DETERMINANTS OF CUSTOMER SATISFACTION WITH THE SEASON TICKET SERVICE OF PROFESSIONAL SPORT CLUBS

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BHMS Hons (SCU)

A thesis submitted for the

Degree of Doctor of Philosophy

University of Technology, Sydney

2001

CERTIFICATE OF ORIGINALITY

I certify that this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Linda Van Leeuwen

ACKNOWLEDGEMENTS

The completion of my PhD was made possible by the assistance and support of a number of people. I will always be grateful to these individuals for helping me to finish such an arduous but incredibly rewarding facet of my education.

First, I wish to thank my primary supervisor, Dr Shayne Quick. Shayne has been a wonderful supervisor. Perhaps most important was his faith in me during those times when I simply did not have the energy or ability to summon faith in myself. Moreover, Shayne's assistance extended beyond my PhD to my professional development and continues to do so today.

I also wish to thank my co-supervisor, Dr Kerry Daniel. Kerry's assistance was particularly important in the developmental stages of my research and in helping me come to terms with how to actually write a thesis. In addition, a very big thank you must go to my statistical adviser Dr Lyndon Brooks. Lyndon's patience, generosity and expertise deserve a gold medal! Furthermore, his humour kept me sane during many frustrating months of number crunching.

I do not think I will ever find words suitable enough to thank my family for their support. As they have always done throughout all the various stages of my education, my family assisted me in so many different ways during my PhD candidature. Their love, pride and confidence in me were priceless. I love them and thank them dearly.

I must also thank some very special friends who have been incredibly supportive over the last few years. First, Russell, who never stopped believing in my abilities and who supported me at times when many would not have. My gratitude also extends to my second family, Rose, Andrew, Sprat, Micky and Milo, who generously opened their home to me and my accompanying proliferation of statistical print-outs and journal articles, not to mention my erratic moods.

The team of support staff at UTS's School of Leisure, Sport and Tourism also deserve my thanks. A final thank you is extended to the various clubs of the Australian National Basketball League (NBL) for allowing me access to their season ticket holders.

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ABSTRACT

Customer satisfaction is associated with numerous positive business outcomes (Kotler, 1994) and is recognised as an important field of study. However, only limited research has addressed the satisfaction of the sport customer with even fewer studies (Madrigal, 1995; Wakefield & Blodgett, 1994) examining the determinants of this satisfaction. Furthermore, no customer satisfaction research has addressed the determinants of satisfaction with the season ticket service. Season ticket holders are among professional sport clubs' most important customers. Professional sport clubs need to be cognisant of those factors that influence the satisfaction of their customers, particularly season ticket holders. This research empirically tested the determinants of customer satisfaction with the season ticket service of professional sport clubs.

Two research models were developed and tested in this thesis: the Expectations Model and the Non-Expectations Model. The models were grounded in the disconfirmation of expectations theory of customer satisfaction, sport marketing theory, social identity theory and services marketing theory. Specifically, the models extended the Disconfirmation of Expectations Model (DEM) to incorporate club identification and the win/lose phenomenon as determinants of sport customer satisfaction. The initial inspiration for the inclusion of the two sport-specific determinants arose from the work of Mullin (1985). The models also included the outcome variable of repeat purchase intention as commonly suggested by the literature. Furthermore, the models accounted for customer satisfaction arising from both the core (i.e., the actual game) and peripheral (i.e., factors external to the game) dimensions of the season ticket service, in accord with services marketing theory.

Season ticket holders from 10 of the 11 clubs in the Australian National Basketball League (NBL) participated in the research. The research employed a two-stage design whereby season ticket holders who returned useable questionnaires from the pre-season survey were later administered with a post-season questionnaire. Of the 808 questionnaires distributed in the second survey, 577 useable questionnaires were returned, representing a response rate of 71.41 percent.

Structural equation modelling was the dominant mode of analysis employed in this thesis. The data analysis together with existing theory indicated that the Non-Expectations model was the superior representation of the customer satisfaction process. The superiority of the Non-Expectations model put in question the utility of the DEM as a useful paradigm of customer satisfaction determinants.

The research findings indicated that club identification, followed by the win/lose phenomenon, had the greatest influence on customer satisfaction. All other determinants were also found to influence customer satisfaction. Furthermore, the results indicated that customer satisfaction arises from the core as well as peripheral dimensions of the season ticket service. Importantly, these results revealed that professional sport clubs do have control over the satisfaction experienced by season ticket holders irrespective of whether the team wins or loses.

This thesis examined relationships that had not previously been subjected to empirical investigation. The research findings considerably aid our understanding of the determinants of sport customer satisfaction, particularly satisfaction with the season ticket service of professional sport clubs. Furthermore, the findings have significant managerial implications for professional sport clubs.

CHAPTER 1
INTRODUCTION

1.1 Introduction

Customer satisfaction has been the focus of considerable marketing research, theory and practice. Consequently there is no shortage of literature addressing the notion of the satisfied customer.[1] Journals, articles, books and even conferences addressing customer satisfaction have proliferated over the last three decades.

Customer satisfaction has been linked to numerous positive outcomes for the organisation. These outcomes include repeat purchase behaviour (Anderson, 1993), decreased complaints and increased positive word-of-mouth (Kotler, 1994), increased market share (Anderson et al., 1994) and profitability (Anderson et al., 1994; Anderson & Mittal, 2000; Kotler, 1991, 1994).

Yet despite the obvious importance of such outcomes to organisational success, very little research has specifically focused on customer satisfaction as it pertains to sport, particularly spectator sport, the exceptions being Lapidus and Schibrowsky (1996), Madrigal (1995), Wakefield and Blodgett (1994) and Zhang, Smith, Pease and Lam (1998). The lack of sport-specific customer satisfaction research contrasts with the enormous array of research conducted on customer satisfaction across a diversity of industries. It also seems incongruous given the failure of many sport organisations to operate at maximum capacity.

Of the existing sport-specific customer satisfaction studies, Madrigal (1995) and Wakefield and Blodgett (1994) have both investigated the determinants of customer

[1] (Anderson, 1993; Anderson, Fornell & Lehmann, 1994; Anderson & Mittal, 2000; Bearden & Teel, 1983; Bechtel, 1977; Bitner & Hubbert, 1994; Cadotte, Woodruff & Jenkins, 1987; Churchill & Surprenant, 1982; Day & Bodur, 1978; Evrard & Aurier, 1994; Fornell, 1992; Fornell, Johnson, Anderson, Cha & Bryant, 1996; Iacobucci, Grayson & Ostrom, 1994a, 1994b; McCollough, Berry & Yadav, 2000; Oliver, 1979, 1981, 1980a, 1980b, 1989, 1993a, 1993b; Oliver & DeSarbo, 1988; Oliver & Swan, 1989a, 1989b; Oliver & Westbrook, 1993; Patterson, 1993a, 1993b, 1995; Patterson, Johnson & Spreng, 1997; Patterson & Spreng, 1998; Spreng, Harrell & Mackoy, 1995; Spreng, MacKenzie & Olshavsky, 1996; Spreng & Olshavsky, 1993; Swan & Trawick, 1981)

satisfaction. So, while the study of customer satisfaction determinants is one of the more popular areas of customer satisfaction research (e.g., Bearden & Teel, 1983; Churchill & Surprenant, 1982; Evrard & Aurier, 1994; Jayanti & Jackson, 1991; Liljander & Strandvik, 1997; Oliver, 1980a, 1980b, 1993b; Oliver & DeSarbo, 1988; Oliver & Swan, 1989a, 1989b; Patterson, 1993a,1993b; Patterson et al., 1997; Patterson & Spreng, 1998; Spreng et al., 1996; Spreng & Olshavsky, 1993; Swan & Trawick, 1981) there exists only a very limited understanding of what contributes to the sport customer's satisfaction and thus the process by which this satisfaction is determined. Furthermore, the extent to which the core service component (i.e., the actual game) and peripheral service component (i.e., factors external to the actual game) of the professional sport service contribute to customer satisfaction is yet to be fully determined.

Accordingly, the main objective of this thesis is to examine empirically and extend knowledge of the determinants of customer satisfaction of professional sport customers. Specifically, this thesis examines the effects of club identification (i.e., a type of sport-specific group identification), the win/lose phenomenon, expectations, perceived performance and disconfirmation on customer satisfaction with the season ticket service of professional team sport organisations. (Henceforth professional team sport organisations will be referred to as *professional sport clubs*, or just *clubs*.) Furthermore, customer satisfaction arising from both the core service component and the peripheral service component is considered.

Two alternative models have been developed to achieve the main objective of this thesis (see Figure 1.1 and Figure 1.2). The models represent different conceptualisations of the process of sport-specific customer satisfaction. Specifically, the models represent the propositions to be tested in this research. The main difference between the two models is whether the expectations construct is included or excluded. Henceforth the model that includes the expectations construct will be referred to as the *Expectations Model* (Figure 1.1). The model that does not include the expectations construct will be referred to as the *Non-Expectations Model* (Figure 1.2).

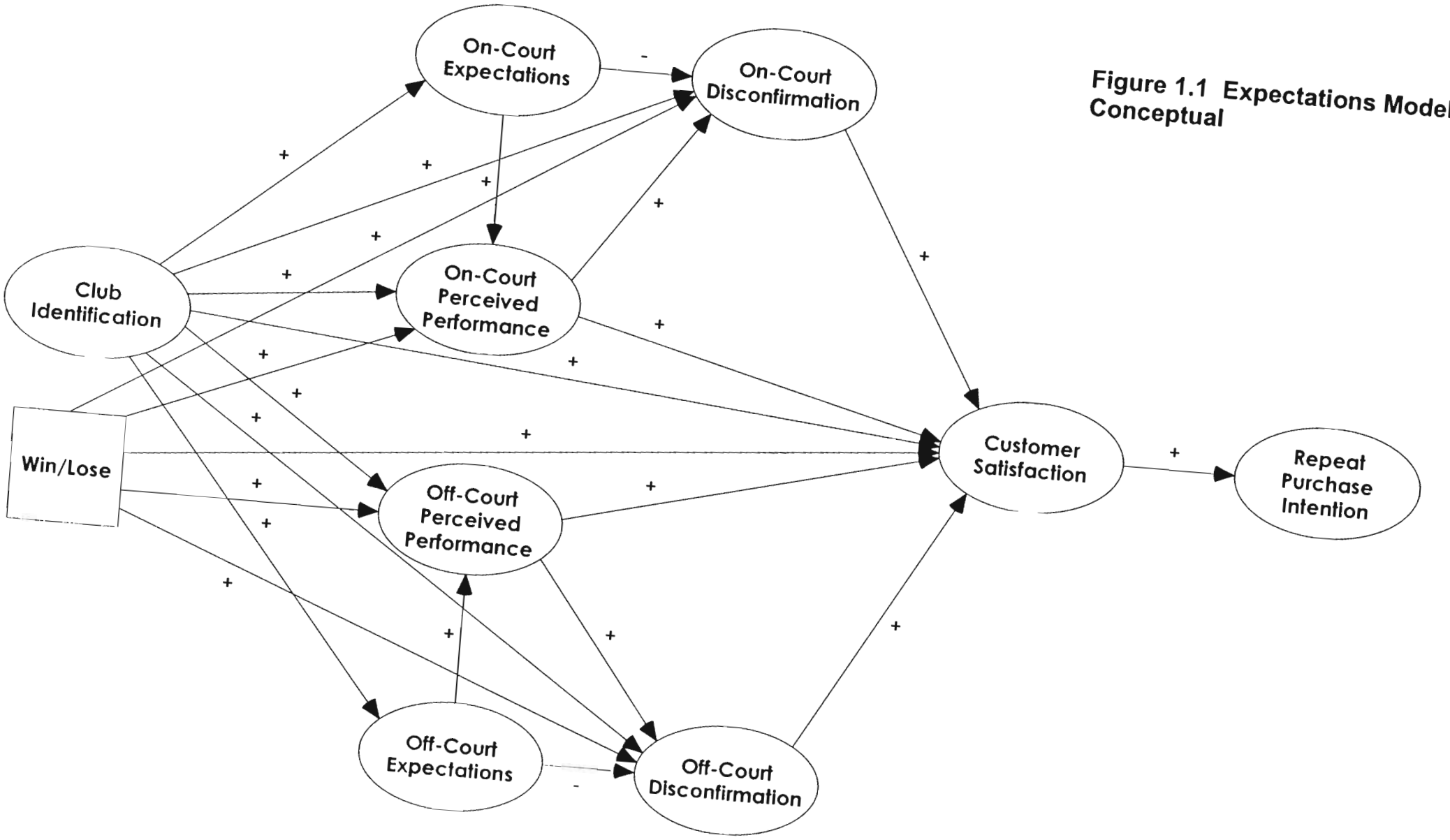


Figure 1.1 Expectations Model: Conceptual

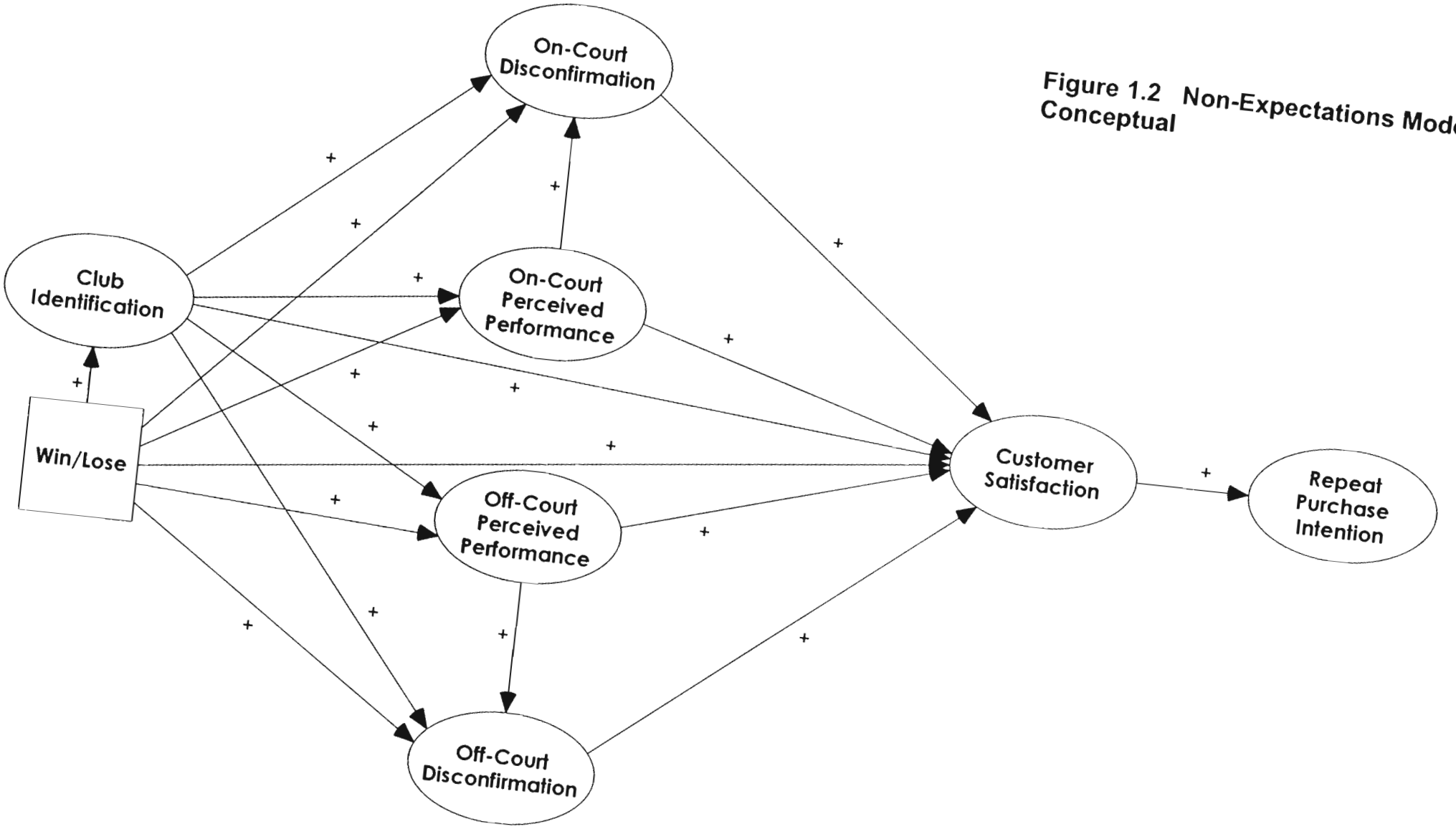


Figure 1.2 Non-Expectations Model: Conceptual

The first aim of this chapter is to introduce the general research problem and specific research questions. Then both the academic and managerial importance of the topic area will be established. The methodology and data analysis will be discussed next, followed by the definitions of the constructs under investigation. The delimitations of the research will then be specified. Finally, the remainder of this thesis will be outlined.

1.2 Statement of Problem

The general research problem this thesis will address is as follows:

> *What are the determinants of customer satisfaction with the season ticket service of professional sport clubs?*

This question will be answered within the framework of the disconfirmation of expectations theory of customer satisfaction, sport marketing theory, social identity theory and services marketing theory. Specifically, two alternative research models will be evaluated. Both models are modifications of the original Disconfirmation of Expectations Model (DEM).[2] Furthermore, both models incorporate two sport-specific variables arising from the seminal work of Mullin (1985) to cater for the uniqueness of the sport product. These variables are *club identification* and the *win/lose phenomenon*. This thesis will argue that, while the traditionally noted determinants, namely expectations, perceived performance and disconfirmation probably contribute to the satisfaction of sport customers, the extent to which the season ticket holder identifies with the professional sport club and the win/lose phenomenon also play a considerable role.

This thesis aims to extend the limited knowledge of the customer satisfaction process of sport customers by testing empirically the extended models' relationships in the context of the Australian professional sport industry. The sample are season ticket holders from

[2] The DEM and the disconfirmation of expectations theory in which it is grounded cannot be attributed to any one particular researcher, or even to a particular academic discipline. See Oliver (1997) for a historical review of the DEM in consumer research.

Australian National Basketball League (NBL) clubs. The product of interest to this research is the season ticket, as opposed to a single sport event.

The empirical testing of the conceptual models' relationships will involve the dependent variable of customer satisfaction as well as several independent variables. Specifically, the independent variables include the club identification of the season ticket holder, the win/lose phenomenon, expectations, perceived performance and disconfirmation. Repeat purchase intention, an outcome of customer satisfaction, is also investigated.

The specific questions to be addressed by empirical testing of the thesis propositions are more fully developed in Chapter 4. The research questions of most significance are briefly summarised as follows.

1. What is the relationship between club identification and customer satisfaction?
2. What is the relationship between the win/lose phenomenon and customer satisfaction?
3. What is the relationship between expectations and customer satisfaction?
4. What is the relationship between perceived performance and customer satisfaction?
5. What is the relationship between disconfirmation and customer satisfaction?

1.3 Justification for the Research

1.3.1 Theoretical justification

Madrigal (1995) is one of the few researchers to examine the determinants of sport customer satisfaction. Although his work will be discussed at some length in Chapter 3, it will be briefly reviewed in the current chapter because it provides the most comprehensive insight into the satisfaction process of sport customers. Furthermore, it contributes much to the theoretical justification of this thesis.

Madrigal (1995) researched spectators attending university women's basketball games to examine the cognitive and affective contributors of customer satisfaction with sport events. Madrigal focused specifically on the core service component, that is, the game itself. He found that the affective components of basking in reflected glory (BIRGing) (Cialdini et al., 1976) and enjoyment of the game contributed directly to customer

satisfaction. BIRGing and game enjoyment were also found to mediate the cognitive components of disconfirmation of expectations, team identification and quality of opponent.

Madrigal (1995) made an early and valuable contribution to the understanding of the process of sport customer satisfaction. However, his research provided only a partial insight into this complex process. First, he only measured satisfaction as an outcome of what happened on the actual playing court (i.e., the core service component). Other research depicts customer satisfaction as shaped by both the core service component and the peripheral service component (Iacobucci et al., 1994a, 1994b; Jones & Sasser, 1995; Walker, 1995). Therefore, this thesis will examine the simultaneous influence of both core and peripheral season ticket performance on customer satisfaction.

Second, customer satisfaction with single sport events was measured. However, the spectator sport service of professional sport clubs can be bought as a ticket to a single event or as a ticket to all, or several, home games for that season (i.e., a season ticket). This thesis researches customer satisfaction with the season ticket, which is an aggregate of many different events.

Third, Madrigal (1995) investigated the satisfaction of supporters of only one team. Yet different groups of people can hold very different expectations of the same product (Kim & Kim, 1998; Parasuraman, Berry & Zeithaml, 1991) and consequently experience very different levels of satisfaction. This thesis examines customer satisfaction across a league of clubs rather than with just one club or even a few clubs, hence providing an enhanced comprehension of the customer satisfaction phenomenon.

