socialising

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16. Based on your feelings towards the **surrounding retail environment at Starbucks**, please use the scales below to complete the following statements:

	Strongly Agree		Neutral			Strongly Disagree	
	1	2	3	4	5	6	7
1. I would like to spend much more time browsing at this location of the Shopping Centre	1	2	3	4	5	6	7
2. I want to avoid looking around or exploring at this location of the Shopping Centre	1	2	3	4	5	6	7
3. This is a place in which I feel friendly and talkative to other people near me	1	2	3	4	5	6	7
4. I like the shopping environment at this location	1	2	3	4	5	6	7
5. I would enjoy shopping at this location of the Shopping Centre	1	2	3	4	5	6	7
6. This is a place where I try to avoid other people, and avoid talking with them	1	2	3	4	5	6	7
7. I would avoid ever having to return to this location of the Shopping Centre	1	2	3	4	5	6	7
8. This is the sort of place where I might end up spending more money than originally intended	1	2	3	4	5	6	7

17. Again, based on your feelings towards the **surrounding retail environment at Starbucks**, please use the scales below to complete the following statements:

	Very Low		Neutral			Very High	
	1	2	3	4	5	6	7
1. The probability that I will use this location of the Shopping Centre again is...	1	2	3	4	5	6	7
2. The likelihood that I would recommend this location of the Shopping Centre to a friend is...	1	2	3	4	5	6	7
3. If I were in the same situation again, the probability I would choose this location of the Shopping Centre is...	1	2	3	4	5	6	7

18. Is this the **first time** you have visited this location at Sunshine Plaza?

Yes GO TO THE STOP SIGN BELOW No GO TO QUESTION 12

19. In the last two months **how often** have you visited this location at Sunshine Plaza?

Daily Once a week Once a month
 2-3 times per week Once a fortnight Once every 1-2 months
 It has been over 2 months since I have been to this location

20. On your last visit, what was the **main reason** for visiting **this location** at Sunshine Plaza?



AT THIS POINT DO NOT ANSWER ANY MORE QUESTIONS.

Next, you should return to Muffin Break, and turn right, walking towards the entrance of Myer on the ground floor of Sunshine Plaza. Stop outside **Gloria Jeans**, next to the popcorn shop. Now answer the questions in the next section of the questionnaire at **Location 3**.

LOCATION 3: OUTSIDE GLORIA JEANS NEAR MYER

21. Once you have arrived outside Gloria Jeans, look around at the retail environment to get a feeling for your surroundings. When considering the **surrounding retail environment** outside Gloria Jeans, how do you feel: Remember your response here relates to the **surrounding environment**. Tick the appropriate box.

Happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unhappy
Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Hopeful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Despairing
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interested
Satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dissatisfied
Contented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depressed
Sluggish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Frenzied
Overcrowded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uncrowded
Stimulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Aroused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unaroused
Wide-awake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sleepy
Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Restricted
Dull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jittery

22. On the following scale, now rate the **surrounding retail environment** outside Gloria Jeans according to six environmental attributes: (tick the appropriate box)

Open feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed feeling
Natural feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unnatural feeling
Feels like it has evolved naturally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feels like it has evolved artificially
Village-like feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-villagy feeling
Historical feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-historical feel
Space for socialising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No space for socialising

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23. Based on your feelings towards **the surrounding retail environment** at Gloria Jeans, please use the scales below to complete the following statements:

	Strongly Agree		Neutral			Strongly Disagree	
	1	2	3	4	5	6	7
1. I would like to spend much more time browsing at this location of the Shopping Centre	1	2	3	4	5	6	7
2. I want to avoid looking around or exploring at this location of the Shopping Centre	1	2	3	4	5	6	7
3. This is a place in which I feel friendly and talkative to other people near me	1	2	3	4	5	6	7
4. I like the shopping environment at this location	1	2	3	4	5	6	7
5. I would enjoy shopping at this location of the Shopping Centre	1	2	3	4	5	6	7
6. This is a place where I try to avoid other people, and avoid talking with them	1	2	3	4	5	6	7
7. I would avoid ever having to return to this location of the Shopping Centre	1	2	3	4	5	6	7
8. This is the sort of place where I might end up spending more money than originally intended	1	2	3	4	5	6	7

24. Again, based on your feelings towards **the surrounding retail environment** at Gloria Jeans, please use the scales below to complete the following statements:

	Very Low		Neutral			Very High	
	1	2	3	4	5	6	7
1. The probability that I will use this location of the Shopping Centre again is...	1	2	3	4	5	6	7
2. The likelihood that I would recommend this location of the Shopping Centre to a friend is...	1	2	3	4	5	6	7
3. If I were in the same situation again, the probability I would choose this location of the Shopping Centre is...	1	2	3	4	5	6	7

25. Is this the **first time** you have visited this location at Sunshine Plaza?

Yes GO TO THE STOP SIGN BELOW No GO TO QUESTION 12

26. In the last two months **how often** have you visited this location at Sunshine Plaza?

Daily Once a week Once a month
 2-3 times per week Once a fortnight Once every 1-2 months
 It has been over 2 months since I have been to this location

27. On your last visit, what was the **main reason** for visiting **this location** at Sunshine Plaza?



AT THIS POINT DO NOT ANSWER ANY MORE QUESTIONS.

Next, you should walk towards **Kmart** on the ground floor. Stop outside the front of **Lowe's** and answer the questions in the next section of the questionnaire at **Location 4**.

LOCATION 4: OUTSIDE LOWES NEAR KMART

28. Once you have arrived outside Lowes, look around at the surrounding retail environment to get a feeling for your surroundings. When considering the **surrounding retail environment** outside Lowes, how do you feel: Remember your response here relates to the **surrounding environment**. Tick the appropriate box.

Happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unhappy
Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Hopeful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Despairing
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interested
Satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dissatisfied
Contented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depressed
Sluggish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Frenzied
Overcrowded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uncrowded
Stimulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Aroused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unaroused
Wide-awake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sleepy
Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Restricted
Dull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jittery

29. On the following scale, now rate the **surrounding retail environment** outside Lowes according to six environmental attributes: (tick the appropriate box)

Open feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed feeling
Natural feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unnatural feeling
Feels like it has evolved naturally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feels like it has evolved artificially
Village-like feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-villagy feeling
Historical feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-historical feel
Space for socialising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No space for socialising

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30. Based on your feelings towards the **surrounding retail environment** at Lowes, please use the scales below to complete the following statements:

	Strongly Agree		Neutral			Strongly Disagree	
	1	2	3	4	5	6	7
1. I would like to spend much more time browsing at this location of the Shopping Centre	1	2	3	4	5	6	7
2. I want to avoid looking around or exploring at this location of the Shopping Centre	1	2	3	4	5	6	7
3. This is a place in which I feel friendly and talkative to other people near me	1	2	3	4	5	6	7
4. I like the shopping environment at this location	1	2	3	4	5	6	7
5. I would enjoy shopping at this location of the Shopping Centre	1	2	3	4	5	6	7
6. This is a place where I try to avoid other people, and avoid talking with them	1	2	3	4	5	6	7
7. I would avoid ever having to return to this location of the Shopping Centre	1	2	3	4	5	6	7
8. This is the sort of place where I might end up spending more money than originally intended	1	2	3	4	5	6	7

31. Again, based on your feelings towards the **surrounding retail environment** at Lowes, please use the scales below to complete the following statements:

	Very Low		Neutral			Very High	
	1	2	3	4	5	6	7
1. The probability that I will visit this location again is...	1	2	3	4	5	6	7
2. The likelihood that I would recommend this location of the Shopping Centre to a friend is ...	1	2	3	4	5	6	7
3. If I were in the same situation again, the probability I would choose this location of the Shopping Centre is ...	1	2	3	4	5	6	7

32. Is this the **first time** you have visited this location at Sunshine Plaza?

Yes GO TO THE STOP SIGN BELOW No GO TO QUESTION 12

33. In the last two months **how often** have you visited this location at Sunshine Plaza?

Daily Once a week Once a month
 2-3 times per week Once a fortnight Once every 1-2 months
 It has been over 2 months since I have been to this location

34. On your last visit, what was the **main reason** for visiting **this location** at Sunshine Plaza?



AT THIS POINT DO NOT ANSWER ANY MORE QUESTIONS.

Next, you should walk towards the newsagents and turn right into the walkway to Riverwalk. Walk past the Customer Service Centre and follow the walkway to the outside, passing Bayswiss. Then walk over the foot bridge to **Zarrafra's Coffee**. Find a comfortable seat, and answer the questions in the next section of the questionnaire at **Location 5**.

LOCATION 5: OUTSIDE ZARRAFFA'S COFFEE SHOP

35. Once you have arrived outside **Zarraffa's Coffee**, look around at the retail environment to get a feeling for your surroundings. When considering the **surrounding retail environment** outside of Zarraffa's Coffee, how do you feel? Remember your response here relates to the **surrounding environment**. Tick the appropriate box.

Happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unhappy
Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Hopeful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Despairing
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interested
Satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dissatisfied
Contented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depressed
Sluggish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Frenzied
Overcrowded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uncrowded
Stimulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Aroused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unaroused
Wide-awake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sleepy
Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Restricted
Dull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jittery

36. On the following scale, now rate the **surrounding retail environment** according to six environmental attributes: (tick the appropriate box)

Open feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed feeling
Natural feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unnatural feeling
Feels like it has evolved naturally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feels like it has evolved artificially
Village-like feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-villaggy feeling
Historical feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-historical feel
Space for socialising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No space for socialising

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37. Based on your feelings towards the **surrounding retail environment** at Zarraffa's, please use the scales below to complete the following statements:

	Strongly Agree		Neutral			Strongly Disagree	
	1	2	3	4	5	6	7
1. I would like to spend much more time browsing at this location of the Shopping Centre	1	2	3	4	5	6	7
2. I want to avoid looking around or exploring at this location of the Shopping Centre	1	2	3	4	5	6	7
3. This is a place in which I feel friendly and talkative to other people near me	1	2	3	4	5	6	7
4. I like the shopping environment at this location	1	2	3	4	5	6	7
5. I would enjoy shopping at this location of the Shopping Centre	1	2	3	4	5	6	7
6. This is a place where I try to avoid other people, and avoid talking with them	1	2	3	4	5	6	7
7. I would avoid ever having to return to this location of the Shopping Centre	1	2	3	4	5	6	7
8. This is the sort of place where I might end up spending more money than originally intended	1	2	3	4	5	6	7

38. Again, based on your feelings towards the **surrounding retail environment** at Zarraffa's, please use the scales below to complete the following statements:

	Very Low		Neutral			Very High	
	1	2	3	4	5	6	7
1. The probability that I will use this location of the Shopping Centre again is...	1	2	3	4	5	6	7
2. The likelihood that I would recommend this location of the Shopping Centre to a friend is...	1	2	3	4	5	6	7
3. If I were in the same situation again, the probability I would choose this location of the Shopping Centre is...	1	2	3	4	5	6	7

39. Is this the **first time** you have visited this particular location at Sunshine Plaza?

Yes GO TO THE STOP SIGN BELOW No GO TO QUESTION 12

40. In the last two months **how often** have you visited this location at Sunshine Plaza?

Daily Once a week Once a month

2-3 times per week Once a fortnight Once every 1-2 months

It has been over 2 months since I have been to this location

41. On your last visit, what was the **main reason** for visiting **this location** at Sunshine Plaza?



AT THIS POINT DO NOT ANSWER ANY MORE QUESTIONS.

You have now visited the five locations at the Sunshine Plaza. Next, please answer the remaining questions in the following sections of the questionnaire.

OVERALL EVALUATION OF SUNSHINE PLAZA ENVIRONMENT

42. Now I would like you to think about the **overall retail environment** at Sunshine Plaza. When considering the retail environment of **Sunshine Plaza as a whole**, how do you feel:
Remember your response here relates to the **overall retail environment for Sunshine Plaza**. Tick the appropriate box.

Happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unhappy
Excited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Calm
Hopeful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Despairing
Bored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interested
Satisfied	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dissatisfied
Contented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depressed
Sluggish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Frenzied
Overcrowded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uncrowded
Stimulated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relaxed
Aroused	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unaroused
Wide-awake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sleepy
Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Restricted
Dull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Jittery

43. On the following scale, now rate the **overall retail environment** at Sunshine Plaza according to six environmental attributes: (tick the appropriate box)

Open feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed feeling
Natural feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unnatural feeling
Feels like it has evolved naturally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feels like it has evolved artificially
Village-like feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-villagy feeling
Historical feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-historical feel
Space for socialising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No space for socialising

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44. Based on your feelings towards the **overall retail environment** at Sunshine Plaza, please use the scales below to complete the following statements:

	Strongly Agree		Neutral			Strongly Disagree	
	1	2	3	4	5	6	7
1. I would like to spend much more time browsing in this Shopping Centre	1	2	3	4	5	6	7
2. I want to avoid looking around or exploring this Shopping Centre	1	2	3	4	5	6	7
3. This is a place in which I feel friendly and talkative to other people near me	1	2	3	4	5	6	7
4. I like this Shopping Centre environment	1	2	3	4	5	6	7
5. I would enjoy shopping in this Shopping Centre	1	2	3	4	5	6	7
6. This is a place where I try to avoid other people, and avoid talking with them	1	2	3	4	5	6	7
7. I would avoid ever having to return to this Shopping Centre	1	2	3	4	5	6	7
8. This is the sort of place where I might end up spending more money than originally intended	1	2	3	4	5	6	7