Fourth, Madrigal (1995) did not incorporate game outcome in his study. Although the effect of the win/lose phenomenon on customer satisfaction has not previously been tested empirically, it would appear logical that winning and losing have a great propensity to influence sport customer satisfaction. Wann and Schrader's (1997) study of the influence of winning on customer enjoyment and related work by Sloan (1979) and Zillmann, Bryant and Sapolsky (1979) attest to this. However, the extent to which winning and losing contribute to customer satisfaction has not been incorporated into

existing customer satisfaction models. This thesis examines the win/lose phenomenon, in a seasonal context, as an important contributor to customer satisfaction.

Fifth, the team identification scale used by Madrigal (1995) is problematic as it included items that not only measured group identification itself, but also outcomes of group identification (e.g., the extent to which the spectator displays the team name or insignia). There are several different types of sport-specific group identification. The ways in which these types of group identification influence customer satisfaction are unclear. This thesis will examine three separate yet related types of sport-specific group identification. Furthermore, the group identification measures used in this thesis do not include behavioural outcomes of the constructs.

Finally, Madrigal did not explore the process of customer satisfaction within the framework of disconfirmation of expectations theory. This theory in both its original and modified forms has been widely supported in many customer satisfaction studies (e.g., Bearden & Teel, 1983; Oliver 1980a, 1980b; Oliver & Bearden, 1983; Oliver & DeSarbo, 1988; Oliver & Swan, 1989b; Patterson, 1993b; Shaffer & Sherrell, 1997; Swan & Trawick, 1981; Tse & Wilton, 1988), but its applicability to the spectator sport service is untested.

In summary, this thesis will make a significant contribution because it investigates a particular facet of sport marketing that has largely been neglected: the determinants of professional sport customer satisfaction. Furthermore, it addresses several gaps in the sport marketing literature. First, it investigates sport customer satisfaction as a combined outcome of what happens during the actual game and of those factors external to the game. Second, it examines satisfaction with the season ticket, not just with the single sport event. Third, satisfaction across a sport league is assessed as opposed to satisfaction with one or two clubs. Fourth, the influence of winning and losing is considered. Fifth, three types of sport-specific group identification are accounted for. Finally, this research is conducted within the framework of the DEM, the dominant theoretical paradigm in the customer satisfaction literature (McCollough et al., 2000; Patterson, 1993b).

This thesis seeks to contribute to the sport marketing literature, particularly the emerging field of customer satisfaction research. However, this thesis also has the potential to be extended beyond the sport-specific context, as it is considerably more than just a study of a commonly researched problem in a new context. The inclusion of social, or group, identification as a key variable in the customer satisfaction process means that this research has application to the study of customer satisfaction in general.

The work of Belk (1984, 1987, 1988a, 1988b), Warde (1994), Hogg and Michell (1996) and also Scott and Lane (2000) indicated that customers can derive social identities from the products they purchase. Sport fans are examples of such customers. Fisher and Wakefield (1998) speculated that customer identification with powerful brands such as Coca-Cola and Nike might contribute to outcomes such as customer satisfaction. A better understanding of the determinants of customer satisfaction across a wide range of goods and services is foreseen if the social identifications of the customer are considered.

This thesis has additional importance because of the methodology employed. The season ticket service is a longitudinal service, with games being played for a period of approximately six months. This thesis employs a two-stage data collection process to cater for the temporal nature of the service. Most studies of the determinants of customer satisfaction are cross-sectional in nature. However, customer expectations are a pre-purchase construct and are best measured prior to consumption (Oliver, 1997). The two-stage design of the empirical research component enables the measurement of customer expectations prior to the service being experienced.

1.3.2 Managerial justification

The previous section outlined the principal theoretical justifications for this thesis. The managerial or practice-based justifications for this thesis will now be addressed. First, the value of investigating the determinants of customer satisfaction in the context of sport will be outlined. This will be followed by the justification for including club identification and the win/lose phenomenon. Finally, the rationale for investigating

customer satisfaction arising from both the core and peripheral service components of the season ticket service will be presented.

One of the most valuable outcomes associated with satisfied customers is repeat purchase behaviour (Kotler, 1991, 1994). Therefore, the subsequent rationale for studying the determinants of customer satisfaction is that practitioners are better positioned to satisfy and thus retain their customers if they know exactly what contributes to their satisfaction. Thus the identification of those factors that contribute to customer satisfaction is of great significance to sport organisations, particularly those sport organisations where demand for services consistently fails to meet service capacity.

The value of identifying the factors that contribute to the sport customer's satisfaction is further justified by the fact that loyalty to a team or a sport is not a guaranteed phenomenon. The demand for services of professional sport clubs only infrequently exceeds capacity. The increasing numbers of relocated teams, trading of players, mergers of sport teams, rule changes, player strikes, perceptions of exorbitant player salaries, increasing ticket prices and hyper-commercialisation of modern sport are several factors which may reduce the loyalty of sport fans. Sport organisations would be judicious not to rely on fan loyalty alone to continue to attract and, just as importantly, to retain customers.

Oliver (1997) reported how customers across an array of industries have become more demanding and increasingly difficult to satisfy. There is no reason to believe that customers of sport organisations are different. Today's sport customers are able to be more demanding and discerning because a wider range of viable sport service options are available to them. Shilbury and Westerbeek (1996) emphasised the heightened need for sport organisations to provide high quality services in an environment of intensifying competition.

Furthermore, there are many other organisations outside of the sporting arena which cater for the needs of the *would-be* sport consumer. That is, the professional sport club is but one player in a competitive market for leisure-time consumption that also contains the arts, cinemas and cultural organisations. Sport services are discretionary and

substitutable (Martin, 1990), that is, no one *has* to attend a football or basketball game. This is particularly the case for the fair-weather as opposed to the die-hard sport customer.

The inclusion of club identification and the win/lose phenomenon also has practical implications for the sport manager. Sport-specific group identification has been shown to affect both customer satisfaction with the spectator service (Madrigal, 1995) and the closely related construct of customer enjoyment with the spectator service (Wann & Schrader, 1997). Likewise, the win/lose phenomenon has great propensity to influence the levels of satisfaction customers of spectator sports experience. For example, Lapidus and Schibrowsky (1996) found that spectators experienced more satisfaction when they perceived their team had performed well than when they perceived it had performed poorly. Although Lapidus and Schibrowsky did not explicitly examine the effect of winning and losing per se, they found that better than expected game performance did improve satisfaction levels. In fact, their study demonstrated game performance could produce halo effects and influence satisfaction levels with non-game related, or peripheral, components of the spectator sport service such as music sound level and give-aways.

This thesis will examine whether club identification and the win/lose phenomenon affect the satisfaction of sport spectators. Studies that fail to incorporate these two variables provide the sport manager with only a partial understanding of what contributes to satisfaction with the professional spectator sport service. Such studies produce distorted results, skewed by game or season outcome, as well as by the level of sport-specific group identification. The reliance on such results has the propensity to lead to poorly informed marketing strategies.

In addition to the inclusion of club identification and the win/lose phenomenon, the consideration of the core component as well as the peripheral component of the sport service has important managerial implications. The core performance of a professional sport club may generally be beyond the control of the sport manager (Mullin, 1985; Mullin, Hardy & Sutton, 1993, 2000). However, it is still important to understand how both components of the sport service contribute to the satisfaction of the sport customer. To date, this has not been tested empirically. Knowledge of the extent to which each of

these components plays a role in the customer satisfaction response will provide the sport manager with an enhanced indication of where to direct marketing efforts.

This section has sought to justify the research problem as one worthy of investigation on both theoretical and practical grounds. There are many facets of sport customer satisfaction that have not been researched. This thesis will contribute to the theory of sport customer satisfaction by addressing some of the considerable gaps in the literature. Furthermore, this thesis will enable sport management practitioners to develop a more comprehensive understanding of those factors that drive the sport customer's satisfaction.

1.4 Methodology and Data Analysis

This section provides a brief overview of the methodology and data analysis employed in this thesis. Greater detail of the methodology and data analysis appears in Chapters 5, 6 and 7.

1.4.1 Research instrument development and administration

An exploratory phase as well as a descriptive, quantitative phase of data collection was employed in this thesis. The exploratory phase of the research comprised a literature review, interviews with practitioners and focus group interviews with season ticket holders of professional sport clubs. This phase was necessary for the development of the pilot study instrument.

The descriptive quantitative phase comprised three separate stages of data collection. Self-administered postal questionnaires were used for each of these stages. The first data collection phase was a pilot study for the purposes of scale development. The final research instruments were developed primarily from the results of the pilot study. Two research instruments were necessary: one for collecting pre-season data and another for collecting post-season data.

The pre-season questionnaire measured pre-consumption constructs such as expectations, whereas the post-season questionnaire measured post-consumption constructs such as customer satisfaction. Oliver (1980a) provided support for the proposed two-stage design with his recommendation that expectations be measured separately from and before disconfirmation.

1.4.2 Data analysis

Two main stages of analysis were conducted. The first stage analysed data collected via the pilot study and the second stage analysed data resulting from both the pre-season and post-season surveys of the main study.

Analysis of the pilot study data centred on the development of scales for the purpose of subsequent research instrument development. Exploratory factor analysis was used to identify the scales. Exploratory factor analysis is a data reduction technique that attempts to reduce a set of variables to a smaller, unknown number of underlying factors (Kim & Mueller, 1978).

Analysis of the main study data involved two distinct stages in accord with the two-step approach to structural equation modelling. The first stage involved confirmatory factor analysis and the development of a measurement model. Confirmatory factor analysis is a data reduction technique that attempts to reduce a set of variables to a smaller, predetermined number of underlying factors (Kim & Mueller, 1978). The predetermined number of factors was established by the results of the pilot study and theory. Confirmatory factor analysis enabled the development of one-factor congeneric measurement models and subsequently composite scales for the variables of interest to this thesis and their respective dimensions.

The second stage of the main study analysis utilised the composite scales developed in the first stage. Specifically, the composite scales were treated as input and incorporated into structural models. These models were then tested via structural modelling. Structural modelling entails testing empirically the various cause and effect

relationships among composite variables derived from the confirmatory factor analysis (Holmes-Smith & Rowe, 1994).

This section sought to provide a brief overview of the methodology and data analysis employed by this thesis. In summary, several stages of data collection took place. In the main the data were analysed with factor analysis, both exploratory and confirmatory, as well as with structural modelling.

1.5 Definitions

The following definitions have been used for the variables under investigation in this thesis. The definitions reappear in the literature review in Chapters 2 and 3.

Customer Satisfaction is defined as:

> *An evaluative response or outcome of the product purchase and consumption experience resulting from a comparison of what was expected and what was received (Patterson, 1993b, p. 453).*

Customer Expectations are defined as:

> *The preusage specification of the level of feature or product performance the customer wants as opposed to anticipates. (This thesis adapted this definition from Spreng and Mackoy's [1996] operationalisation of desires and Swan, Trawick and Carroll's [1982] definition of desired expectations.)*

Perceived Performance is defined as:

> *The customer's perception of the level of feature or product performance received. (This thesis adapted this definition from Yi [1990].)*

Disconfirmation is defined as:

> *The customer's perceived discrepancy between expectations and perceptions of feature or product performance (This thesis adapted this definition from Tse and Wilton [1988].)*

The following three sport-specific group identification definitions are grounded in Fisher and Wakefield's (1998) definition of group identification. Fisher and Wakefield derived their definition from the early work of Kelman (1961).

Team Identification is defined as:

> *The psychological orientation of the self, such that the individual defines himself or herself as part of the team.*

Fan Identification is defined as:

> *The psychological orientation of the self, such that the individual defines himself or herself as a fan of the team.*

Club Identification is defined as:

> *The psychological orientation of the self, such that the individual defines himself or herself as part of the club.*

The following two win/lose phenomenon definitions stem from the inherently competitive nature of professional sport. The definitions also stem from the way in which professional sport is organised. The winning and losing of a sport team can be considered in an event-specific context as well as a seasonal context.

Win/Lose Phenomenon (event-specific) is defined as:

> *The game outcome (i.e., either a win or a loss; winning and losing are mutually exclusive).*

Win/Lose Phenomenon (seasonal) is defined as:

> *The percentage of games the team won throughout the season (i.e., both winning and losing are treated as a matter of degree).*

Repeat Purchase Intention is defined as:

> *The inclination of a person to purchase a product they have consumed at least once before. (This definition is in accord with the work of Patterson et al. [1997] and Oliver and Swan [1989a].)*

The core and peripheral dimensions of season ticket performance central to this research are referred to as the on-court and off-court dimensions respectively. This is due to the basketball context in which the research is conducted. The definitions for on-court and off-court are in accord with Mullin's (1985) descriptions of the core and peripheral dimensions of sport.

On-court is defined as:

> *The core service dimension of the basketball season-ticket service (i.e., the actual game).*

Off-court is defined as:

> *The peripheral service dimension of the basketball season-ticket service (i.e., the game peripherals or product extensions).*

1.6 Delimitations

Although the sport service sector comprises a variety of sport organisations (e.g., government, community, marketing, consultation, management, facilities, private, profit, non-profit), this research is concerned with customer satisfaction as it pertains to professional sport clubs. A primary objective of many professional sport clubs is profitability (Cairns, Jennett & Sloane, 1986), a purported outcome of customer satisfaction (Anderson et al., 1994; Anderson & Mittal, 2000; Kotler, 1991, 1994). Additionally, this research is concerned with those professional sport clubs where the sport of interest is a team sport. Professional team sports in Australia include Australian Rules Football, Basketball, Cricket, Rugby Union, Rugby League and Soccer.

Since the conceptual models of this thesis are concerned with the satisfaction of customers of professional sport clubs it was necessary to conduct the research among a cohort of customers appropriate to this characterisation. There are many different types of customer of the professional sport club, including spectators, sponsors and employees. However, the customers of interest to this study are the game-attending spectators, in particular the season ticket holders. Pitts, Fielding and Miller (1994)

described four types of spectators, claiming that sport consumers who spectated in person were engaging in the "purest form of spectating" (p. 19).

Season ticket holders from a variety of clubs in a sport league as opposed to just a single club were selected for this thesis. This was necessary so that the seasonal effect of the win/lose phenomenon could be accounted for. Season ticket holders from the NBL were chosen for this research. Customers of the NBL clubs were chosen for the following reasons:

1. the NBL clubs sell season tickets as one of their product offerings and these tickets, are comparable to those sold by most other professional sport clubs;
2. basketball is an international sport;
3. the NBL clubs were supportive of the research; and
4. the NBL clubs have large numbers of season ticket holders.

In summary, the delimitations of this thesis are as follows:

1. professional team sport products are the only types of sport product considered;
2. season tickets are the only type of professional team sport product considered; and
3. season ticket holders of the NBL are the only sport customers considered.

1.7 Outline of Thesis

Following this chapter, Chapters 2 and 3 will provide a review of the literature germane to this research and the empirical and theoretical works relevant to this thesis. The purpose of the literature review chapters is to provide background and historical support for this thesis. Chapter 2 will explore the customer satisfaction body of research within which this study is located. Furthermore it will discuss the DEM of customer satisfaction as a theoretical framework central to this thesis, including each of its key variables of expectations, perceived performance and disconfirmation. Also discussed in Chapter 2 will be repeat purchase intention as a significant consequence of customer satisfaction.

In Chapter 3 the review of literature pertinent to sport-specific customer satisfaction will be presented. Key research focusing on the satisfaction of sport customers, sport-

specific group identification and the win/lose phenomenon will be outlined. The group identification of sport spectators will be explored within the framework of social identity theory. In addition, the win/lose phenomenon will be explored within the context of the uniqueness of the professional sport product and sport marketing theory.

Following the literature review, in Chapter 4 the specific propositions to be tested in this thesis will be outlined. In Chapter 5 the methodology to be used including the research setting and justification for the use of NBL season ticket holders as respondents will be described. Finally, the research design encompassing data collection, pre-testing, scale development and the research instruments will be outlined.

Chapters 6 and 7 will then present the research findings. Chapter 6 comprises the preliminary results of this thesis. Primarily, in Chapter 6 the development of the measurement model by way of confirmatory factor analysis and reliability analysis will be described. In Chapter 7 the results of proposition testing by way of structural modelling will be reported. The superior research model will be identified in Chapter 7.

Chapter 8 will present a summary and discussion of the research results along with the managerial implications of the research. The theoretical contributions of the research will be outlined and the limitations of the research addressed. Finally, possible future research directions will be considered.

1.8 Summary

This chapter has laid the foundations for the thesis. It has introduced the research problem and the five most significant research questions. The research has been justified on the grounds of theoretical and practical significance. The chapter then presented a brief overview and justification of the methodology. Definitions were given, the delimitations were described and the thesis structure was outlined. On these foundations, the thesis can proceed with a detailed description of the research.

CHAPTER 2
CUSTOMER SATISFACTION

2.1 Introduction

This thesis is concerned with developing a better understanding of those factors that influence customer satisfaction with the season ticket service of professional sport clubs. It is important for sport organisations to understand the determinants of sport customer satisfaction as customer satisfaction is a key determinant of customer retention (Kotler, 1994). Sport managers and sport marketers will be better positioned to satisfy and thus retain their customers if they understand what contributes to their customers' satisfaction. Furthermore, a satisfied clientele is necessary to a sport organisation's ability to generate revenue from a variety of sources including television rights and sponsorship (Shilbury & Westerbeek, 1996).

This thesis comprises two literature review chapters: Chapter 2 in which the general domain of customer satisfaction is explored and Chapter 3 which focuses on customer satisfaction in the context of sport. The key objective of each chapter is to discuss the literature germane to the variables under investigation in the two conceptual models (see Figures 1.1 and 1.2 in Chapter 1) and the theoretical foundation that links these variables. The literature review will provide a conceptual background and demonstrate support for the research propositions, which are developed in Chapter 4. The conceptual models, comprising variables proposed to influence customer satisfaction with the season ticket service of professional sport clubs, have not previously been tested.

The literature review in the current chapter proceeds as follows. First, the customer satisfaction area of research is discussed. In particular the numerous positive organisational outcomes associated with a largely satisfied customer base are reviewed. The focus of the chapter then shifts to determinants of customer satisfaction.

First the Disconfirmation of Expectations Model (DEM) and each of its component variables are discussed. Then an argument for the extension of the DEM to incorporate additional relationships among the component variables is made. This is followed by the identification of conflicting evidence in the literature regarding the inclusion of the expectations construct as a determinant of customer satisfaction. Repeat purchase intention is then discussed as an important consequence of customer satisfaction. The chapter concludes with the recommendation that two alternative research models be developed, with one model including the expectations construct and the other excluding it.

The second literature review chapter, Chapter 3, focuses on customer satisfaction as it pertains to sport. The chapter commences with an overview of the spectator sport service including its core and peripheral dimensions. A review of sport-specific customer satisfaction studies is then presented. The remainder of the chapter focuses on the two sport-specific variables proposed as additional determinants of customer satisfaction. This entails a discussion of sport-specific group identification, including club identification, team identification and fan identification, as well as the win/lose phenomenon. The chapter concludes with the identification of several research gaps in the sport-specific customer satisfaction literature.

2.2 Customer Satisfaction as an Area of Research

This thesis is as much a study of customer satisfaction as it is of sport marketing. The study of customer satisfaction is not a new phenomenon. As emphasised in Chapter 1, journals, books and even conferences addressing customer satisfaction have proliferated since the 1970s.

Historically the focus of researchers has been on customer satisfaction with manufactured goods. However, with the emergence and steady growth of the service sector, research addressing service satisfaction has also flourished (e.g., Bearden & Teel, 1983; Cadotte et al., 1987; Evrard & Aurier, 1994; Jayanti & Jackson, 1991; Liljander & Strandvik, 1997; Oliver, 1980a, 1993b; Oliver & DeSarbo, 1988; Oliver & Swan, 1989a; Patterson, 2000; Patterson et al., 1997; Patterson & Spreng, 1998; Spreng

& Mackoy, 1996; Swan & Trawick, 1981; Walker, 1995). Indeed the study of satisfaction with services may be even more important than the study of satisfaction with manufactured goods because the intangibility of services makes them more difficult for both the consumer and the producer to evaluate objectively (Iacobucci et al., 1994b). This thesis focuses on satisfaction with a service, the season ticket of professional sport clubs.

2.2.1 Defining customer satisfaction

The plethora of customer satisfaction literature arising from studies involving different researchers, products and customers has resulted in a multitude of customer satisfaction definitions. Multiple definitions give rise to several problems including those associated with developing valid measures and comparing and interpreting empirical results (Giese & Cote, 2000).

Oliver (1997) provided one explanation for the lack of a consensual definition of customer satisfaction. He argued "consumers may (and do) mean different things when they proclaim that they are 'satisfied' within different contexts and situations" (p. 26). If differences exist among consumers in what it means for them to be satisfied, then the disparate array of customer satisfaction definitions that currently exist is only to be expected.

To overcome the problem of multiple definitions, articles with the primary purpose of addressing the issue of exactly what customer satisfaction is have arisen (e.g., Giese & Cote, 2000). Giese and Cote (2000) identified three general components of customer satisfaction definitions from their review of the literature. These components were that: (a) customer satisfaction is a response (i.e., emotional or cognitive); (b) the response pertains to a particular focus (e.g., expectations); and (c) the response occurs at a particular time (i.e., post-consumption) (p. 2).

For the purpose of this thesis, a customer satisfaction definition provided by Patterson (1993b) was chosen. The definition not only contained each of the components of

Giese and Cote (2000) described previously but it also adhered to the disconfirmation of expectations theory of customer satisfaction in which this thesis is grounded.

Customer Satisfaction is defined as:

> *An evaluative response or outcome of the product purchase and consumption experience resulting from a comparison of what was expected and what was received (Patterson, 1993b, p. 453).*

2.2.2 Importance of customer satisfaction

The concept of satisfying customers has a long history and in recent years this concept has increased in importance (Anderson & Fornell, 1994). In the past, numerous companies took their customers for granted (Kotler, 1994). This was particularly the case for companies that operated in a regulated environment whereby customers had few, if any, alternative suppliers. Likewise, companies that enjoyed rapid growth could afford to lose dissatisfied customers, confident that they could be replaced without too much difficulty.

However, in today's hyper-competitive market place, the customers and not the marketers are increasingly calling the shots. The commodification and extensive range of alternatives for the majority of goods and services have helped create more demanding and discerning customers. No longer can most organisations afford to be complacent about poor satisfaction levels, as their customers can often take their business elsewhere. Kotler (1994) emphasised that the best way to prevent customer attrition is through high levels of customer satisfaction.

Therefore, the importance of having satisfied customers cannot be overstated. It is widely acknowledged (e.g., Anderson, 1993; Anderson & Fornell, 1994; Anderson et al., 1994; Bearden & Teel, 1983; Bitner, 1990; Churchill & Surprenant, 1982; Fornell, 1992; Kotler, 1991, 1994; Oliver, 1993a, 1996; Shemwell, Yavas & Bilgin, 1998; Stauss & Neuhaus, 1997) that favourable business outcomes are associated with customer satisfaction. For example, Anderson et al. (1994) and Fornell (1992) found a strong positive relationship between customer satisfaction and repurchase behaviour.

Additionally, Shemwell et al. (1998) reported decreased complaints, increased positive word-of-mouth, emotional bonding and a commitment to continue the service relationship with increased levels of customer satisfaction.

Kotler (1994, p. 20) added to the list of positive business consequences associated with customer satisfaction. He noted that the satisfied customer also: (a) buys additional products as the company introduces and upgrades its products; (b) pays less attention to competing brands and advertising and is less price sensitive; (c) offers product/service ideas to the company; and (d) costs less to serve than new customers because transactions are routinised.

Furthermore, satisfied customers can lead to a reduction in marketing expenses as it costs a firm considerably less to retain a customer than lure a new one (Anderson & Fornell, 1994; Buttle, 1996). Rosenberg and Czepiel (1984) found that, on average, attracting new customers is six times more expensive than retaining current customers.

Due to the many favourable outcomes of having a satisfied customer base, several researchers (e.g., Anderson & Fornell, 1994; Anderson et al., 1994; Anderson & Mittal, 2000; Kotler, 1991, 1994) have proposed a link between customer satisfaction and profitability. Kotler (1991) for example, claimed "(h)igh satisfaction ratings are widely believed to be the best indicator of a company's future profits" (p. 19).

Although the customer satisfaction-profitability relationship has great intuitive appeal, customer satisfaction is obviously not the sole determinant of financial success. Nor does it impact in isolation on such factors as retention, loyalty and positive word-of-mouth. Several other factors (e.g., competition, economic conditions) also play a considerable role in any organisation's prosperity (Anderson et al., 1994; Julander, Mägi, Jonsson & Lindqvist, 1996). Furthermore, as indicated by Anderson and Mittal (2000), the relationships in the satisfaction-profit chain are asymmetric and non-linear. Nevertheless, satisfying customers is of significant consequence to the marketer because companies cannot afford to take their customers for granted. Marketers realise that high levels of customer satisfaction can provide their organisations with a competitive advantage (Dabholkar, 1995; Shemwell et al., 1998).

2.3 Determinants of Customer Satisfaction

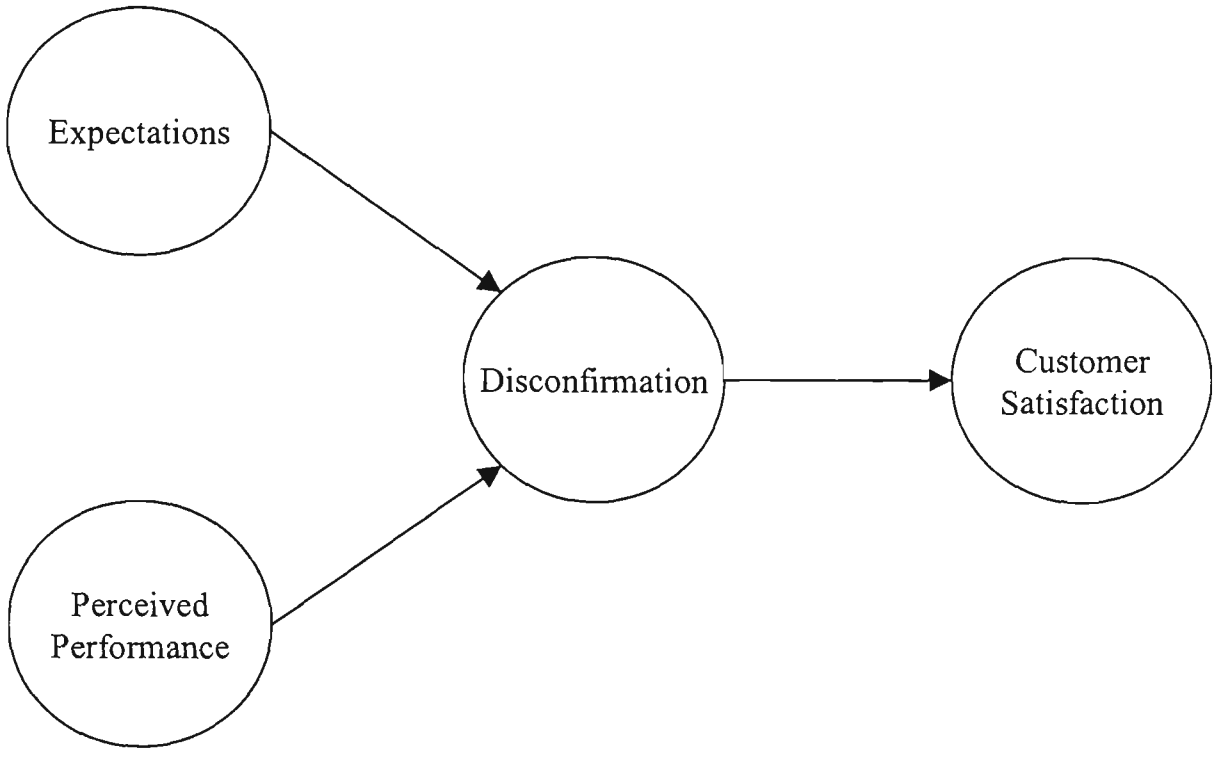
Two broad domains of customer satisfaction research include the determinants of customer satisfaction and the consequences, or outcomes, of customer satisfaction. This thesis is an investigation into the determinants of customer satisfaction in a sport-specific context.

The importance of the satisfied customer has prompted numerous researchers (e.g., Bearden & Teel, 1983; Churchill & Surprenant, 1982; Evrard & Aurier, 1994; Jayanti & Jackson, 1991; Liljander & Strandvik, 1997; Oliver, 1980a, 1993b; Oliver & DeSarbo, 1988; Oliver & Swan, 1989a, 1989b; Patterson, 1993a, 1993b; Patterson et al., 1997; Patterson & Spreng, 1998; Spreng et al., 1996; Spreng & Olshavsky, 1993; Swan & Trawick, 1981) to investigate the determinants of customer satisfaction.

Although the quantity of research addressing the determinants of service satisfaction lags behind that which pertains to goods satisfaction, a number of researchers have contributed to this area (e.g., Bearden & Teel, 1983; Cadotte et al., 1987; Evrard & Aurier, 1994; Jayanti & Jackson, 1991; Liljander & Strandvik, 1997; Madrigal, 1995; Oliver, 1980a, 1993b; Oliver & DeSarbo, 1988; Patterson et al., 1997; Patterson & Spreng, 1998; Spreng & Mackoy, 1996; Swan & Trawick, 1981). The types of services which have been investigated include automobile repairs, restaurants, cinemas, employment agencies, hair dressing salons, flu innoculation programs, education, the stock market, professional business services, car dealerships and, more recently, sport.

A variety of factors have been proposed to contribute to customer satisfaction, including expectations, perceived performance, disconfirmation, quality, needs, desires, regret, emotion, equity and attribution (Oliver, 1997). However, the three determinants that appear most regularly in the literature are expectations, perceived performance and disconfirmation. Together with customer satisfaction, these three determinants constitute the DEM (Churchill & Surprenant, 1982). See Figure 2.1 for the original version of the DEM.

Figure 2.1 Original Disconfirmation of Expectations Model (DEM)



2.4 Disconfirmation of Expectations Model (DEM)

The DEM is the dominant customer satisfaction paradigm in the literature (McCollough et al., 2000; Patterson, 1993b). In its original or modified form, the DEM has received considerable acceptance in the study of customer satisfaction with goods (e.g., Oliver, 1993a; Oliver & Bearden, 1983; Oliver & Swan, 1989b; Patterson, 1993b; Tse & Wilton, 1988). The DEM has also gained strong support in studies of service satisfaction (e.g., Bearden & Teel, 1983; Jayanti & Jackson, 1991; McCollough et al., 2000; Oliver, 1980a, 1980b, 1993b; Oliver & Burke, 1999; Oliver & DeSarbo, 1988; Shaffer & Sherrell, 1997; Spreng & Mackoy, 1996; Swan & Trawick, 1981).

The original DEM comprised four key components (see Figure 2.1). These were expectations, perceived performance, disconfirmation and customer satisfaction.

Expectations are defined as:

> *The preusage specification of the level of feature or product performance the customer wants as opposed to anticipates. (This definition is grounded in the work of Spreng and Mackoy [1996] and Swan et al. [1982].)*

Perceived Performance is defined as:

> *The customer's perception of the level of feature or product performance received. (This definition is grounded in the work of Yi [1990].)*

Disconfirmation is defined as:

> *The customer's perceived discrepancy between expectations and perceptions of feature or product performance. (This thesis adapted this definition from Tse and Wilton [1988].)*

Customer Satisfaction is defined as:

> *An evaluative response or outcome of the product purchase and consumption experience resulting from a comparison of what was expected and what was received (Patterson, 1993b, p. 453).*

The DEM is based on the premise that customers form certain expectations of product performance, observe or experience the performance and form perceptions of the performance. It is proposed that these perceptions of performance will be compared to the customers' originally held expectations (Churchill & Surprenant, 1982; Oliver, 1980a, 1993a). This comparison can result in one of three outcomes: negative disconfirmation, zero disconfirmation (i.e., confirmation), or positive disconfirmation.

Negative disconfirmation results when performance falls short of expectations. Zero disconfirmation, or simply confirmation, occurs when performance equals expectations. Positive disconfirmation results when performance exceeds expectations. The original and simplest interpretation of the outcomes of these three types of disconfirmation is that satisfaction results from expectations being met or exceeded (i.e., confirmation and positive disconfirmation) and dissatisfaction results from expectations not being met (Churchill & Surprenant, 1982; Oliver, 1997; Patterson, 1993b). However, as will be

outlined later, the outcomes of disconfirmation can vary with the expectations type used (Miller, 1977; Swan & Trawick, 1980; Swan et al., 1982).

Thus the basic tenet of the DEM is that customer satisfaction is related to the size and direction of disconfirmation arising from the customer's comparison of perceived performance to initial expectations. The DEM posits disconfirmation as the most influential determinant of customer satisfaction.

2.4.1 Criticisms of the Disconfirmation of Expectations Model (DEM)

Despite the previously noted considerable support for the DEM, it has nevertheless been criticised (e.g., Cadotte et al., 1987; Oliver, 1997; Spreng et al., 1996; Spreng & Olshavsky, 1993; Westbrook & Reilly, 1983). Criticisms are grounded in: (a) its exclusion of certain relationships and (b) its use of expectations.

The following sections will address each of these grounds for criticism. It will be argued that: (a) the DEM can be extended to include additional meaningful relationships and (b) conflicting evidence exists of the value of using expectations in the study of customer satisfaction determinants, particularly when the product under investigation is a longitudinal service.

2.4.1.1 Exclusion of certain relationships

In its original form the DEM comprises only three direct relationships. These relationships are:

- Expectations ➜ Disconfirmation;
- Perceived Performance ➜ Disconfirmation; and
- Disconfirmation ➜ Customer Satisfaction.

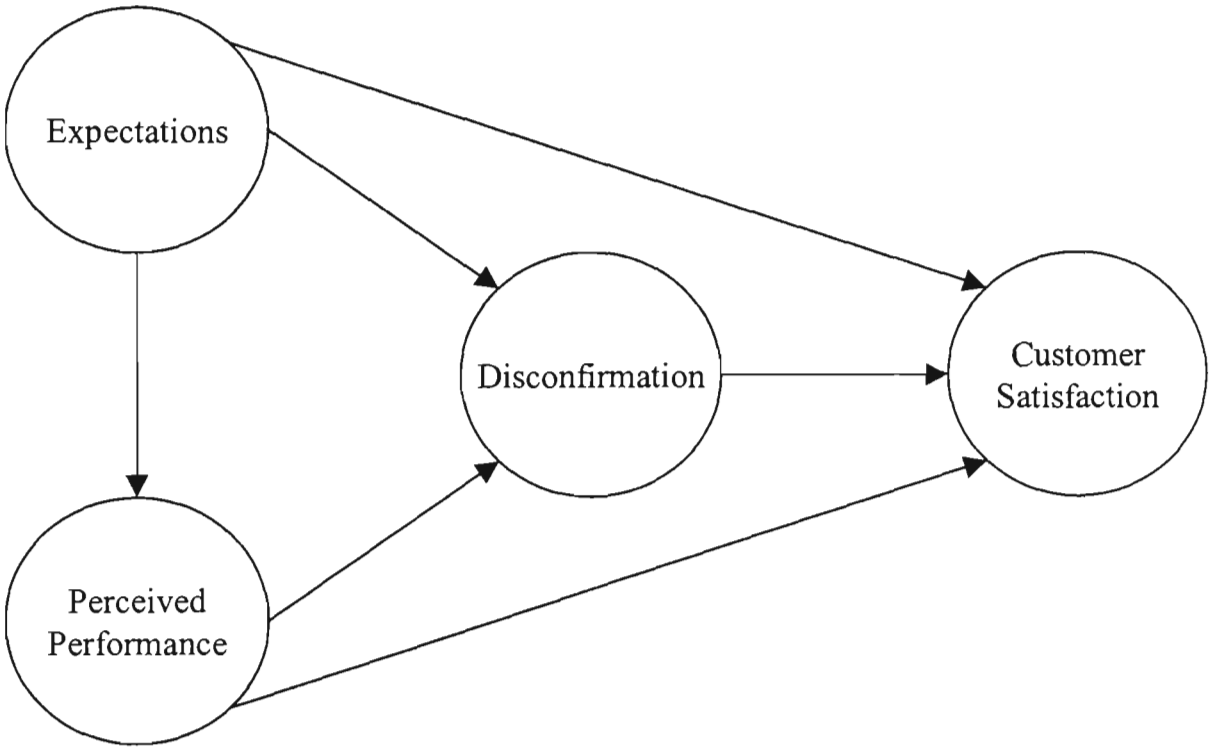
The DEM posits disconfirmation as the key determinant of customer satisfaction. Customer expectations and perceived performance are shown to influence customer

satisfaction only indirectly through the mediating disconfirmation variable. However, since its first application a considerable body of research (e.g., Jayanti & Jackson, 1991; Shaffer & Sherrell, 1997; Spreng & Mackoy, 1996) has provided evidence that three additional direct relationships, or effects, can be found among the DEM's four component variables. These additional relationships are:

- Expectations ➔ Customer Satisfaction;
- Expectations ➔ Perceived Performance; and
- Perceived Performance ➔ Customer Satisfaction.

An extended version of the DEM comprising each of the possible six relationships just listed appears in Figure 2.2.

Figure 2.2 Extended Disconfirmation of Expectations Model (DEM)



The following discussion will address the three additional relationships found to exist among the component variables of the DEM. First, the two direct effects of

expectations on customer satisfaction and perceived performance will be discussed. This will be followed by a discussion of the direct effect of perceived performance on customer satisfaction.

2.4.1.1.1 Additional expectations effects

The original DEM specifies that the influence of expectations on customer satisfaction is only indirect and that it is mediated by disconfirmation (Oliver, 1997). However, empirical support exists for a direct relationship between expectations and customer satisfaction (Bearden & Teel, 1983; Churchill & Surprenant, 1982; Shaffer & Sherrell, 1997; Westbrook & Reilly, 1983) as well as a direct relationship between expectations and perceived performance (Churchill & Surprenant, 1982; Patterson, 1993a; Spreng & Mackoy, 1996).

Expectations → customer satisfaction relationship

Bearden and Teel (1983) examined the determinants of customer satisfaction in their study using automobile repairs and services. They found a direct relationship between expectations and customer satisfaction (beta = .77). A similar relationship (beta = .77) was detected when they replicated the study using another sample.

In a study using two contrasting products, a video disc player and a potted plant, Churchill and Surprenant (1982) also investigated the determinants of customer satisfaction. The effect of expectations was found to differ among the two product types. Expectations had a direct effect on customer satisfaction with the potted plant (beta = .221) but not with the video disc player.

Shaffer and Sherrell (1997) tested the determinants of customer satisfaction with two different aspects of a healthcare service (i.e., access mechanisms and the physician) given two different levels of customer involvement (i.e., low and high). Their study involved four separate models. A direct relationship (beta = .46) between expectations and customer satisfaction was revealed for the model of satisfaction with the access mechanisms of the service under a high level of involvement. No direct relationships between expectations and customer satisfaction were detected in the other models.

Yet another study to demonstrate a direct effect of expectations on customer satisfaction was that of Westbrook and Reilly (1983) in their study using automobiles. They tested three alternative models, two with a direct causal relationship between expectations and customer satisfaction. Significant expectations effects were detected for both models (beta = .43 and .41).

Although direct relationships between expectations and customer satisfaction have been supported empirically, Oliver (1993b) cautioned that a direct expectation effect on satisfaction is ambiguous as to the direction of effect. Whereas very high expectations are difficult to meet and are therefore more likely to result in customer dissatisfaction (i.e., a negative relationship), high expectations can also contribute to customer satisfaction (i.e., a positive relationship).

Positive expectation effects arising from high expectations can be explained as assimilation effects (Oliver, 1997). Assimilation effects involve customers adjusting their satisfaction ratings to more closely approximate their initial expectations. Voss, Parasuraman and Grewal (1998) maintained that assimilation is most likely to occur if performance is reasonably close to expectations.

Assimilation effects are the result of people being able to rationalise apparent discrepancies (Clary & Tesser, 1983). Assimilation theory states people are averse to acknowledge disparities between the initial position held (e.g., their expectations) and subsequent events (e.g., their perceptions of performance) (Oliver, 1997). Customers can protect their egos by assimilating their evaluation of product performance into their initial expectation level. Furthermore, even when ego preservation is not a motivating mechanism, when customers have difficulty evaluating product performance they may have no choice but to rely on their expectations to determine their customer satisfaction evaluations (Anderson & Fornell, 1994).

Strength of expectations → customer satisfaction relationship

Several studies have provided empirical evidence that the relationship between expectations and customer satisfaction can be direct as well as indirect. When compared to the direct effects of perceived performance and disconfirmation on customer satisfaction, however, the expectations effect is typically the weakest (e.g.,

Churchill & Surprenant, 1982; Oliver & Burke, 1999; Patterson, 1993b; Westbrook & Reilly, 1983). For example in Churchill and Surprenant's (1982) study with a potted plant, the disconfirmation effect (beta = .72) and perceived performance effect (beta = .27) were both stronger than the expectations effect (beta = .22). Moreover, in the same study with a video disc player they found no expectations effect.

However, upon rare occasions the direct effect of expectations on customer satisfaction has been found to be stronger than other direct effects. For one of their models of customer satisfaction with a healthcare service Shaffer and Sherrell (1997) revealed that the expectations effect (beta = .46) was greater than the perceived performance effect (beta = .000). Likewise, with a stockmarket service Oliver and DeSarbo (1988) found that the expectations effect (F = 141.77) was stronger than the perceived performance effect (F = 49.22).