45. Again, based on your feelings towards the **overall retail environment** at Sunshine Plaza, please use the scales below to complete the following statements:

	Very Low		Neutral			Very High	
	1	2	3	4	5	6	7
1. The probability that I will use this Shopping Centre again is...	1	2	3	4	5	6	7
2. The likelihood that I would recommend this Shopping Centre to a friend is...	1	2	3	4	5	6	7
3. If I were in the same situation again, the probability I would choose this Shopping Centre is...	1	2	3	4	5	6	7

46. When thinking about your preferred shopping environment, on a scale of 1 to 7, please rate the following six environmental attributes in terms of their **importance to you**:

Open feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed feeling
Natural feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unnatural feeling
Feels like it has evolved naturally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feels like it has evolved artificially
Village-like feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-villagy feeling
Historical feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-historical feel
Space for socialising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No space for socialising

47. Think about the shopping environment at **Sunshine Plaza overall**. Again, on a scale of 1 to 7, rate your **level of satisfaction** with the Shopping Centre for the six attributes:

Open feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Closed feeling
Natural feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unnatural feeling
Feels like it has evolved naturally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Feels like it has evolved artificially
Village-like feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-villagy feeling
Historical feel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-historical feel
Space for socialising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No space for socialising

48. Thinking about the **overall retail environment at Sunshine Plaza**, what, if anything, do you think could make your shopping experience more enjoyable?

FINALLY SOME QUESTIONS ABOUT YOU

Finally, I have some questions about you. This information is completely confidential. This is just to see if the answers given to the questions above are different for different groups of people. Your responses are completely anonymous: I am interested in general trends, rather than identifying the responses of particular individuals.

49. Are you?

Male Female

50. Which of the following describes your main and most recent **occupation**?

- Home duties Operator/labourer Professional/manager
 Student Retired/superannuated Trades
 Sales/personal services Para-professional Unemployed
 Other (please specify)

51. Which of the following categories corresponds with your **age** group?

- 18-25 years 46-55 years
 26-35 years 56-65 years
 36-45 years Over 65 years

52. Which of the following best describes you and the structure of the **household** you live in?

- Single living at home (eg. with parents)
 Single living alone or sharing with others, no children at home
 Married/defacto, no children at home
 Married/defacto with children at home
 Single parent/widowed/divorced/separated, no children at home
 Single parent/widowed/divorced/separated, with children at home

53. What is your **country of birth**?

- | | | |
|---|--|--|
| <input type="checkbox"/> Australia | <input type="checkbox"/> Pacific Islands | <input type="checkbox"/> New Zealand |
| <input type="checkbox"/> Asia | <input type="checkbox"/> Africa | <input type="checkbox"/> Great Britain |
| <input type="checkbox"/> Europe | <input type="checkbox"/> North America | <input type="checkbox"/> South America |
| <input type="checkbox"/> Other (please specify) | | |

54. Which income category reflects your **household income before tax**?

- | | | |
|--|--|---|
| <input type="checkbox"/> Less than \$18,000 | <input type="checkbox"/> \$42,001 - \$60,000 | <input type="checkbox"/> \$90,001 - \$120,000 |
| <input type="checkbox"/> \$18,001 - \$30,000 | <input type="checkbox"/> \$60,001 - \$75,000 | <input type="checkbox"/> \$120,000 + |
| <input type="checkbox"/> \$30,001 - \$42,000 | <input type="checkbox"/> \$75,001 - \$90,000 | <input type="checkbox"/> Don't know |

55. Please write your **name, street address**, including your **suburb** and **postcode**. Also include a **telephone** contact number:

Name: _____

Street Address _____

Suburb: _____ Postcode _____

Telephone _____ Mobile: _____

56. Please enter the **time you completed** the questionnaire:

Time: _____ am/pm

THANK YOU for the time you have taken to complete this questionnaire.

Please return the completed questionnaire to:

Sunshine Plaza Centre Management Office (**weekdays**)
located upstairs opposite St George Bank

OR

Customer Service Centre (**weekends**)
located in the walkway beside the newsagents close to Kmart.

As a thank you collect your \$30 Sunshine Plaza gift voucher.