In summary, not only can expectations have an indirect influence on customer satisfaction, as proposed by the original DEM, they can also have a direct influence. The strength of the expectations effect on customer satisfaction is generally the weakest of the additional DEM direct effects (e.g., Churchill & Surprenant, 1982), although there are some exceptions to this outcome (e.g., Shaffer & Sherrell, 1997).

Expectations ➔ perceived performance relationship

As previously noted, Churchill and Surprenant (1982) studied the determinants of customer satisfaction of two separate products, a video disc player and a potted plant. Whereas the effects of expectations on customer satisfaction differed, the effects of expectations on perceived performance were similar. Strong, positive direct effects were found for both product types. The effect for the video disc player (beta = .51) was stronger than the effect for the potted plant (beta = .43).

In a study investigating the determinants of customer satisfaction with a slow-combustion heater, Patterson (1993b) also found a direct effect between customer expectations and perceived performance (beta = .40). Spreng and Mackoy (1996) revealed the same result with their study of the determinants of customer satisfaction and service quality with an education related service (beta = .55). Furthermore, in Shaffer and Sherrell's (1997) satisfaction study of healthcare services, direct

relationships (beta = .45 – .62) between expectations and perceived performance were found for each of the four models tested.

Together with the relationship between expectations and customer satisfaction, the relationship between expectations and perceived performance can also be explained with the use of assimilation theory (Oliver, 1997; Oliver & Burke, 1999). In other words, people will change their perceptions of performance to reflect their initial expectations. Thus the directionality of the effect is ambiguous. Oliver and Burke (1999) identified an assimilation-based expectations effect on perceived performance in their study of customer satisfaction with four similar dining services.

Strength of expectations → perceived performance relationship

Several studies have provided empirical support for a relationship between expectations and perceived performance. When compared to the other direct effects the strength of this effect varies greatly (e.g., Churchill & Surprenant, 1982; Patterson, 1993b; Shaffer & Sherrell, 1997; Spreng & Mackoy, 1996).

In Spreng and Mackoy's (1996) study using an educational service, the relationship between expectations and perceived performance (beta = .55) was the second strongest relationship in the model. Only the relationship between perceived performance and disconfirmation (beta = .76) was stronger.

However, in Shaffer and Sherrell's (1997) healthcare study, the strength of the relationship between expectations and perceived performance varied for each of the four models. In one model the relationship between expectations and perceived performance (beta = .62) was stronger than any other relationship, yet in another model the relationship (beta = .52) was weakest.

In summary, not only do expectations have an indirect influence on customer satisfaction through disconfirmation, they also influence it indirectly through perceived performance. The strength of this effect has been found to vary considerably between products and even between the same product's dimensions.

2.4.1.1.2 Additional perceived performance effect

Perceived performance → customer satisfaction relationship

The original DEM specifies that the influence of perceived performance on customer satisfaction is only indirect and is mediated by disconfirmation (Oliver, 1997). However, substantial empirical support (e.g., Churchill & Surprenant, 1982; Jayanti & Jackson, 1991; Patterson, 1993b; Shaffer & Sherrell, 1997; Spreng & Olshavsky, 1993) exists for a direct relationship between perceived performance and customer satisfaction.

The direct effect of perceived performance on customer satisfaction has been detected for a wide range of goods and services, some of which included potted plants (beta = .27) and video disc players (beta = .94) (Churchill & Surprenant, 1982), hairdressing (beta = .57) (Jayanti & Jackson, 1991), slow-combustion heaters (beta = .41) (Patterson, 1993b), healthcare (beta = .35 - .71) (Shaffer & Sherrell, 1997) and cameras (beta = .27) (Spreng & Olshavsky, 1993).

Strength of perceived performance → customer satisfaction relationship

Not only have direct relationships between perceived performance and customer satisfaction been identified. In some studies (e.g., Jayanti & Jackson, 1991; Patterson, 1993b) perceived performance, not disconfirmation, has been shown to play the dominant role in the satisfaction process.

For example, Jayanti and Jackson (1991) found that the direct effect of perceived performance (beta = .57) contributed more to satisfaction with a hair styling service than did the direct effect of disconfirmation (beta = .46). Patterson (1993b) reported that perceived performance also had a greater direct effect (beta = .41) on customer satisfaction with a slow-combustion heater than did the direct effect of disconfirmation (beta = .29). Moreover, in his study the total effect of perceived performance (beta = .71) was far greater than for disconfirmation (beta = .29).

So, not only does perceived performance have an indirect influence on customer satisfaction, as proposed by the original DEM, it also has a direct one. Even though the strength of these influences may differ somewhat from study to study, robust empirical studies (e.g., Jayanti & Jackson, 1991; Patterson, 1993b) indicated that in some

circumstances, perceived performance, not disconfirmation was the most influential determinant of customer satisfaction.

2.4.1.1.3 Summary of additional effects

In summary, there is substantial empirical support for relationships among customer expectations, perceived performance, disconfirmation and customer satisfaction, other than those depicted by the original DEM. These additional relationships are:

- Expectations ➜ Customer Satisfaction;
- Expectations ➜ Perceived Performance; and
- Perceived Performance ➜ Customer Satisfaction.

In the main, the relationship between expectations and customer satisfaction is the weakest of the DEM's relationships (e.g., Churchill & Surprenant, 1982; Oliver & Burke, 1999; Patterson, 1993b; Westbrook & Reilly, 1983), whereas the relationship between perceived performance and customer satisfaction is the most strongly supported (e.g., Jayanti & Jackson, 1991; Patterson, 1993b). In addition, the relationship between expectations and perceived performance has demonstrated great variation in strength (e.g., Shaffer & Sherrell, 1997).

The criticism that the DEM excludes substantial relationships among its component variables is a valid one. This is why, in the main, the original DEM is no longer used when studying the determinants of customer satisfaction. Extended versions of the DEM allowing for additional relationships are preferred (e.g., Jayanti & Jackson, 1991; Patterson, 1993b; Shaffer & Sherrell, 1997) as they provide a much more comprehensive representation of the customer satisfaction process. However, it should be noted that not all of these extended models include each of the six possible relationships described in this chapter. This is because the customer satisfaction process can vary from product to product (e.g., Churchill & Surprenant, 1982) and even between dimensions of the same product (e.g., Oliver & Burke, 1999; Shaffer & Sherrell, 1997).

2.4.1.2 Use of expectations

The use of the expectations construct in studies of customer satisfaction can be criticised with regard to its appropriateness as a comparative referent, or standard, when alternative referents are available. It can also be criticised due to the dynamic nature of customer expectations. The criticism pertaining to the use of expectations as a comparative referent will be addressed first. Then the criticism relating to the dynamic nature of expectations will be discussed.

2.4.1.2.1 Expectations as a comparative referent

This section describes the different types of expectations that exist in the customer satisfaction literature. It also outlines why the use of expectations as comparative referents in studies of customer satisfaction is criticised. A number of alternative comparative referents are then introduced. This section concludes with a rationale for the continued use of expectations as comparative referents in studies of customer satisfaction.

Most customer satisfaction researchers have agreed that some sort of comparison takes place in the customer satisfaction process (e.g., Cadotte et al., 1987; Churchill & Surprenant, 1982; Spreng & Olshavsky, 1993; Westbrook & Reilly, 1983). What these researchers have tended to disagree on, however, is the type of comparative referent customers use in this process. The most common criticism of the DEM is that it uses expectations, in particular predictive expectations, instead of some other comparative referent (Cadotte et al., 1987; Spreng & Olshavsky, 1993; Westbrook & Reilly, 1983; Woodruff, Cadotte & Jenkins, 1983).

Miller (1977) was probably the first to acknowledge the differences between the various types of customer expectations in the context of customer satisfaction. He identified four different expectations. These included ideal (can be) expectations, expected (will be) expectations, minimum tolerable (must be) expectations and deserved (should be) expectations. Ideal expectations operate at a wished for level. Alternatively, expected levels of performance are much more realistic and reflect the probable or most likely performance. Minimum tolerable expectations reflect the minimal level of performance that will be tolerated or considered acceptable. Finally, deserved expectations reflect

the performance to which customers believe they are entitled given their inputs or investments.

Other types of expectations also appear in the literature. For example, Swan et al. (1982) referred to desired expectations. They described desired expectations as "the consumer's preusage specification of the level of product performance that would be necessary in order to satisfy or please the consumer" (p. 15). Parasuraman et al. (1991) referred to desired expectations in terms of the level of service the customer hoped to receive. They described the desired level of service as "a blend of what the customer believes can be and should be" (p. 42).

Swan et al. (1982) utilised desired expectations as well as predictive expectations in their disconfirmation study of customer satisfaction with a restaurant. Their results revealed different levels of satisfaction depending upon the comparative referent used. Higher levels of customer satisfaction were found when desired expectations were met than when predictive expectations were met. Swan and Trawick (1980) reported similar results when they investigated the roles of predictive and desired expectations in customer satisfaction with a fabric cleaner. The results of both studies supported Miller's (1977) sometimes forgotten advice that researchers must explicitly consider various performance expectations as they may yield different types of satisfaction responses.

Customer satisfaction studies, especially those employing the DEM framework, traditionally utilised predictive (will be) expectations (Oliver, 1993b; Parasuraman, Zeithaml & Berry, 1988; Tse & Wilton, 1988). However, an increasing number of studies are employing higher level expectations such as deserved expectations (e.g., Patterson, 1993a), desired expectations (e.g., Swan & Trawick, 1980; Swan et al., 1982) and even ideal expectations (e.g., Tse & Wilton, 1988).

The trend towards the use of higher level expectations does much to combat criticism of the DEM's dependence upon expectations as the comparative referent against which product performance is judged. This is because the DEM posits customer satisfaction as the outcome of confirmation and positive disconfirmation and fails to account for the possibility of very low expectations. Yet it is possible that dissatisfaction as opposed to

satisfaction may result when very low predictive expectations exist (Oliver, 1997; Swan et al., 1982). It does not make sense that customers would be satisfied if they anticipated extremely poor service but only received slightly poor service. In this example, the service would be better than expected but still nothing to be satisfied with. The use of higher level expectations diminishes the possibility of dissatisfaction arising from positive disconfirmation and thus dispels much of the criticism directed at the DEM.

Irrespective of the utility of employing higher level expectations in studies of customer satisfaction, some researchers (e.g., Cadotte et al., 1987; Spreng & Mackoy, 1996; Spreng & Olshavsky, 1993; Tse & Wilton, 1988; Westbrook & Reilly, 1983; Woodruff et al., 1983) have proposed a number of other evaluative standards as part of conceptualising the satisfaction process. These standards include: (a) norms (Cadotte et al., 1987; Woodruff et al., 1983); (b) values (Westbrook & Reilly, 1983); and (c) desires (Spreng & Mackoy, 1996; Spreng & Olshavsky, 1993).

(a) Norms

Woodruff et al. (1983) proposed two types of norms as alternative comparative referents to predictive expectations of the focal brand (i.e., the brand under study). They described these norms in terms of the standard that should be provided to meet customer needs and wants. In this context norms share a likeness to Miller's (1977) deserved expectations. The two types of norms were brand-based norms and product-based norms. Brand-based norms operate when one brand dominates the consumer's set of brand experiences. In contrast, product-based norms operate when a consumer has experience with several brands of a particular type of product. Woodruff et al. (1983) referred to both norms as experience-based norms.

Woodruff et al. (1983) argued that norms were superior to expectations in the study of customer satisfaction. They claimed that the use of expectations as the comparative referent limits the customer's experiences to those concerned with the focal brand. However, this is not necessarily true. Expectations are influenced by many factors in addition to experience with the focal brand, including experience with competing brands (Zeithaml, Berry & Parasuraman, 1991).

Clow, Kurtz, Ozment and Soo Ong (1997) studied determining factors of customer expectations. In addition to customer experience, they identified: (a) service promises made by the service organisation, for example, through advertising; (b) tangible clues in the physical environment of the service organisation, for example clean and comfortable food service areas; (c) word-of-mouth communications; (d) price; and (e) image of the service organisation to have all influenced customer expectations.

Parasuraman et al. (1991) identified other determinants of customer expectations. These determinants included: (a) the number of alternative service options; (b) emergency or recovery situations; and (c) the expectations of a customer's affiliates, or associates. Therefore, given the many determining factors of customer expectations, it is unreasonable to assume that the expectations customers use in satisfaction judgements will not be shaped by factors other than their experiences with the focal brand.

Cadotte et al. (1987) used the two experienced-based norms as well as predictive expectations in a study using three different types of restaurant dining services. They found empirical support for norms as alternative evaluation standards in customer satisfaction judgments. Their norms-based models outperformed the predictive expectations-based model in explaining variation in customer satisfaction across the three different restaurant types. The norms-based models were also characterised by a better fit.

(b) Values

Westbrook and Reilly (1983) proposed customer values as an alternative comparative referent to customer expectations. They did not explicitly define values. Rather, they likened them to and used them interchangeably with needs, wants and desires. In this context values share a likeness to Miller's (1977) deserved expectations and also Parasuraman et al.'s (1991) desired expectations. The outcome of the comparison process between values and performance is referred to as value-percept disparity (Westbrook & Reilly, 1983).

Westbrook and Reilly (1983) tested three alternative models in their study using automobiles. Each model was based on the DEM and included the value-percept

disparity variable. In the better fitting model, value-percept disparity was found to influence customer satisfaction directly (beta = .18). However, the direct effects of expectations (beta = .41) and disconfirmation (beta = .53) were considerably stronger.

(c) Desires

One of the more popular and recently investigated alternative comparative referents is customer desires. Spreng and Olshavsky (1993) defined desires as "the attributes, levels of attributes and benefits the consumer believes will lead to or are connected with higher-level values" (p. 171). Spreng and Mackoy (1996) described desires in terms of the level of service customers want as opposed to expect. In this context, desires closely resemble Parasuraman et al.'s (1991) desired expectations. The outcome of the comparison process between desires and performance is referred to as desires congruency (Spreng & Mackoy, 1996).

In studies involving evaluations of an education-related service and a camera respectively, Spreng and Mackoy (1996) and Spreng and Olshavsky (1993) demonstrated that desires congruency plays a considerable role in customer satisfaction. Spreng and Mackoy (1996) found that both desires congruency (beta = .22) and disconfirmation of expectations (beta = .26) contributed to satisfaction with an education-related service. Alternatively, Spreng and Olshavsky (1993) found that only desires congruency influenced customer satisfaction with a camera (beta = .66). The effect of disconfirmation was non-significant.

In summary, there is empirical support for the use of norms, values and desires as the comparative referent against which performance is judged in the formation of customer satisfaction (e.g., Cadotte et al., 1987; Spreng & Mackoy, 1996; Westbrook & Reilly, 1983). However, as noted by Oliver (1997), there is considerable overlap among comparative standards, including those discussed in this thesis, with many of them having a corresponding expectations type. Examples of alternative comparative standards with overlapping expectations types include norms and deserved/should be expectations, values and desired expectations and desires and desired expectations. Indeed desires are very similar, if not the same as desired expectations! For example, it makes good sense that what customers want or desire can also be what they expect (e.g., a fast and entertaining hockey game).

Accordingly, Oliver (1997) maintained that the expectations construct subsumes many of the comparative referents against which performance is judged (Oliver, 1997). If one accepts this position then there is limited ground to criticise the DEM on the basis that it includes the expectations construct. This is particularly the case when higher level expectations, such as desired expectations, are used.

2.4.1.2.2 Expectations are dynamic

The use of expectations in the study of customer satisfaction determinants can also be criticised on the grounds that expectations are dynamic. It has long been established that customer expectations can and do change (e.g., Oliver, 1997; Oliver & Burke, 1999; Parasuraman et al., 1991; Walker, 1995). Indeed Oliver and Burke (1999) demonstrated this empirically by measuring expectations both before and after a dining experience in their study of expectation processes in satisfaction formation.

A variety of factors can effect change in a customer's expectations. This is because numerous determinants of customer expectations exist for any given product (Clow et al., 1997; Parasuraman et al., 1991; Voss et al., 1998). One of the more commonly cited determinants of customer expectations is customer experience (Clow et al., 1997; Parasuraman et al., 1991; Voss et al., 1998; Walker, 1995). Customer experience may pertain to a previous and separate service encounter or it may pertain to an earlier phase or stage of the current service experience.

Typically customer experience refers to a previous and separate encounter (e.g., Clow et al., 1997; Parasuraman et al., 1991; Voss et al., 1998; Walker, 1995). For example, a customer's expectations of trying to purchase tickets to the Olympic Games scheduled for Athens in 2004 may be affected by his or her experience of purchasing tickets for the Sydney 2000 Games.

Walker (1995) referred to the influence of experience on customer expectations in terms of the various stages that constitute the service encounter. He described the overall service encounter evaluation as a "function of three separate, yet integrated, evaluation stages" (p. 10). These stages are: (a) first stage peripheral; (b) second stage core; and (c) third stage peripheral. Walker claimed that the evaluations of the peripheral stages

can influence the expectations the customer has of the core service component as well as the overall service encounter evaluation.

Using a professional sport event as an example, the first stage peripheral performance could involve the accessibility of parking, length of queues to enter the stadium and pre-game snacks and beverages. The second stage core performance would involve the actual game itself. Finally, the third stage peripheral performance could involve the availability of merchandise and the ease of leaving the stadium.

Walker's (1995) three-stage model of service encounter satisfaction provided a useful mechanism for understanding the role of expectations in the customer satisfaction process with discrete service encounters. At the same time it emphasised the dynamic and thus problematic nature of expectations for studies of customer satisfaction, particularly for a longitudinal service such as the season ticket service. Not only is it possible for season ticket holder expectations to change during a game, it is also possible for them to fluctuate between games throughout the season.

The dynamic nature of customer expectations presents problems for the study of customer satisfaction determinants. These problems relate to the measurement of expectations. With cross-sectional studies, expectations are measured at the same time as other constructs such as perceived performance and disconfirmation (e.g., Westbrook & Reilly, 1983). However, expectations are a pre-purchase construct and are best measured prior to consumption (Oliver, 1980a, 1997; Patterson, 1993b). In cross-sectional studies, the customer's original expectations may have changed and may not be accurately recalled due to memory loss (Patterson, 1993b). Incorrectly recalled expectations as a consequence of memory loss would be even more prevalent for longitudinal services such as the season ticket. Expectations may also not be accurately recalled as a result of assimilation (Oliver, 1997; Oliver & Burke, 1999).

When two-stage methodologies are employed in customer satisfaction studies, expectations are measured prior to the customer experiencing the product. However, other constructs such as perceived performance, disconfirmation and customer satisfaction are measured after the product has been experienced (e.g., Patterson, 1993b; Swan & Trawick, 1981). Thus two-stage studies provide a much more accurate

representation of the expectations construct. However, because expectations change, those which the customers refer to during their assessment of disconfirmation may not be the original expectations they held prior to experiencing the product. Even if the expectations did not change, once again the original expectations may not be correctly recalled due to memory loss (Patterson, 1993b) or assimilation (Oliver, 1997; Oliver & Burke, 1999).

In summary, the inclusion of expectations in studies of customer satisfaction determinants can be problematic due to measurement difficulties. These difficulties arise largely out of the changing nature of expectations and the associated loss of accurate memory recall. A two-stage research design does much to remedy these difficulties. However, the likelihood of changing expectations and memory loss is magnified when the service under study is longitudinal in nature such as the season ticket service. The dynamic nature of expectations discussed in this section provides a rationale for *not* investigating the expectations construct in this thesis.

2.4.1.3 Summary of criticisms of Disconfirmation of Expectations Model (DEM)

This section has explored criticisms of the DEM grounded in its exclusion of certain relationships and its use of expectations as the comparative referent against which performance is judged. The remainder of this section will summarise these criticisms and present the implications for this thesis.

The original DEM comprises only three relationships. Yet three additional relationships among the DEM component variables have been supported empirically (Churchill & Surprenant, 1982; Spreng & Olshavsky, 1993; Westbrook & Reilly, 1983). These are the relationships between expectations and customer satisfaction, expectations and perceived performance and also between perceived performance and customer satisfaction.

The original DEM does not account for the possibility of these relationships, positing disconfirmation as the key determinant of customer satisfaction. However, earlier discussion of these relationships revealed that disconfirmation can no longer be

regarded as the prime determinant of customer satisfaction. In some studies (Patterson, 1993b; Shaffer & Sherrell, 1997) it was the effect of expectations, or perceived performance that contributed the most to customer satisfaction. Therefore, extended versions of the DEM, versions that incorporate additional relationships, were proposed as considerably more comprehensive models of customer satisfaction.

In addition to its exclusion of certain relationships, a common criticism of the DEM is that it relies upon expectations instead of some other comparative referent such as norms (Cadotte et al., 1987), desires (Spreng & Olshavsky, 1993) or values (Westbrook & Reilly, 1983). Although the use of alternative comparative referents has been supported empirically this criticism is of little consequence to this thesis. There is considerable overlap among comparative referents in the literature and many of them have a corresponding expectation type, for example, desires and desired expectations. Oliver (1997) referred to this overlap in terms of the ability of expectations to subsume most other comparative referents. Furthermore the use of higher level expectations such as desired expectations minimises the likelihood that dissatisfaction may arise even when expectations are confirmed.

The final criticism of the use of expectations pertains to their dynamic nature. This criticism cannot be so easily dispelled. Customer expectations change over time. Inaccurate memory recall is one reason why expectations should be measured prior to the product being experienced or purchased. Even when a two-stage research design is used, however, the pre-purchase measurement of expectations may not be a worthwhile exercise. This is particularly the case for studies investigating longitudinal services such as the season ticket. Initial customer expectations of the season ticket may change over a period of six to eight months and play an inconsequential role in customer satisfaction.

In essence, conflicting viewpoints exist as to the value of including the expectations construct in this thesis. Substantial support for the inclusion of expectations in studies of the determinants of customer satisfaction has been provided in previous sections. Likewise, support for the exclusion of expectations, particularly for this thesis, has also been presented.

The implication of these conflicting viewpoints is that two alternative research models of customer satisfaction with the season ticket service are required. One model will include the expectations construct (i.e., the Expectations Model) and another will exclude it (i.e., the Non-Expectations Model). These models appeared earlier in Chapter 1 as Figure 1.1 and Figure 1.2. For ease of reference, the models will reappear in Chapter 4 as Figures 4.1 and 4.2. The use of alternative research models is increasingly common in customer satisfaction research (e.g., Gotlieb, Grewal & Brown, 1994; Jayanti & Jackson, 1991; Madrigal, 1995; Shaffer & Sherrell, 1997; Westbrook & Reilly, 1983) and is in accord with marketing theory construction as espoused by Bagozzi (1984).

2.5 Repeat Purchase Intention

The conceptual models of this thesis extend the DEM in two different ways. First, they include additional relationships among the DEM component variables. Second, they incorporate extra variables.

This thesis has incorporated three extra variables into the basic DEM framework. Two of these variables are posited as determinants of customer satisfaction. These are club identification and the win/lose phenomenon. These two variables are unique to the satisfaction of sport customers and will be discussed at length in Chapter 3. The other variable is a purported consequence of customer satisfaction, that is, repeat purchase intention.

One of the most significant consequences of customer satisfaction is repeat purchase behaviour, or customer retention (Kotler, 1991, 1994; Spreng & Mackoy, 1996). Marketers must concern themselves not just with attracting customers but also with retaining them. The cost of retaining customers is considerably less than the cost of attracting new customers (Anderson & Fornell, 1994; Buttle, 1996; Rosenberg & Czepiel, 1984).

Even though this thesis is primarily concerned with the determinants of customer satisfaction, the inclusion of repeat purchase intention was also considered important.

The extent to which a customer intends to repurchase does not necessarily equate with the customer's actual repurchase behaviour (Foxall, 1984; Kalwani & Silk, 1982; Morwitz, Johnson & Schmittlein, 1993) but it does provide some indication of future behaviour. Therefore, repeat purchase intention is of consequence to marketers and is of interest to this thesis. Furthermore it is common practice to incorporate measures of repeat purchase intention in studies of customer satisfaction determinants (e.g., Bearden & Teel, 1983; Bitner, 1990; Oliver, 1980a; Oliver & Swan, 1989a; Patterson, 1993a).

2.6 Summary

This chapter has explored customer satisfaction and why it is an important area of study. Moreover it has identified the determinants of customer satisfaction as a valuable area of research. This chapter has also explored numerous studies that have sought to understand the factors that contribute to customer satisfaction.

Additionally, this chapter has introduced the DEM as the dominant customer satisfaction paradigm in the literature. Despite the widespread acceptance of the DEM, two sources of criticism were also discussed. These were the DEM's: (a) exclusion of certain relationships and (b) use of expectations.

The criticism of the DEM pertaining to its exclusion of certain relationships was noted as valid. However, an argument was made that the DEM has been successfully extended to incorporate additional relationships. An extended DEM was advocated as a much improved and more comprehensive paradigm to model the customer satisfaction process. An extended version of the DEM incorporating all three of the possible additional relationships was also presented. Furthermore, an argument was made for models of customer satisfaction to include repeat purchase intention.

The criticism of the DEM pertaining to its use of expectations could not be dispelled. The argument was made that expectations can be considered a useful comparative referent. However, it was also acknowledged that the dynamic nature of expectations is problematic, particularly for studies involving longitudinal services such as this thesis. Therefore, this criticism has considerable implications for this thesis. The conflicting

evidence in the literature resulted in the decision to develop two alternative research models: one to include the expectations construct and another to exclude it.

The second half of the literature review is presented next in Chapter 3. Chapter 3 will focus on customer satisfaction and how it pertains to sport and, in particular, spectator sport. In the main, in Chapter 3 club identification and the win/lose phenomenon will be discussed as important determinants of sport spectator satisfaction. In Chapter 3 it will be established that the DEM, in its original or extended form, cannot fully account for the peculiarities of the spectator sport service and that it needs to be modified if it is to successfully explain the customer satisfaction process of season ticket holders.

CHAPTER 3
CUSTOMER SATISFACTION IN SPORT

3.1 Introduction

The previous chapter focused on customer satisfaction as a general area of research in which this thesis is located. The chapter examined the Disconfirmation of Expectations Model (DEM) which has become a popular and generic framework within which to study the determinants of customer satisfaction for many different goods and services. Within the chapter it was also argued that extended versions of the DEM, as opposed to the original version, provide the most comprehensive understanding of the customer satisfaction process. Conflicting evidence in the literature for the inclusion of expectations in a study of customer satisfaction determinants of a longitudinal service was also presented in Chapter 2. Accordingly two alternative research models to cater for the conflicting evidence were proposed.

Whereas the previous chapter focused on the general research area of customer satisfaction, this chapter focuses on customer satisfaction only as it pertains to sport. Specifically, this chapter examines customer satisfaction with the spectator sport service. The aim of this chapter is to complete the review of the germane literature concerning the determinants depicted in the conceptual models that are proposed directly or indirectly to influence customer satisfaction with the season ticket.

This chapter proceeds as follows. First, the spectator sport service will be introduced. Then the core and peripheral dimensions of the service will be described. This will be followed by a review of several sport-specific customer satisfaction studies. A discussion of two additional determining variables peculiar to the satisfaction of sport spectators will follow. These variables are club identification and the win/lose phenomenon. An argument will be made for a sport-specific extension of the DEM so that these variables are accounted for. The chapter will then conclude with a summary of the research gaps this thesis will address.

3.2 The Spectator Sport Service

Sport spectators can purchase a ticket to a single event or a season ticket that typically entitles them to attend all, or at least a selection, of the home games for a given season. This thesis is concerned with the season ticket. Irrespective of the type of ticket purchased, sport spectatorship is a service. The spectator sport service can be distinguished from sport goods by the four separate, yet interrelated, characteristics of intangibility, inseparability, perishability and heterogeneity. These are the defining characteristics of all services as described in the services marketing literature (e.g., Zeithaml, Parasuraman & Berry, 1985). Many of these service characteristics are also referred to in the sport marketing literature (e.g., Mullin et al., 1993, 2000; Pitts & Stotlar, 1996; Pope & Turco, 2001; Shank, 1999).

The spectator sport service is intangible in that it cannot be felt, seen or touched in the same way that sports goods such as golf clubs, running shoes and tennis balls can be. The few tangible things that the sport spectator can take away from the spectating experience include the ticket stub, some photos, a program and a piece of merchandise.

Production and consumption of sport spectatorship is inseparable (except for delayed televised events) in that the service providers (e.g., athletes, ushers, concession staff) must be present to deliver the service. Basketball spectators, for example, consume the service simultaneously as the athletes, officials, cheerleaders and commentators produce it.

The spectator sport service is perishable in that it cannot be inventoried as a sports good can be. The service must be consumed when it becomes available, or else it ceases to exist. For example, a spectator's experience at a football grand-final scheduled for 8pm on a Saturday evening cannot be stored and consumed at a later date, unless of course the event is video recorded.

Sport spectatorship is heterogenous in that no two sport events are ever the same. Each event is characterised by different players, officials, game importance and playing conditions. Furthermore, even if sport events could be perfectly replicated, differences within and between the spectators themselves still exist.

3.2.1 Core and peripheral dimensions of the spectator sport service

All services, including the spectator sport service, can be evaluated on several different levels. A customer can be satisfied, or dissatisfied, with an entire service, a service dimension, or a specific service attribute (Iacobucci et al., 1994a). For example, Lapidus and Schibrowsky (1996) measured total satisfaction with a sport event as well as satisfaction with various attributes such as the sound level of the music and the cleanliness of the arena.

This thesis is concerned with two general dimensions of service: the core service offering and the peripheral service offering. This is a common distinction in the services marketing literature (e.g., Walker, 1995). The core-peripheral dimensions of services have also been termed *technical-functional* (Grönroos, 1990) and *outcome-process* (Berry, Zeithaml & Parasuraman, 1985).

In the context of spectator sport the core service dimension is the game itself. The peripheral service dimension includes all of the non-game supplementals such as parking, concessions and half-time entertainment. Mullin (1985) referred to these peripherals, or supplementals, as "product extensions" (p. 107). In this thesis the core and peripheral service dimensions are referred to as the on-court and off-court service dimensions respectively, reflecting the basketball context in which this thesis is conducted. No previous customer satisfaction research could be located that explicitly and simultaneously examines these two separate dimensions of the spectator sport service.

3.2.2 Different effects of core and peripheral dimensions

In the services marketing literature there is a general consensus that the peripheral dimensions of a service contribute more to customer satisfaction than the core service (Iacobucci et al., 1994a, 1994b; Jones & Sasser, 1995; Walker, 1995). Iacobucci et al. (1994b) claimed that managers were often surprised to find their customers judging them on the little things (i.e., service peripherals) even when the core offering was of

high quality. Although an adequate core service may prevent dissatisfaction it does not necessarily guarantee satisfaction.

Iacobucci et al. (1994b) explained why service peripherals contribute so much to customer satisfaction. First, customers believe that a high quality core offering is almost guaranteed. It is a *given*. Second, within and across competitors there tends to be little variability in the core offering. Another reason for service peripherals to contribute so much to customer satisfaction is that customers often find the core service much more difficult to evaluate than the peripherals. For example, how does the average customer know whether their insurance broker has secured the best coverage for them, or whether the first service on their new car has been performed correctly? These three reasons do much to explain why it is often the service peripherals, as opposed to the core service, that drive customer satisfaction.

Although service peripherals may play a dominant role in customer evaluations of many services, the extent to which they influence customer satisfaction with the spectator sport service is not known. Iacobucci et al. (1994b) argued that customers often have difficulty evaluating the core service offering. However, this is not the case for most sport spectators.

Mullin (1985) claimed sport customers often consider themselves experts. Indeed he even classified this as one of the unique characteristics of sport marketing. It is not atypical for spectators of professional sport events to be familiar with the game rules, player skill level and injury, the characteristics of the opposing team and sometimes even the idiosyncrasies of the umpires. Furthermore, numerous spectators believe they *know best* and it would be an unusual event where the crowd was not yelling out advice to their team. Likewise, after any sport event there is always someone to tell you what the losing team *should have* done. Moreover, the umpires, perhaps like no one else at a sport event, are subject to often highly emotional tirades from the experts in the stands as to how they could have improved their performance!

So, unlike many services, for most customers the core component of the spectator sport service is relatively easy to evaluate. Sport spectators know when they are witnessing a good or bad game. Likewise, season ticket holders know when they have witnessed a

good or bad season. Thus the extent to which each of the core and peripheral service dimensions contributes to the satisfaction of customers of the spectator sport service is unclear and may differ from the situations described in the general marketing literature.

What is apparent, though, is that evaluations of both dimensions will play a role in the satisfaction of the sport spectator. Madrigal (1995) for example found that various aspects of the game contributed to spectator satisfaction. In addition, Wakefield and Blodgett (1994) revealed that a number of service peripherals associated with the sport venue contributed to customer satisfaction. Zhang et al. (1998) also identified that sport spectators derived satisfaction from service peripherals. Furthermore, Tomlinson, Buttle and Moores (1995) and Kasky (1994) concluded that both dimensions were important to the sport spectator, with the peripheral dimension being most important.

In summary, the services marketing literature emphasises the importance of considering both the core and peripheral dimensions in service evaluations (e.g., Bitner, 1990; Iacobucci et al., 1994a, 1994b; Jones & Sasser, 1995; Walker, 1995). Indeed Walker (1995) has even developed a model of service encounter satisfaction that specifically considers the core-peripheral aspects of services. (Walker's model was discussed previously in Chapter 2.) Furthermore, the sport marketing literature points to the value of incorporating both dimensions in the study of sport customer satisfaction. Consideration of satisfaction arising from both dimensions is necessary to provide a more comprehensive understanding of the process of spectator satisfaction.

3.3 Sport-Specific Customer Satisfaction Studies

Very little research has investigated customer satisfaction in a sport context. The dearth of sport-specific customer satisfaction research is at odds with the research that exists for just about every other service industry, from telecommunications to hospitality and from travel to banking. Indeed, for many of these industries, the literature indicates an overwhelming and legitimate concern with the notion of the satisfied customer.

This section will review the five studies that contribute the most in varying ways to an understanding of customer satisfaction as it pertains to spectator sport and thus

potentially the season ticket service of professional sport clubs. Each study will first be described in terms of its purpose and results. The main similarities and differences between each study and this thesis will then be outlined.

The studies to be reviewed are: (a) the work of Zillmann et al. (1979) on the enjoyment spectators derive from watching sport contests; (b) Wakefield and Blodgett's (1994) examination of the effects of spectator perceptions of the sport servicescape, or facility, on customer satisfaction and repatronage intentions; (c) the investigation by Lapidus and Schibrowsky (1996) addressing game induced halo effects and customer satisfaction with various aspects of the spectator sport service; (d) the work of Zhang et al. (1998) on spectator satisfaction with the service peripherals, or game support programs, of professional sport events; and (e) Madrigal's (1995) examination of the cognitive and affective determinants of spectator satisfaction.

3.3.1 Zillmann, Bryant & Sapolsky (1979)

The purpose of Zillmann et al.'s (1979) research was to investigate a similar construct to customer satisfaction, customer enjoyment. Using a series of four related empirical studies, they identified a number of factors that contributed to the enjoyment spectators derived from watching sport contests. These included the disposition of the fan towards the athlete or team, rough play, risky play, effective play and winning.

Zillmann et al. (1979) investigated the effect of spectator disposition on enjoyment. Spectator disposition refers to the extent to which the spectators like or dislike the players or teams. The first study investigated the enjoyment of watching a televised professional football game. The second study examined the enjoyment of watching a live college football game. The third investigated the enjoyment of watching a televised Olympics basketball game. Finally, the fourth study examined enjoyment arising from watching a televised professional tennis match.

Taken together, the results of the studies demonstrate that the disposition of the spectators towards players and teams determined how much the spectator enjoyed the sport event. Overall, spectators who were highly disposed towards a particular player or

team reported higher levels of enjoyment when a good play was executed and when the team won. Conversely, these spectators experienced much less enjoyment when they witnessed a poor play or a team loss.

Zillmann et al. (1979) also conducted two studies to investigate the effect of rough play on enjoyment. For a televised professional football game, very rough play was enjoyed substantially more than lower levels of roughness. This effect was particularly strong for male spectators. A similar study using spectators of a professional ice hockey game also found that rough play was enjoyed more than less rough play.

Another study conducted by Zillmann et al. (1979) examined the effect of uncommon, risky and effective offensive play on enjoyment. Using a televised game of professional football, spectator enjoyment was predicted by the riskiness of the offensive play as well as the effectiveness of it. However, uncommon or surprising offensive plays were not shown to predict enjoyment.

The work of Zillmann et al. (1979) is important to this thesis because it investigated factors that contribute to spectator enjoyment. Customer enjoyment is a similar albeit distinct construct to customer satisfaction. Furthermore, this thesis is also concerned with elements of playing performance (i.e., on-court performance) as well as the outcome of playing performance (i.e., the win/lose phenomenon).

Although the work of Zillmann et al. (1979) centred on a similar construct to customer satisfaction, there are some substantial differences between their research and this thesis. First, they focused on enjoyment arising from the game itself. They did not account for enjoyment derived from other aspects of the sport event such as half-time entertainment (the exception being one study that explored the role of social facilitation in spectator enjoyment). Second, only enjoyment associated with single sport events and not season tickets was investigated. Third, sport-specific group identification was not considered. Fourth, the results arose from studies utilising a combination of different types of sport spectatorship (live and televised). The determinants of customer satisfaction with a live sport event are likely to differ from the determinants of customer satisfaction with a televised event. The levels of customer satisfaction arising from these two types of spectatorship may also vary. Finally, the studies involved different

levels of competition (college, professional and Olympic). Zillmann et al. (1979) and also Branscombe and Wann (1992) noted the differences between fans of college sport and professional sport. Therefore, the determinants and levels of customer satisfaction may be dissimilar among these different cohorts of spectators.

3.3.2 Wakefield & Blodgett (1994)

The primary purpose of Wakefield and Blodgett's (1994) research was to examine the effects of quality perceptions of the servicescape, or sport facility, on customer satisfaction and repatronage intentions. They also examined the effects of perceived crowding, excitement and enduring involvement.

Wakefield and Blodgett (1994) conducted two studies. The first utilised a videotape simulation method. University students viewed a videotape of two different Major League Baseball stadiums and then completed a questionnaire. In the second study spectators attending five different college football games completed the questionnaire.

Wakefield and Blodgett (1994) analysed the data from both studies with structural equation modelling. For both studies the analysis revealed that customer satisfaction was directly affected by the quality of the facility (beta = .691 and .892), that is, the higher the perception of facility quality, the higher the satisfaction with the facility.

Customer satisfaction was also directly affected by excitement in the video simulation study (beta = .302). Respondents who experienced higher levels of excitement after watching the video also reported higher levels of satisfaction, but the effect of excitement on customer satisfaction in the field study was not significant. Excitement was also found to indirectly affect customer satisfaction in both studies, as did crowding and enduring involvement. Furthermore, direct relationships between customer satisfaction and repatronage intentions were detected for both studies.

The work of Wakefield and Blodgett (1994) is important to this thesis because of its similarity of purpose. Like this thesis, Wakefield and Blodgett investigated the determinants of sport customer satisfaction. Their focus, however, is much narrower

than this thesis as it only concerned satisfaction arising from the actual sport venue. It did not account for satisfaction arising from other peripheral aspects of the sport service or from the game itself. Another difference is that the aims of the study did not include consideration of game outcome or sport-specific group identification.

Despite Wakefield and Blodgett's (1994) apparent exclusion of a group identification variable, it is interesting to note that in one of their two studies the measures of enduring involvement with the home team closely resemble measures of group identification. The measures were: (a) I am a loyal (team) fan; (b) I like to let people know I'm a (team) fan; and (c) Win or lose, I'll always be a (team) fan. In this sense, their study shares a similarity with this thesis.

Another important difference between Wakefield and Blodgett's (1994) study and this thesis is that even though they were primarily interested in the satisfaction of sport spectators, they did not examine customer expectations, perceived performance or disconfirmation. Past research has indicated these variables play key roles in the customer satisfaction process. The final difference between the two investigations is that Wakefield and Blodgett included college sport spectators in their study whereas this thesis only examines the satisfaction of spectators of professional sport.

3.3.3 Lapidus & Schibrowsky (1996)

Lapidus and Schibrowsky (1996) studied the satisfaction of spectators attending three university basketball games. They were particularly interested in identifying halo effects arising from the games.

Thorndike (1920) was the first to define the halo effect, although he referred to it as halo error. Thorndike defined halo error (i.e., halo effect) as a "marked tendency to think of a person in general as rather good or rather inferior and color the judgments of the specific performance dimensions by this general feeling" (p. 25). In the context of consumer behaviour, Oliver (1997) referred to halo effects in terms of consumers bringing "overall positive or negative biases to the judgment task" (p. 110).

The primary purpose of Lapidus and Schibrowsky (1996) was to test whether a halo effect arising from team performance would influence customer satisfaction with a variety of peripheral service aspects. They also tested whether different levels of team performance influenced spectator satisfaction with the overall game. Sixteen peripheral service aspects were classified according to their proximity to the game. Services experienced outside the arena, prior to the game, or both were classified as remote (e.g., parking). Services experienced in the concourse area during the game were classified as intermediate (e.g., restrooms). Services experienced in the arena itself, during the game, were classified as close (e.g., sound level).

The home team won each of the three games central to the study. However, the quality of the home team's performance varied from game to game. The first game was evaluated as the least satisfying, the third game was evaluated as the most satisfying and the second game was rated as nearly as satisfying as the third. The degree of satisfaction varied with the disconfirmation of spectator expectations. For example, satisfaction was lowest when the team performed much worse than expected and highest when the team performed much better than expected.