Appendix B: Consent Form



THE UNIVERSITY
OF ADELAIDE
AUSTRALIA

School of Commerce
233 North Terrace
The University of Adelaide SA 5000

Participants Statement of Consent

Sunshine Plaza Research

In response to the invitation to participate in a research study examining the retail environment at Sunshine Plaza, Maroochydore, by Margo McOmish under the supervision of Professor Pascale Quester,

I..... (name)

of.....

.....(address)

Personally state that:

1. I have voluntarily participated in this study.
2. I have been informed of the purpose of the research project.
3. I have been assured that all data and information provided will be kept strictly confidential, anonymous, and used only for academic research.
4. I understand that I can withdraw from the project at any time without prejudice.

Signature.....Date.....

Appendix C: Study 2 Respondent Invitation



THE UNIVERSITY
OF ADELAIDE
AUSTRALIA



Sunshine Plaza Research

You are invited to undertake a shopping trip at the Sunshine Plaza as part of research being undertaken by Margo McOmish, a research student from The University of Adelaide. During the shopping trip you will be asked a series of questions relating to the surrounding retail environment in **five different locations** in the Sunshine Plaza.

The questionnaire will take about 40-45 minutes to complete. As a **THANK YOU** for your time, Sunshine Plaza is giving you a **\$30 gift voucher**.

The shopping trip can be undertaken between 9am – 5.30pm weekdays, or between 10.30am – 4 pm Saturday and Sunday. Please bring some personal identification to collect the questionnaire and allow at least 45 minutes so you can complete the research before the Centre closes. You can collect your questionnaire from:

Weekdays	Centre Management Office 9am – 5.30pm	Located upstairs opposite St George Bank at the exit to the car park (near McDonald's)
Weekends	Customer Service Centre Saturday 9am – 5.30pm Sunday 10.30am – 4pm	Located next to the newsagents in the walkway near Kmart

Please undertake the shopping study by **5.30pm on Monday 14th November 2005**. Once you have completed your questionnaire, you can return it to me and collect your \$30 gift voucher from the above locations at Sunshine Plaza.

If you have questions regarding this research please contact Margo McOmish on her mobile on 0417 627 944 or her academic supervisor Professor Pascale Quester on (08) 8303 3986.

Thank you for your participation in this research.

Margo McOmish
PhD Candidate
The University of Adelaide

Appendix D: Scale Statistics for Pleasure and Arousal Items

Location 1: Fresh Food Hall	Factor Loadings		Scale Statistics		
	Pleasure	Arousal	I TOTAL	Mean	SD
Pleasure items					
Happy	.78		.66	2.75	1.33
Hopeful	.74		.63	3.21	1.25
Interested	.77		.75	3.21	1.66
Satisfied	.87		.77	2.84	1.47
Contented	.88		.64	2.75	1.30
Arousal items					
Excited		.77	.42	4.30	1.78
Stimulated		.82	.41	4.31	1.75
Aroused		.61	.45	4.03	1.74
	Eigenvalue	3.55	1.58		
	% Variance explained	44.4	19.8		
	Coefficient Alpha	.87	.62		
Location 2: Starbucks Coffee	Factor Loadings		Scale Statistics		
	Pleasure	Arousal	I TOTAL	Mean	SD
Pleasure items					
Happy	.89		.82	2.16	1.15
Hopeful	.76		.79	2.85	1.25
Interested	.77		.74	2.66	1.40
Satisfied	.89		.65	2.39	1.37
Contented	.84		.65	2.32	1.29
Arousal items					
Excited		.70	.42	3.84	1.80
Frenzied		.66	.34	3.85	1.09
Stimulated		.70	.43	4.61	1.89
Jittery		.67	.38	3.78	1.03
	Eigenvalue	3.61	1.87		
	% Variance explained	40.1	20.7		
	Coefficient Alpha	.89	.61		
Location 3: Gloria Jean's Coffees	Factor Loadings		Scale Statistics		
	Pleasure	Arousal	I TOTAL	Mean	SD
Pleasure items					
Happy	.86		.78	2.29	1.19
Hopeful	.72		.69	2.90	1.10
Interested	.78		.69	2.74	1.49
Satisfied	.90		.78	2.48	1.26
Contented	.86		.71	2.44	1.17
Arousal items					
Excited		.62	.36	3.57	1.83
Frenzied		.66	.47	3.67	1.05
Stimulated		.74	.42	3.97	1.86
Jittery		.72	.44	3.73	1.05
	Eigenvalue	3.78	1.77		
	% Variance explained	42.0	19.6		
	Coefficient Alpha	.89	.65		

Notes: I TOTAL refers to item-to-total correlations.