Lapidus and Schibrowsky's (1996) results revealed a recency-based halo effect. The quality of team performance influenced satisfaction with the peripheral aspects of the spectator sport service. The halo effect was strongest for those service aspects located close to the game (e.g., sound level, give-aways). It was next strongest for those service aspects classified as being within an intermediate proximity to the game (e.g., concourse appearance, food). Finally, there was no halo effect for those service aspects located the furthest from the game (e.g., smoking policy, starting time).

The work of Lapidus and Schibrowsky (1996) is important to this thesis because it demonstrated that core service performance (i.e., game performance) can influence customers' evaluations of peripheral service performance and overall event performance. It is argued later in this chapter that, as an outcome of game performance, the win/lose phenomenon is also likely to influence evaluations of the peripheral service performance of the season ticket as well as overall customer satisfaction.

Similar to this thesis, Lapidus and Schibrowsky (1996) considered spectator satisfaction arising from the game itself as well as from peripheral aspects of the sport service. Unlike this thesis, they were primarily concerned with levels of satisfaction as opposed to determinants of satisfaction. Thus the disconfirmation of expectations theory was not relevant to their study. Furthermore, they were concerned with individual events not the season ticket.

Another significant difference is that Lapidus and Schibrowsky (1996) conducted their study using supporters of only one team and college sport events, not professional sport events, were studied. Furthermore, differences in game outcome were not accounted for because the home team won each of the games included in their study. The final difference between Lapidus and Schibrowsky's research and this thesis is that there was no consideration of sport-specific group identification.

3.3.4 Zhang, Smith, Pease & Lam (1998)

Like Lapidus and Schibrowsky (1996), Zhang et al. (1998) were concerned with spectator satisfaction with a variety of peripheral service dimensions. The stated purpose of their research was "to assess variables that affect spectator satisfaction toward the support programs of minor league professional hockey games" (p. 4). However, their work appeared equally concerned with examining the relationship between the extent to which spectators were satisfied with various service peripheral dimensions and game attendance.

The first phase of Zhang et al.'s (1998) research entailed the development of a scale, the Spectator Satisfaction Inventory (SSI), to measure customer satisfaction with peripheral aspects of the spectator sport service. Initially, the researchers identified 35 peripheral activities. Expert opinion and then factor analysis of data collected at three minor league hockey games reduced the number of these activities to 24 and simultaneously identified five dimensions. The dimensions were: (a) Satisfaction with Ticket Service; (b) Satisfaction with Audio Visuals; (c) Satisfaction with Accessibility and Parking; (d) Satisfaction with Arena Staff; and (e) Satisfaction with Event Amenities.

Following the scale development phase, Zhang et al.'s (1998) research entailed a series of stepwise regression analyses. The analyses revealed that Satisfaction with Event Amenities was positively predictive of the number of games already attended and the number of additional games spectators intended to attend in the remainder of the season. The results also indicated that Satisfaction with Event Amenities and Satisfaction with Ticket Services were positively predictive of the number of games spectators intended to attend in the following season.

Correlation analysis and analysis of variance (ANOVA) proceeded the examination of relationships between the peripheral service dimensions and the actual and intended attendance of spectators. First, the correlation analyses revealed that each of the continuous sociodemographic variables (i.e., age, family size and economic status) was related to one or more of the service dimensions. Second, the ANOVA results indicated that satisfaction levels with certain service dimensions differed with respect to two of the categorical sociodemographic variables. Specifically, spectators of different ethnicity differed in terms of Satisfaction with Audio Visuals, Satisfaction with Arena Staff and Satisfaction with Event Amenities. Also, spectators of different marital status differed in terms of Satisfaction with Ticket Service and Satisfaction with Audio Visuals.

The work of Zhang et al. (1998) is important to this thesis because it demonstrates that customer satisfaction does arise from the peripherals of the spectator sport service. Furthermore, it demonstrates a relationship between spectator satisfaction and repeat purchase intention as well as actual purchase behaviour.

Similar to this thesis, Zhang et al. (1998) considered spectator satisfaction arising from the service peripherals of professional sport events. Unlike this thesis, they did not also consider satisfaction arising from the actual game. Nor were they primarily concerned with the determinants of satisfaction but with the outcomes of satisfaction as well. Furthermore, although Zhang et al. (1998) claimed that the purpose of their study was to assess variables that *affect* satisfaction, their stated purpose was not supported by their choice of analysis (i.e., correlation and ANOVA).

Another dissimilarity to this thesis is that Zhang et al. (1998) had an operations-specific focus in that they deliberately excluded satisfaction with marketing and management activities associated with the spectator sport service. They also had a game-specific focus as opposed to a season-ticket focus. Furthermore, they did not take game outcome into consideration. Nor did they account for the sport-specific group identification levels of their subjects.

3.3.5 Madrigal (1995)

The purpose of Madrigal (1995) was to investigate a model of the cognitive and affective determinants of fan satisfaction with sport events. His model comprised six variables inclusive of customer satisfaction. Three of the model's variables were cognitive determinants (i.e., disconfirmation of expectations, team identification [i.e., a type of sport-specific group identification] and quality of opponent). These were related to two affective determinants (i.e., enjoyment and BIRGing), which were in turn related directly to customer satisfaction.

Madrigal's (1995) study was discussed at some length in Chapter 1. The discussion focused on the limitations of the study as well as its differences from this thesis. The purpose of the earlier discussion was to identify the research gaps this thesis addresses and justify this thesis as a significant piece of research. Further consideration will now be given to Madrigal's work with regard to its inclusion of two variables of particular relevance to this thesis. These variables are disconfirmation of expectations and team identification. Limitations arising from Madrigal's measurement of these two variables will also be discussed.

Madrigal (1995) conceptualised disconfirmation of expectations in accord with the disconfirmation of expectations theory of customer satisfaction. However, team identification, the extent to which a fan identifies with a particular team, was not explicitly defined other than being described as a social identity. He measured disconfirmation subjectively using only two items whilst acknowledging that it would be measured better with additional items. The two disconfirmation measures were game-specific, pertaining to how well the team played and the quality of the game.

Team identification was measured using Wann and Branscombe's (1993) Sport Spectator Identification Scale (SSIS). Madrigal acknowledged that not all of the items in the SSIS were measures of personal identification yet used the scale in its entirety. Limitations of the Wann and Branscombe scale will be discussed in Chapter 5.

Madrigal (1995) did not report the full extent to which disconfirmation and team identification influenced the satisfaction of spectators. However, it can be assumed that the roles they played were considerable given the substantial effects on the mediating variables of (BIRGing) (beta = .24 and .56) and enjoyment (beta = .39 and .51). Indeed, the strongest direct effects in Madrigal's model were those of team identification.

Akin to Wakefield and Blodgett (1994), the work of Madrigal (1995) is important to this thesis because of its similarity of purpose. Both studies investigated determinants of spectator satisfaction. Madrigal's (1995) study is somewhat more significant, however, as it supports the inclusion of sport-specific group identification and also disconfirmation of expectations in the study of customer satisfaction determinants.

The main differences between Madrigal (1995) and this thesis were presented earlier in Chapter 1. In summary, Madrigal (1995) only accounted for satisfaction arising from the actual game and with individual college sport events. Also, the effect of the win/lose phenomenon was not considered and the satisfaction of supporters of only one team was assessed. Furthermore, the effect of only one type of sport-specific group identification was investigated. Finally, Madrigal did not conduct his research within the framework of disconfirmation of expectations theory.

3.3.6 Summary of sport-specific customer satisfaction studies

In summary, this section reviewed five studies that have contributed in varying ways to an understanding of customer satisfaction as it pertains to the spectator sport service. The main findings of the reviewed studies relevant to this thesis include: (a) spectator enjoyment, a similar construct to spectator satisfaction, is influenced by game outcome (Zillmann et al., 1979); (b) peripheral service components as well as core service components contribute to spectator satisfaction (Lapidus & Schibrowsky, 1996;

Madrigal, 1995; Wakefield & Blodgett, 1994; Zhang et al., 1998); (c) core service performance can influence spectator satisfaction with peripheral service performance as well as the overall service (Lapidus & Schibrowsky, 1996); and (d) sport-specific group identification and disconfirmation of expectations affect spectator satisfaction (Madrigal, 1995).

The reviewed studies are valuable in that they have helped develop an initial understanding of the satisfaction of sport spectators. However, it should be apparent that there is considerable scope for additional research in the area of spectator satisfaction. There are few studies addressing the satisfaction of sport spectators, with only two of these studies (Madrigal 1995; Wakefield & Blodgett, 1994) specifically investigating determinants of spectator satisfaction. The paucity of research has resulted in only a selective insight into what is a highly complex phenomenon, the satisfaction of the sport spectator.

3.4 Uniqueness of the Spectator Sport Service

All services are characterised by heterogeneity, intangibility, inseparability and perishability (Zeithaml et al., 1985). However, Mullin (1985) identified a number of aspects he believed were unique to the marketing of the sport product and thus the spectator sport service. Mullin et al. (1993, 2000) later revised these aspects.

Mullin's (1985) review of the peculiarities of sport marketing is of considerable relevance to the current sport-specific study of customer satisfaction. The characteristics he identified capture two constructs that are proposed in this thesis to not only influence the process of spectator satisfaction but also influence the very levels of satisfaction sport spectators experience. These two constructs are: (a) sport-specific group identification, including club identification, team identification and fan identification and (b) the win/lose phenomenon.

3.4.1 Sport-specific group identification

Mullin (1985) claimed that sport fans personally identify with the sport product. There are many aspects of sport that fans, spectators, or both can identify with including a team (Branscombe & Wann, 1991; Fisher, 1998; Wann & Branscombe, 1993), other fans of a team (Wann & Branscombe, 1995; Wann & Dolan, 1994c) and the institution represented by the team (Schurr, Wittig, Ruble & Ellen, 1988). A spectator's identification with a team, other fans, or sport institution or club, each represent different types of sport-specific group identification.

Sport-specific group identification, like any other form of group or social identification is grounded in social identity theory. A review of social identity theory germane to this thesis will now be presented. The review will outline why people identify with groups and what the outcomes of these identifications are. Furthermore, the review will establish social identity theory as important to an enhanced understanding of consumer behaviour. A review of the literature focusing on sport-specific group identification will then follow. A rationale for including sport-specific group identification in the study of spectator satisfaction determinants will be provided.

3.4.1.1 Social identity theory

Tajfel (1972) first introduced the concept of social identity as "the individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of this group membership" (p. 292). Social identity theory is a social psychological theory of group membership, group processes and intergroup relations (Hogg, 1995; Hogg & Abrams, 1988; Tajfel, 1978, 1981; Turner, 1982).

Social identity theory maintains that individuals have two separate identities that together constitute the self-concept (Turner, 1982). One of these identities is the individual's personal identity, that is, what one thinks or feels about oneself (e.g., feelings of competence, attractiveness, intelligence). The other identity is the individual's social identity, that is, a number of group classifications with which one identifies (e.g., favourite sport team, political affiliation, gender). An individual

identifies with a group to the extent the group category is psychologically accepted as part of oneself.

People belong to numerous social groups and therefore have a plurality of social identities. Indeed an individual can have as many different social identities as groups to which the individual belongs (Pratt & Foreman, 2000a, 2000b).

3.4.1.1.1 Social categorisation

An individual's social identities arise out of the process of social categorisation. Social categorisation theory is a component of social identity theory. Developed by Turner and his colleagues (Turner, 1985; Turner, 1987), social categorisation theory describes the process whereby individuals classify themselves and others into social categories or groups. Groups within which individuals place themselves are referred to as *ingroups* whereas groups in which they do not share membership are referred to as *outgroups*.

Each ingroup and outgroup has its own prototype. A prototype is a "cognitive representation of features that describe and prescribe attributes of the group" (Hogg & Terry, 2000, p. 123). Prototypes maximise similarities within and differences between groups. Thus prototypes distinguish groups from each other.

Self-categorisation, or social-categorisation of the self, "cognitively assimilates self to the ingroup prototype" (Hogg & Terry, 2000, p. 123). Self-categorisation enables individuals to compare their group(s) to other groups. Individuals engage in group comparisons to confirm or to establish that the group(s) they belong to are more favourable than groups they do not belong to (Turner, 1975). This comparison procedure is driven by an underlying need for individual self-esteem (Abrams & Hogg, 1988; Brown & Starkey, 2000; Turner, 1975). Social identity theory maintains that individuals will evaluate their ingroup favourably (Hogg & Terry, 2000; Hogg, Terry & White, 1995; Turner, 1975, 1985).

Whilst the need to maintain positive self-esteem is the most commonly noted motivation for social identification, uncertainty reduction is another and more recently proposed motivation (Hogg & Abrams, 1993; Hogg & Mullin, 1999; Hogg & Terry, 2000). Self-categorisation reduces uncertainty by transforming self-conception and

assimilating self to a prototype that dictates perceptions, attitudes, feelings and behaviours (Hogg & Terry, 2000). In other words, these prototypes provide the individual with a template of how to perceive, think, feel and act. Thus uncertainty is reduced.

3.4.1.1.2 Negative group identity

Sometimes individuals belong to groups that have a disadvantaged or negative status, for example being a fan of a losing sport team. However, irrespective of the status of the group, these individuals can still achieve a positive social identity. They do this by implementing what Tajfel and Turner (1979) referred to as *identity management strategies* (Blanz, Mummendey, Mielke & Klink, 1998; Jackson, Sullivan, Harnish & Hodge, 1996; Tajfel & Turner, 1979).

Tajfel and Turner (1979) identified three types of identity management strategies. First, individuals may attempt to leave the group or dissociate themselves from it in some way. These are referred to as social mobility strategies. Second, individuals may use social creative strategies, which entail changing the elements of the comparative situation in some way so that more favourable comparisons for the group will result. Third, individuals may compete with other groups to produce changes in the relative status of the two groups, referred to as social change strategies.

Identity management strategies may be either individual or collective in nature (Jackson et al., 1996). When an individual strategy is used, an attempt is made to improve the status of the individual but not the status of the group. When a collective strategy is employed, an attempt is made to improve the status of the whole group (Blanz et al., 1998), which in turn improves the status and identity of the individual.

3.4.1.1.3 Consequences of group identification

Identity and identification explain one means by which individuals act on behalf of their social groups (Albert, Ashforth & Dutton, 2000). The more strongly identified with the social group, the more likely an individual will be motivated to ensure the wellbeing of the group, often relative to other groups (Brickson, 2000). Alternatively, when people are low in group identification they are focused more on their own needs than the needs

of the group. That is, low group identification is associated with self-interest as opposed to group interest (Scott & Lane, 2000).

It is widely acknowledged that positive group outcomes arise from group identification (Ashforth & Mael, 1989; Dutton, Dukerich & Harquail, 1994; Mael & Ashforth, 1992; Turner, 1982). For example, in the organisational behaviour literature, Dutton et al. (1994) maintained that the stronger the organisational identification, the more likely the individual will cooperate with others in the organisation, compete more strongly against out-group members and exhibit organisational citizenship behaviours such as acts of obedience and loyalty.

Also in the organisational behaviour literature, Mael and Ashforth (1992) tested a model of antecedents and outcomes of organisational identification using an alma mater of an all-male college. Identification with the alma mater was associated with a number of positive outcomes for the college, including making financial contributions (beta = .30), willingness of subjects to advise their sons to attend the college (beta = .22) and willingness to advise others to attend (beta = .23).

3.4.1.1.4 Social identity theory and consumer behaviour

The inclusion of social identity theory has been prevalent in the consumer behaviour literature (Belk, 1984, 1987, 1988a, 1988b; Bhattacharya, Rao & Glynn, 1995; Ferreira, 1996; Hogg & Michell, 1996; Scott & Lane, 2000). In the main, the literature has focused on consumers' identification with products as opposed to their identification with the organisations that produce and sell these products.

Belk (1984, 1987, 1988a, 1988b) in particular has extensively explored the product possession/consumption – self-identity nexus. Belk (1988a) maintained that possessions, both goods and services, are regarded as parts of ourselves, that is, people identify with their possessions and possessions define people. A basic premise of Belk (1988a) was that the meanings consumers attach to possessions must be understood if consumer behaviour is to be understood.

That consumers identify with products is widely acknowledged. Less acknowledged, however, is the extent to which consumers identify with the organisations that produce

and sell products. In a sense, such organisational identification is a type of brand identification. Fisher and Wakefield (1998) contended that customers were most likely to identify with powerful brands such as Nike, Coca-Cola and Marlboro. Professional sport clubs are also brands, many of which (e.g., the Chicago Bulls and New York Yankees in the United States and the Collingwood Magpies and Brisbane Broncos in Australia) are also very powerful.

Scott and Lane (2000) provided examples of customers identifying with powerful brands. They described how customers of Harley-Davidson Incorporated identified with the company, its symbols, products and values through their membership in the company-sponsored Harley Owner's Group (HOG). Scott and Lane also outlined how, despite being non-members, customers of shops such as the Body Shop may identify with that organisation because they define the Body Shop, as well as themselves, as animal rights supporters.

Two studies that address the identification of consumers with organisations that produce and sell products are Bhattacharya et al. (1995) and Ferreira (1996). Bhattacharya et al. (1995) examined the organisational identification of paying members of an art museum. Specifically, they were interested in the correlates of organisational identification. They revealed that art museum identification was positively related to organisational prestige, donating activity, tenure of membership, visiting frequency and positive disconfirmation of member expectations of the museum's services. Art museum identification was negatively related to members' participation in other similar organisations.

Ferreira (1996) focused on identification with country clubs as opposed to art museums. Ferreira also used members, examined many of the same correlates as Bhattacharya et al. (1995) and uncovered very similar results. Ferreira found that country club identification was positively associated with the perceived prestige of the club, positive disconfirmation of expectations of club services and programs and length of membership. Membership in other clubs was negatively related to identification.

Bhattacharya et al.'s (1995) and Ferreira's (1996) studies were predominantly correlational in nature. Therefore, inferences of causality as well as directionality could

not be made. However, on a conceptual level it is reasonable to assume that the correlates could easily contribute to organisational identification, as well as stem from it. Ferreira acknowledged the possible bi-directional nature of the relationships. Furthermore, Sutton, McDonald, Milne and Cimperman (1997) proposed bi-directional relationships in their conceptual model of fan identification. If indeed the correlates of these studies are also outcomes of organisational identification then the results provide support for the notion that positive consequences exist for the target organisation of customer identification.

In brief, the above discussion indicates that not only can customers identify with the products they possess and consume, they can also identify with the organisations that produce and sell these products. Social identity theory, together with the results of Bhattacharya et al. (1995) and Ferreira (1996), dictates that organisations with highly identified customers should experience positive outcomes as a result of this identification. Although not verified empirically, one likely positive outcome for organisations that produce and sell products is satisfied customers. This thesis aims to provide some insight into the relationship between organisational identification and customer satisfaction.

In summary, this section has introduced social identity theory as a framework that helps explain in part peoples' perceptions, feelings, thoughts and behaviours. In particular, this section emphasised that a group will experience numerous positive outcomes from having highly identified group members. Moreover, it is concluded that social identity theory is relevant to the study of consumer behaviour. That is, consumption can be a means of social identification, with customers identifying with products as well as with the organisations that produce and sell these products. An improved understanding of the social identification of consumers should therefore result in an enhanced understanding of consumer behaviour (Belk, 1988a). The next section addresses social identity theory in the context of sport, that is, *sport-specific group identification*.

3.4.1.2 Group identification of sport spectators: Types and definitions

For many sport spectators, especially fans, their favourite sport is not only an important part of their life but also an important part of their identity. This section will discuss social identity theory as it pertains to sport. In particular it will address the group identification of sport spectators. The aim of this section is to establish theoretically that sport spectators can identify with several different groups within the context of sport.

The term sport-specific group identification is not one to be found in the sport management, sport sociology or sport psychology literature. Instead it is a term developed for this thesis in response to the interchangeable use of *fan identification*, *team identification* and even *spectator identification* in the literature (e.g., Branscombe & Wann, 1992; Wann & Branscombe, 1990). These terms have also been confounded with *allegiance* (Branscombe & Wann, 1991; Wann & Branscombe, 1993), *commitment* (Wann & Branscombe, 1993) and *involvement* (Branscombe & Wann, 1992; Wann & Branscombe, 1990).

The interchangeable use of the different sport-specific group identifications is confusing. In the main this practice appears to stem from researchers not investigating sport-specific group identification in strict accord with social identity theory. With the exception of Schurr et al. (1988), few researchers have acknowledged the diversity of groups sport spectators can identify with. Furthermore researchers have often not clearly delineated where identities reside (i.e., the identity claimant) and to whom or what they refer (i.e., the identity target) as recommended by Pratt and Foreman (2000a).

Social identities reside in an individual but the identity may capture values and beliefs that belong to a social group (Pratt & Foreman, 2000a). For example, a sport fan (i.e., the identity claimant) may hold a particular social identity but the identity may capture values and beliefs belonging to a sport team or club (i.e., the identity target).

In this thesis it is maintained that the literature's interchangeable use of the different group identification terms is misleading. In accord with social identity theory, individuals belong to many different groups and consequently have numerous social

identities (Pratt & Foreman, 2000a, 2000b). In this thesis it is proposed that some of the groups that a sport spectator can identify with include a team (i.e., team identification), other fans (i.e., fan identification) and also the institution or club representing a team (i.e., club identification). These are the three sport-specific group identifications central to this thesis.

This thesis uses definitions of team identification, fan identification and club identification that are in accord with social identity theory. The definitions incorporate the fundamental aspect of self-definition. Furthermore, as recommended by Pratt and Foreman (2000a), the identity targets and identity claimants in these definitions are apparent. The definitions were first introduced in Chapter 1. However, for the purpose of this section they are restated as follows:

Team Identification

> *The psychological orientation of the self, such that the individual defines himself or herself as part of the team.*

Fan Identification

> *The psychological orientation of the self, such that the individual defines himself or herself as a fan of the team.*

Club Identification

> *The psychological orientation of the self, such that the individual defines himself or herself as part of the club.*

The three definitions are grounded in Fisher and Wakefield's (1998) definition of group identification. Fisher and Wakefield drew upon the early work of Kelman (1961) to define group identification as the "psychological orientation of the self such that individuals define themselves in terms of their group membership" (p. 24).

It should be noted that no empirical work differentiating these three group identifications from one another could be located in the literature. Therefore, much is to be learned about these constructs including how they relate to one another. In this thesis it is proposed that team identification and fan identification are two separate

dimensions of club identification. That is, sport spectators can identify with other fans as well as the team and together these identifications constitute a more general state of group identification, namely club identification.

Karasawa (1991, 1995) provided support for the multidimensional conceptualisation of group identification proposed in this thesis. Karasawa also investigated different dimensions of group identification but within the context of educational institutions. The two dimensions of group identification he investigated were not dissimilar to the dimensions of fan identification and club identification used in this thesis. The levels of group identification of interest to Karasawa were students' identification with their school and students' identification with other students of their school. Karasawa referred to these two distinct dimensions as group identification and member identification respectively.

3.4.1.3 Group identification of sport spectators: Significant studies

The purpose of this section is to discuss some of the sport-specific group identification literature germane to the study of customer satisfaction with the spectator sport service. In particular the section will focus on the consequences of sport-specific group identification. The section commences with a review of the seminal work of Cialdini et al. (1976).

Cialdini et al. (1976) did not explicitly examine sport-specific group identification. Yet the social identification phenomenon is central to their research. Furthermore, their research represents one of the earliest pieces of work to contribute to an understanding of the outcomes of the group identification of sport spectators.

Cialdini et al. (1976) used three football field studies to examine the tendency of individuals to BIRG. They described BIRGing as the "tendency for people to publicize a connection with another person who has been successful" (p. 366).

In their first study, Cialdini et al. (1976) demonstrated the BIRG phenomenon when students displayed a greater likelihood to wear school-identifying apparel after their

university's football team had won a game than when the team lost a game. They also demonstrated the BIRG phenomenon in two other studies where students were found to have a greater propensity to use the pronoun *we* when describing how their university football team won than when it lost.

Social identity theory can be used to explain the BIRG phenomenon demonstrated in Cialdini et al.'s (1976) work. Social identity theory argues that all individuals strive to maintain a positive self-identity. One way to maintain a positive self-identity is through positive, or high status, group affiliations. In the context of sport, associating with a victorious sport team can enhance an individual's self-identity.

Nearly a decade after Cialdini et al.'s (1976) BIRGing study, another work (Lee, 1985) examining BIRGing in the context of sport appeared in the literature. This in turn was followed by an investigation by Wann and Branscombe (1990).

Whereas Lee (1985) focused only on BIRGing, Wann and Branscombe (1990) also investigated cutting off reflected failure (CORFing). CORFing is described as the tendency of people to increase the distance between themselves and unsuccessful others (Snyder, Higgins & Stucky, 1983). Whereas BIRGing was previously described as an image enhancement strategy, Snyder, Lassegard and Ford (1986) described CORFing as an image protection strategy.

In accord with social identity theory, CORFing represents one of Tajfel and Turner's (1979) identity management strategies, a social mobility strategy. A person who CORFs attempts to dissociate himself or herself from the group in some way.

Wann and Branscombe (1990) measured the propensity to BIRG and CORF based on the degree to which students claimed to enjoy watching their university basketball team win and lose. Using three different categories of identification with the team, low, moderate and high, they found the extent to which the respondent was identified with the team affected the BIRGing and CORFing response. Higher identification resulted in an increased propensity to BIRG and a decreased propensity to CORF. Alternatively, individuals lower in identification were less likely to BIRG and more likely to CORF.

3.4.1.4 Significant studies: Moving on from BIRGing and CORFing

In the last decade a wealth of studies investigating factors associated with sport-specific group identification other than the BIRG and CORF responses have appeared in the literature (Branscombe & Wann, 1991, 1992; Dietz-Uhler & Murrell, 1999; Fisher, 1998; Fisher & Wakefield, 1998; Hirt, Zillmann, Erickson & Kennedy, 1992; Murrell & Dietz, 1992; Sutton et al., 1997; Wakefield, 1995; Wann, 1995, 1996; Wann & Branscombe, 1993, 1995; Wann & Dolan, 1994a, 1994b, 1994c; Wann, Dolan, McGeorge & Allison, 1994; Wann et al., 1997; Wann & Schrader, 1996, 1997; Wann, Tucker & Schrader, 1996; Wann & Wiggins, 1999). In the main these studies have focused on the outcomes of sport-specific group identification.

The literature reveals a diversity of sport-specific group identification outcomes, many of which are relevant to this thesis. Sport-specific group identification has been shown to affect spectator: (a) affective states, including enjoyment (Wann et al., 1994; Wann & Schrader, 1997); (b) evaluations of the team's playing performance (Dietz-Uhler & Murrell, 1999; Wann & Dolan, 1994b); (c) expectations of the team's future playing performance (Hirt et al., 1992; Murrell & Dietz, 1992; Wann & Dolan, 1994b); (d) attributions about the team's accomplishments (Wann & Branscombe, 1993; Wann & Dolan, 1994a); and (e) support for the team (Fisher, 1998; Fisher & Wakefield, 1998; Murrell & Dietz, 1992; Wakefield, 1995; Wann & Branscombe, 1993).

There are various reasons for noting the relevance of these outcomes of sport-specific group identification to this thesis. First, customer satisfaction is partly an affective response and it is a similar construct to customer enjoyment. Second, customer satisfaction involves an evaluation of performance in comparison to initial expectations of performance. Third, the different use of internal and external attributions may help explain why some spectators will still be satisfied despite their team losing. Fourth, team supportive behaviours are highly likely to be associated with customer satisfaction.

In addition to the numerous outcomes of sport-specific group identification, the literature also reveals a diversity of factors shown to contribute to sport-specific group identification. These factors include: (a) winning (Branscombe & Wann, 1991; Wann

et al., 1994; Wann et al., 1996); (b) similarity between the spectator and the team (Fisher, 1998); (c) attractiveness of the team or its individual athletes (Fisher & Wakefield, 1998; Wann et al., 1996); (d) involvement in the particular sport (Fisher & Wakefield, 1998); (e) peers and/or family being fans (Wann et al., 1996); and (f) geographical variables (Wann et al., 1996).

The sport-specific group identification determinant of most relevance to this thesis is winning. Not only can winning influence the levels of group identification the spectator experiences, it also interacts with group identification to produce many of the outcomes noted previously including enjoyment, higher expectations and more positive evaluations.

3.4.1.5 Summary of sport-specific group identification

In summary, this section has identified a number of studies that have investigated various consequences and determinants of sport-specific group identification. Many of these studies provide empirical support for the inclusion of sport-specific group identification in the study of spectator satisfaction. It is of interest to note that the majority of these studies appear in the sport psychology and sociology literature, not in the sport marketing literature. These studies will be discussed in greater detail in Chapter 4 to support the relationships proposed in the conceptual models. The focus of this chapter will now shift to the win/lose phenomenon, the second sport-specific determinant of customer satisfaction germane to this thesis.

3.4.2 The win/lose phenomenon

Although in outlining the unique characteristics of marketing the sport product Mullin (1985) did not specifically list the win/lose phenomenon, the whole issue of winning and losing is at the very heart of sport competitions. It is something that truly distinguishes sport from all other services and its salience warrants considerable discussion.

The winning and losing of a sport team can be considered in a seasonal context as well as the more commonly researched event-by-event context. Fans of professional sport teams not only support their teams on a weekly basis but throughout the entire season. This thesis examines the win/lose phenomenon as it pertains to an entire season, not just to a particular event. However, reference is made to numerous studies that examine the phenomenon in an event-specific context.

The win/lose phenomenon is very much associated with three of the unique characteristics of sport identified by Mullin (1985). These are: (a) the little control sport marketers have over their organisation's core product; (b) the undeniably inconsistent and unpredictable nature of sport; and (c) the considerable marketing emphasis on product extensions as opposed to the core product. These characteristics are discussed in turn below.

(a) Little or no marketer control over the composition of the core product

The core service provided by a spectator sport organisation is the actual game. In this thesis the core service is referred to as the on-court dimension of the service. Mullin (1985) noted that the sport marketer has little, if any, say as to which athletes should be recruited, traded etc. (i.e., the product mix). Instead, this responsibility falls to coaches or managers. Nor is the sport marketer able to nominate when and sometimes where the games should be played, as the sport league controls this. The only influence marketers may occasionally have over the composition of the organisation's core product is through the introduction of new rules (Sutton & Parrett, 1992).

(b) Inconsistency and unpredictability of the product

Strongly related to the marketer's inability to control the composition of the core product of the spectator sport organisation is the inconsistency and unpredictability of the product. No two sport events will ever be the same. The core product (i.e., the game) is inconsistent and unpredictable due to a myriad of diverse and dynamic factors (e.g., athletes and officials will differ, playing conditions will change, game importance will vary).

However, whereas most service organisations strive for consistency and predictability of the entire product, professional sport clubs can only do so with confidence for the

peripheral service components. For the core component (i.e., the game), exactly the opposite is sought. This is because uncertainty of game outcome is an important determinant of game attendance (Borland, 1987; Borland & Lye, 1992; Cairns et al., 1986; Knowles, Sherony & Haupert, 1992; Wann & Branscombe, 1990; Welch, 1994) and is a significant contributor to game enjoyment when the spectator's favoured team wins (Wann et al., 1994; Zillmann et al., 1979). In recognition of the role that a close game can play in many spectators' decisions to attend the game, sport marketers and managers have introduced mechanisms such as the salary cap and the draft for the explicit purpose of trying to make game outcomes as unpredictable as possible.

(c) Marketing emphasis on product extensions exceeds that on core product
To a lesser extent the product extensions, or peripheral aspects of the spectator sport service, can also be characterised by inconsistency and unpredictability. For example, spectators will vary and service staff will turn over. However, it is in the area of product extensions where the sport marketer can achieve the most consistency. Astute sport marketers do not promise their customers something over which they have minimal control (e.g., a close game, the customer's preferred game outcome). Instead they promise their customers things over which they have the most control (e.g., friendly and efficient service, quality merchandise, easy parking).

3.4.2.1 Importance of winning

Winning is of importance not just to the athletes themselves but to many other stakeholders in the sport community including spectators, sponsors, team owners and more recently shareholders. This thesis is concerned with the significance of winning to the spectator.

A considerable body of research points to winning as an important independent variable in understanding the consumer behaviour of sport spectators. Some of this research investigates the role of winning in a spectator's decision to attend a sport event (e.g., Branvold, Pan & Gabert, 1997; Greenstein & Marcum, 1981; Schofield, 1983; Whitney, 1988). Other research pertains to the role of winning in spectator enjoyment (Wann & Schrader, 1997; Zillmann et al., 1979). By far the most research concerns the

interaction between winning and sport-specific group identification and the subsequent outcomes of this interaction (e.g., Branscombe & Wann, 1991; Dietz-Uhler & Murrell, 1999; Hirt et al., 1992; Wann, 1996; Wann & Branscombe, 1990; Wann & Dolan, 1994a).

3.4.2.1.1 The win/lose phenomenon and game attendance

Whitney (1988) was concerned with winning in the context of individual games as well as championships. He assessed the influence of a team's game-winning prospects and championship-winning prospects on fan attendance. Using data on professional baseball teams from 1970 to 1984, he concluded that winning games as well as winning championships was important for fan interest and attendance.

Greenstein and Marcum (1981) also studied the effect of winning on spectator attendance at professional baseball games. They analysed data from 1946 to 1975 to determine that winning percentage, more so than any other performance factor, explained the variation in game attendance.

Branvold et al., (1997) were concerned with winning in the context of individual games. They studied the effects of winning percentage as well as a number of other variables on attendance levels during a five-year period for minor league baseball. Results indicated that winning percentage was significant in predicting attendance at Class A and AA games but not at AAA games.

3.4.2.1.2 The win/lose phenomenon and game enjoyment

Zillmann et al. (1979) conducted a series of studies to investigate the enjoyment of spectators. They examined enjoyment arising from offensive and defensive plays, the entire game and game outcome. Results indicated game enjoyment was greatly influenced by game outcome as well as by the extent to which the spectators liked and disliked the two teams. Game enjoyment was high for spectators who liked the winning team and almost non-existent for spectators who disliked the winning team.

Wann and Schrader (1997) investigated the enjoyment levels of spectators following a home team victory and a home team defeat. Using spectators at two college basketball games they found that team success as well as spectator identification with the home

team influenced spectator enjoyment. Highly identified spectators who watched their home team win reported the highest rating of enjoyment. These spectators reported significantly more enjoyment than the highly identified spectators who witnessed a home team loss. Furthermore, these spectators experienced more enjoyment than the spectators low in identification irrespective of whether the low identity fans had witnessed a home team win or loss.

3.4.2.1.3 The win/lose phenomenon and sport-specific group identification

Most of the research with relevance to this thesis that investigated the win/lose phenomenon also included sport-specific group identification as an important variable. Examples of these studies include: (a) the investigation of the role a winning team plays in spectator identification with the team (Branscombe & Wann, 1991; Wann, 1996); (b) an examination of how the win/lose phenomenon and spectator identification influence evaluations of the past and future performance of both the spectators themselves, as well as their team (Hirt et al., 1992); (c) an investigation of how spectator identification affects the internal and external attributions a fan uses when confronted with team victory and defeat (Wann & Dolan, 1994a); and (d) an examination of the degree to which spectator identification influences the BIRG response following a team win and the CORF response following a team loss (Wann & Branscombe, 1990). Sport-specific group identification and the win/lose phenomenon were also important variables in the previously discussed Wann and Schrader (1997) study of spectator enjoyment.

3.4.2.2 Summary of win/lose phenomenon

This section has identified a diversity of studies that have investigated various consequences of the win/lose phenomenon relevant to the study of sport customer satisfaction, particularly spectator satisfaction. The majority of studies mentioned in this section were introduced in the previous section on sport-specific group identification. This is because the win/lose phenomenon and sport-specific group identification are often studied together as they share many consequences in terms of sport customer affect, cognition and behaviour. The studies presented in these sections

will be reintroduced in Chapter 4 and discussed in greater detail to support the relationships proposed in the conceptual models.

3.5 Summary of Literature Review (Chapters 2 and 3)

The preceding chapter and this chapter have aimed to review the germane literature that relates to the conceptual models of this research. The tenet of this thesis is that additional research into the satisfaction of sport customers, particularly sport spectators, needs to be undertaken due to the: (a) numerous positive outcomes for organisations with highly satisfied customers; (b) failure of many sport organisations to operate at maximum capacity; and (c) limited studies that have been undertaken in this area.

The DEM of customer satisfaction formed the starting point for the conceptual models and was thus a primary consideration of the first chapter of the literature review. The aim of Chapter 2 was to acknowledge the DEM as a legitimate framework within which to examine the determinants of customer satisfaction. At the same time, Chapter 2 presented conflicting evidence of the use of customer expectations and therefore the full DEM, in a study of satisfaction with a longitudinal service. The chapter then outlined a rationale for the development of two alternative research models to be tested in this thesis.

The aim of the current chapter was to extend the DEM to cater for some of the peculiarities of the spectator sport service. Sport marketing theory, social identity theory and services marketing theory guided the model extensions. The resulting models are considerably different to the original DEM as they account for the: (a) core and peripheral dimensions of the spectator sport service; (b) group identifications of sport spectators; and (c) win-lose phenomenon. The literature provided substantial support for the extended models.

In summary, the objective of this literature review has been to present a case for further research in line with the relationships depicted by the conceptual models. These relationships and the ensuing propositions are further developed in the next chapter.

Essentially, it is considered that additional research for the relationships proposed in the conceptual models is warranted for the following reasons:

1. There is very little work that addresses the determinants of spectator satisfaction and even less that pertains to professional sport.
2. No work exists that examines spectator satisfaction with the season ticket, only with specific sport events and venues.
3. There are no studies that simultaneously investigate the different effects of the core and peripheral service dimensions on spectator satisfaction.
4. No work exists that investigates the effect of the win/lose phenomenon on spectator satisfaction.
5. Limited studies of spectator satisfaction have included the influence of sport-specific group identification. Furthermore, none of these studies has explored more than one type of group identification and most of them have used problematic measures.
6. No other studies have attempted to test or extend the DEM in the context of sport.
7. There are no existing studies that simultaneously investigated all of the noted variables and their proposed relationships.

CHAPTER 4
PROPOSITION DEVELOPMENT

4.1 Introduction

The previous two chapters comprised the review of the germane literature that supports the relationships proposed in the conceptual models of this research. The purpose of this chapter is to develop a series of research propositions to test the determinants of customer satisfaction with the season ticket service. The propositions stem from the review of literature in Chapters 2 and 3. The propositions form the basis of this thesis.

This thesis tests the determinants of customer satisfaction using two alternative models and 24 different research propositions. The variables specified as determinants of customer satisfaction with the season ticket service were selected because the existing literature provides theoretical, empirical or both types of support for them. The variables had either been included in previous studies of customer satisfaction, or had been found, or proposed, to hold significant relationships with comparable variables.

Therefore, the primary purpose of this thesis is to test empirically and extend knowledge of the determinants of customer satisfaction with the season ticket service of professional sport clubs. The key aspects of this thesis are the consideration of both the core and peripheral dimensions of the service as well as the inclusion of club identification and the win/lose phenomenon.

4.2 Alternative Research Models

This thesis tests two alternative research models, the Expectations Model and the Non-Expectations Model. The models were first presented in Chapter 1 as Figures 1.1 and 1.2 but for ease of reference they reappear in this chapter as Figures 4.1 and 4.2. Alternative models were necessary because the literature revealed conflicting evidence

of the value of including expectations as a determinant of customer satisfaction. The conflicting evidence regarding the inclusion of expectations was outlined in Chapter 2.

In brief, the utility of including expectations as a customer satisfaction determinant in this thesis is debatable because of the longitudinal nature of the season ticket service. Expectations change over time (Oliver, 1997; Oliver & Burke, 1999; Parasuraman et al., 1991; Walker, 1995). The expectations spectators hold prior to experiencing the season ticket will probably be different from the expectations they have later in the season. Even if expectations are not updated, it is possible that they may not be accurately recalled in terms of influencing perceptions of performance or forming disconfirmation evaluations. This is due to the susceptibility of expectations to poor memory recall (Patterson, 1993b) and also assimilation (Oliver, 1997; Oliver & Burke, 1999).

The primary difference between the alternative models is whether the expectations determinant is included. Related to the inclusion of expectations is whether a pre-season or post-season measure of club identification is used. A pre-season measure of club identification is included in the Expectations Model. This is because there is substantial support in the literature for a relationship between sport-specific group identification and spectator expectations (e.g., Wann & Branscombe, 1993; Wann & Dolan, 1994b). In contrast, a post-season measure of club identification is used in the Non-Expectations Model. The stability of sport-specific group identification is unclear but there is some evidence that it can change over time (Wann, 1996). It is believed that a post-season measure of club identification would explain a greater proportion of the variance in the post-season variables than would a pre-season measure of club identification. Furthermore, considerable theoretical and empirical support (e.g., Wann, 1996; Wann et al.,1996) exists for a relationship between post-season club identification and the win/lose phenomenon.

In summary, the Expectations Model tests 23 of the 24 propositions developed in this thesis. The Non-Expectations Model tests 18 propositions. With the exception of one proposition, the relationship between the win/lose phenomenon and club identification, the Expectations Model tests all of the propositions tested by the Non-Expectations Model.

4.3 Proposed Relationships Among the Determinants of Customer Satisfaction

The remainder of this chapter will present support for the propositions of this thesis. First, support will be presented for those relationships proposed by the Disconfirmation of Expectations Model (DEM). Support will be presented for a total of 10 propositions involving expectations, perceived performance, disconfirmation and customer satisfaction for both the on-court and off-court dimensions of the season ticket service. The propositions arising from the DEM will be presented simultaneously because of the considerable support for these relationships as discussed in Chapter 2.