Appendix D (Continued)

Location 4: Lowes		Factor Loadings		Scale Statistics		
		Pleasure	Arousal	I TOTAL	Mean	SD
Pleasure items						
	Happy	.86		.76	3.02	1.41
	Hopeful	.79		.72	3.38	1.34
	Interested	.77		.76	3.50	1.70
	Satisfied	.86		.81	3.23	1.52
	Contented	.91		.67	2.96	1.43
Arousal items						
	Excited		.73	.44	4.41	1.61
	Frenzied		.63	.41	4.01	1.31
	Stimulated		.76	.31	4.24	1.62
	Jittery		.57	.42	4.23	1.34
	Eigenvalue	3.79	1.70			
	% Variance explained	42.1	18.9			
	Coefficient Alpha	.90	.61			
Location 5: Zarraffa's Coffee		Factor Loadings		Scale Statistics		
		Pleasure	Arousal	I TOTAL	Mean	SD
Pleasure items						
	Happy	.79		.64	2.10	1.04
	Hopeful	.72		.63	2.74	1.07
	Interested	.73		.56	2.61	1.36
	Satisfied	.86		.75	2.47	1.33
	Contented	.79		.66	2.37	1.29
Arousal items						
	Excited		.69	.40	3.97	1.82
	Frenzied		.59	.30	3.81	0.95
	Stimulated		.71	.35	4.57	1.90
	Jittery		.66	.35	3.85	1.08
	Eigenvalue	3.27	1.68			
	% Variance explained	36.4	18.7			
	Coefficient Alpha	.84	.57			

Notes: I TOTAL refers to item-to-total correlations.

Appendix E: Scale Statistics for Approach-Avoidance Items

Location 1:		Factor Loadings		Scale Statistics	
Fresh Food Hall		Approach	I TOTAL	Mean	SD
Approach-Avoidance Items					
AA1 (time)		.76	.61	4.26	1.65
AA4 (affect)		.89	.80	3.37	1.67
AA5 (affect)		.86	.74	3.44	1.76
AA6 (affiliation)		.71	.57	3.28	1.87
AA7 (spend)		.77	.64	2.43	1.64
	Eigenvalue	3.19			
	% Variance explained	63.8%			
	Coefficient Alpha	.86			
Location 2:		Factor Loadings		Scale Statistics	
Starbucks Coffee		Approach	I TOTAL	Mean	SD
Approach-Avoidance Items					
AA1 (time)		.76	.63	3.30	1.62
AA3 (affiliation)		.80	.68	2.56	1.54
AA4 (affect)		.92	.85	2.70	1.51
AA5 (affect)		.92	.83	2.90	1.74
AA6 (affiliation)		.71	.58	2.50	1.63
	Eigenvalue	3.40			
	% Variance explained	67.9%			
	Coefficient Alpha	.88			
Location 3:		Factor Loadings		Scale Statistics	
Gloria Jean's Coffees		Approach	I TOTAL	Mean	SD
Approach-Avoidance Items					
AA1 (time)		.82	.71	3.15	1.60
AA3 (affiliation)		.87	.78	2.82	1.65
AA4 (affect)		.94	.88	2.70	1.71
AA5 (affect)		.92	.85	2.80	1.64
AA6 (affiliation)		.67	.57	2.66	1.68
	Eigenvalue	3.62			
	% Variance explained	72.5%			
	Coefficient Alpha	.90			
Location 4:		Factor Loadings		Scale Statistics	
Lowes		Approach	I TOTAL	Mean	SD
Approach-Avoidance Items					
AA1 (time)		.91	.83	4.20	1.80
AA4 (affect)		.92	.83	4.23	1.87
AA5 (affect)		.95	.89	4.08	1.85
AA8 (spend)		.77	.63	4.55	2.02
	Eigenvalue	3.15			
	% Variance explained	78.8%			
	Coefficient Alpha	.91			
Location 5:		Factor Loadings		Scale Statistics	
Zarrafa's Coffee		Approach	I TOTAL	Mean	SD
Approach-Avoidance Items					
AA1(time)		.85	.72	3.52	1.72
AA3 (affiliation)		.74	.59	2.90	1.64
AA4 (affect)		.90	.81	2.99	1.70
AA5 (affect)		.91	.82	3.12	1.70
	Eigenvalue	2.92			
	% Variance explained	72.9%			
	Coefficient Alpha	.87			

Notes: I TOTAL refers to item-to-total correlations.