Second, support will be presented for the propositions concerning club identification as a determinant of the two dimensions of expectations, perceived performance and disconfirmation and also customer satisfaction. Third, support will be presented for the propositions concerning the win/lose phenomenon as a determinant of the two dimensions of perceived performance and disconfirmation, club identification and customer satisfaction. Finally, support will be presented for the proposition that repeat purchase intention is an outcome of customer satisfaction. The reader is advised to refer to the models depicted in Figures 4.1 and 4.2 when reading each of the propositions.

4.3.1 Propositions of the Disconfirmation of Expectations Model (DEM)

The two alternative models tested by this thesis evolved from the DEM. The DEM was first introduced in Chapter 1 and then discussed at length in Chapter 2 (see Figure 2.1). Its value as a model of the determinants of customer satisfaction was also explored in Chapter 2. In particular, it was noted that many studies (e.g., Churchill & Surprenant, 1982; Oliver & DeSarbo, 1988; Patterson, 1993b; Shaffer & Sherrell, 1997; Spreng & Mackoy, 1996) have empirically tested and supported the following three relationships of the original DEM:

- Expectations ➔ Disconfirmation;
- Perceived Performance ➔ Disconfirmation; and
- Disconfirmation ➔ Customer Satisfaction.

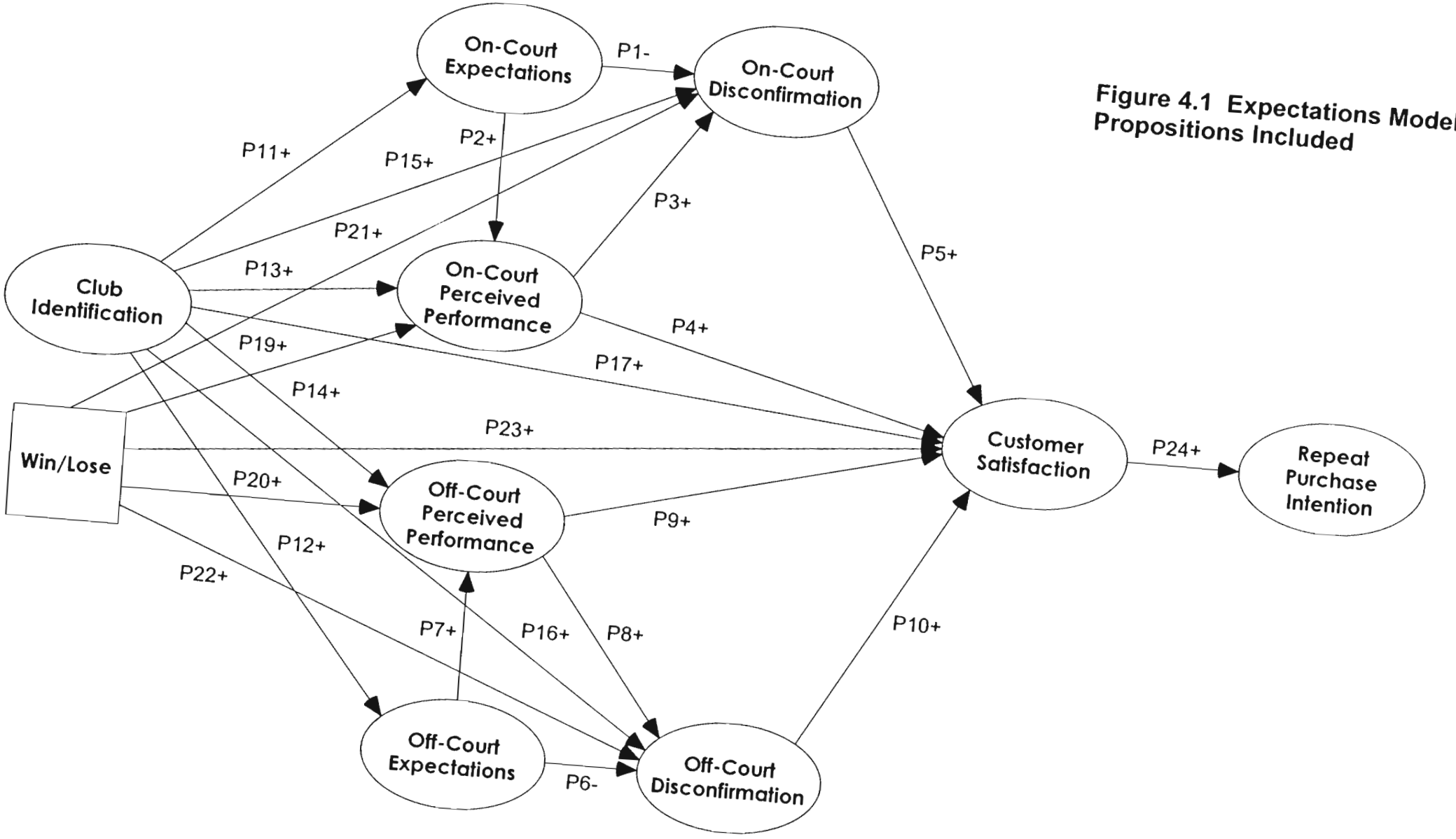
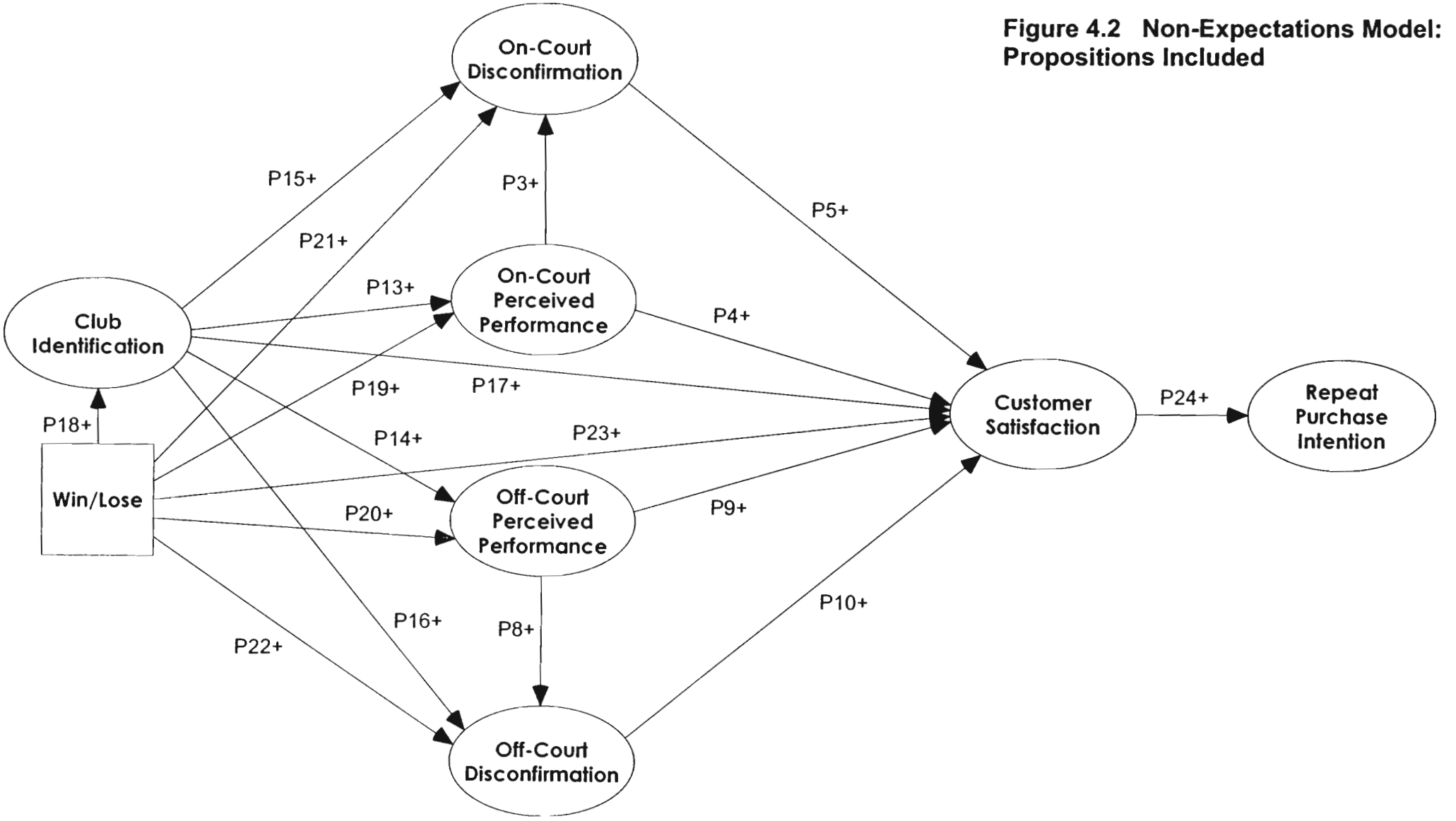


Figure 4.1 Expectations Model: Propositions Included

Figure 4.2 Non-Expectations Model: Propositions Included



Chapter 2 also outlined how several studies (e.g., Bearden & Teel, 1983; Churchill & Surprenant, 1982; Jayanti & Jackson, 1991; Patterson, 1993b; Shaffer & Sherrell, 1997) have provided empirical support for the following three additional relationships among the DEM component variables:

- Expectations → Customer Satisfaction;
- Expectations → Perceived Performance; and
- Perceived Performance → Customer Satisfaction.

Although empirical support for the existence of each of these additional relationships has been produced, in Chapter 2 it was acknowledged that the least amount of support was for the relationship between expectations and customer satisfaction. This has been typically the weakest of the three relationships (e.g., Churchill & Surprenant, 1982; Patterson, 1993b; Westbrook & Reilly, 1983).

In a sport-specific context there is even less support for the existence of a direct relationship between customer expectations and customer satisfaction. The services marketing literature maintains that customers may use their expectations to drive satisfaction judgements because they have difficulty evaluating services, particularly the core dimensions (Iacobucci et al., 1994b). However, in sport the customers are often considered to be experts (Mullin, 1985) about the core service dimension (i.e., the game) and should not have difficulty evaluating its quality. Neither should customers have difficulty evaluating the peripheral dimension of the spectator sport service because the peripheral aspects of a service are typically the easiest to evaluate (Iacobucci et al., 1994b).

Another reason for the unlikely existence of a direct relationship between customer expectations and customer satisfaction is the longitudinal nature of the season ticket service. Although Oliver (1997) and Oliver and Burke (1999) maintain that the assimilation effect can generate a direct relationship between expectations and customer satisfaction, spectators may not be able to recall their initial pre-season expectations due to memory loss. Therefore, an assimilation effect could not take place (at least with the originally held expectations).

In summary, six possible relationships that can exist among the DEM variables were identified in Chapter 2. In Chapter 2 it was also acknowledged that all of these relationships do not necessarily exist for all products because the satisfaction process can vary (e.g., Churchill & Surprenant, 1982). In the main, in Chapter 2 it was suggested that a direct relationship between expectations and customer satisfaction would probably not exist for the season ticket service.

In contrast to the relationship between expectations and customer satisfaction, Chapter 2 provided considerable support for the inclusion of the two other additional relationships, that is, the relationship between expectations and perceived performance and the relationship between perceived performance and customer satisfaction. Therefore, five of the six possible relationships of the DEM are tested in this thesis. The Expectations Model tests all five relationships whereas the Non-Expectations Model tests three of these relationships.

Each model tests the same relationships for each of its on-court and off-court dimensions. Not only was it suggested in Chapter 3 that both the core service dimension and the peripheral service dimension of the spectator sport service are important to sport customers but it was also suggested that spectators would not have difficulty evaluating either of these dimensions. Therefore, the proposed relationships among the DEM determinants for the on-court dimensions of the models do not differ from those for the off-court dimensions.

In view of the foregoing discussion the following propositions are made:

Proposition 1 (Expectations Model only)

There is a negative relationship between on-court expectations and on-court disconfirmation.

Proposition 2 (Expectations Model only)

There is a positive relationship between on-court expectations and on-court perceived performance.

Proposition 3

There is a positive relationship between on-court perceived performance and on-court disconfirmation.

Proposition 4

There is a positive relationship between on-court perceived performance and customer satisfaction.

Proposition 5

There is a positive relationship between on-court disconfirmation and customer satisfaction.

Proposition 6 (Expectations Model only)

There is a negative relationship between off-court expectations and off-court disconfirmation.

Proposition 7 (Expectations Model only)

There is a positive relationship between off-court expectations and off-court perceived performance.

Proposition 8

There is a positive relationship between off-court perceived performance and off-court disconfirmation.

Proposition 9

There is a positive relationship between off-court perceived performance and customer satisfaction.

Proposition 10

There is a positive relationship between off-court disconfirmation and customer satisfaction.

4.3.2 Propositions arising from the club identification determinant

4.3.2.1 Club identification → expectations

Four studies (Hirt et al., 1992; Murrell & Dietz, 1992; Wann & Branscombe, 1993; Wann & Dolan, 1994b) indicated that the extent to which spectators identify with a sport club can affect the expectations they hold of the club's future performance.

Hirt et al. (1992) referred to team fanship as a particular type of group identity. Using live broadcasts of university basketball games they studied spectator evaluations of past and expectations of future team performance. They found fanship interacted with the win/lose phenomenon to influence spectator expectations of team performance for the following season. Highly identified viewers held higher expectations of team performance after watching a team victory than after a team loss. Viewers low in fanship did not demonstrate different levels of expectations irrespective of whether they watched their team win or lose.

Murrell and Dietz (1992) studied factors contributing to fan support of sport teams. They measured identification with a university as opposed to a sport team. Identification with the university may be considered a reflection of identification with the two university teams used in their study. That is, the student subjects, the teams and the university were all a part of the one *group*. They found the extent to which identification with the university was important to the individual's self-concept affected expectations of future success for the university's football and basketball teams. Highly identified subjects held higher expectations of team performance in terms of predicted success than did subjects low in identification.

Wann and Branscombe (1993) used student identification with a university basketball team to develop a team identification scale. The scale was validated by examining the relationship between team identification and a number of other constructs. One of these constructs was customer expectations. Students highly identified with the team reported higher levels of expectations for the team's future performance than did students low in identification.

Wann and Dolan (1994b) investigated the extent to which spectator identification with a university basketball team affected evaluations of past, present and future team performance. Respondents were asked to give their impressions of the team's performance for the past year, current year to date and remainder of the year. Respondents were asked to rate the team in terms of: (a) being poor or outstanding; (b) performing well above or below expectations; (c) being a bad or good team; and (d) having little or a great deal of ability. Respondents were also asked to rate the likelihood that the team would: (a) finish in first place in their conference; (b) win the conference tournament; and (c) win an NCAA tournament game. The results indicated that highly identified subjects gave more positive predictions of future team performance and accomplishments than did subjects low in identification.

The relationship between level of identification and expectations, as supported by the aforementioned studies, can be explained with social identity theory. Social identity theorists, such as Tajfel and Turner (1979) and Turner (1987), claim people are motivated to protect and maintain a positive social identity. The sport product's performance is symbolic of the sport club's performance. Highly identified spectators would desire their club and therefore the season ticket to perform well because the club is central to their social identity. Good club performances would reflect positively on the social identity of highly identified spectators, while poor club performances would reflect negatively on their social identity. The performance of the club and therefore of the season ticket is not of as great significance to the less identified spectator because the club is not central to his or her self-image.

In view of the foregoing discussion the following propositions are made:

Proposition 11 (Expectations Model only)

There is a positive relationship between club identification and on-court expectations.

Proposition 12 (Expectations Model only)

There is a positive relationship between club identification and off-court expectations.

4.3.2.2 Club identification → perceived performance

Dietz-Uhler and Murrell (1999) investigated the role of social identity on spectator evaluations of sport teams. Similar to Murrell and Dietz (1992), they measured identification with a university, not with a sport team. Spectator evaluations of university football team performance were assessed after every game of the season on the dimensions of goodness, successfulness, intelligence and skilfulness. The results revealed that spectators high in identification rated the team's performance much more favourably across all games than did spectators with low identification.

Wann and Dolan's (1994b) study of spectator evaluations of team performance was discussed previously as providing support for the proposition that club identification directly affects expectations. The study also supports the existence of a direct relationship between club identification and perceived performance. The results revealed that team identification affected evaluations of performance, both for games played in the previous season and games played in the current season. Subjects high in identification evaluated team performance more favourably than did subjects low in identification.

Social identity theory can explain the relationship between level of identification and perceived performance as supported by Dietz-Uhler and Murrell (1999) and Wann and Dolan (1994b). Again this explanation pertains to an individual's need to maintain a positive social identity. The importance of the club to an individual's social identity dictates that highly identified spectators have strong motivations to evaluate their club positively, as well as any symbolic representations of the club, including its products. Highly identified fans would be loath to criticise club performance because part of their own identity and therefore their self-esteem is contingent upon this evaluation. However, spectators low in club identification can afford to evaluate the club and its products less favourably because the club is not such an important facet of their social identity. Furthermore, they can more readily implement identity management strategies, such as CORFing, to dissociate themselves from a club failure.

In view of the foregoing discussion the following propositions are made:

Proposition 13

There is a positive relationship between club identification and on-court perceived performance.

Proposition 14

There is a positive relationship between club identification and off-court perceived performance.

4.3.2.3 Club identification → disconfirmation

Disconfirmation is the discrepancy between customer expectations and perceptions of product performance (Tse & Wilton, 1988). Disconfirmation can be negative or positive. That is, not only can the customer perceive they received less than they expected from the product, its various attributes, or both, but they can also perceive they received more.

The previously discussed sport studies (Dietz-Uhler & Murrell, 1999; Wann & Dolan, 1994b), which supported the proposition that club identification directly affects perceived performance, also support the proposition that club identification affects disconfirmation. Disconfirmation arises from a process of comparison of perceived performance to expectations. Social identity theory stipulates that individuals positively evaluate their ingroup in order to maintain positive social identity. Therefore, just as highly identified individuals are motivated to evaluate product performance favourably they are also likely motivated to evaluate favourably the extent to which their expectations of product performance were met.

Two other studies that supported the existence of a relationship between club identification and disconfirmation were conducted by Bhattacharya et al. (1995) and Ferreira (1996). Bhattacharya et al. examined the organisational identification of members of an art museum, while Ferreira investigated the organisational identification of country club members. Both studies revealed relationships between organisational

identification and disconfirmation. The more highly identified the members were, the more positive disconfirmation they experienced.

In view of the foregoing discussion the following propositions are made:

Proposition 15

There is a positive relationship between club identification and on-court disconfirmation.

Proposition 16

There is a positive relationship between club identification and off-court disconfirmation.

4.3.2.4 Club identification → customer satisfaction

Thus far considerable support for an indirect relationship between club identification and customer satisfaction has been presented. Club identification has been linked to customer expectations, perceived performance and disconfirmation. However, a direct relationship may also exist between club identification and customer satisfaction. The satisfaction process can vary from product to product (Churchill & Surprenant, 1982) and also from person to person (Shaffer & Sherrell, 1997). It is possible that club identification will affect customer satisfaction directly as well as indirectly.

The only study located which specifically tests the relationship between sport-specific group identification and customer satisfaction is Madrigal (1995). He was primarily concerned with an indirect relationship between the two variables, finding BIRGing and enjoyment to mediate the relationship. However, Madrigal also tested a direct relationship between team identification and customer satisfaction in one of his alternative models. The alternative model did not fit the data well and the significance and strength of the path coefficient was not reported. Therefore, other studies need to be examined for possible support of a direct relationship between club identification and customer satisfaction.

Wakefield (1995) did not specifically examine a relationship between sport-specific group identification and customer satisfaction. However, his study does lend some support for the existence of a relationship. Using a field study approach at two minor league (AA) baseball games the effect of a number of variables on sport spectator purchase intentions were tested. Wakefield's (1995) results revealed a relationship between team identification and repatronage intentions. It is possible and highly probable that customer satisfaction mediated this relationship because customer satisfaction is commonly posited as a substantial determinant of repeat purchase intention (Kotler, 1991, 1994).

Similar to Wakefield (1995), Fisher and Wakefield (1998) and also Wann and Branscombe (1993) provided some support for the existence of a relationship between club identification and customer satisfaction. They demonstrated that team support behaviours were associated with the level of identification with the team. For example, Fisher and Wakefield (1998) found that highly identified spectators attended more games and purchased more licensed products than spectators low in identification. Similarly, Wann and Branscombe (1993) found that highly identified fans had stronger purchase intentions and were more willing to pay a higher price for a ticket than were fans low in identification. Just as it is likely that customer satisfaction mediates the relationship between team identification and repatronage intentions detected by Wakefield (1995), so too is it likely that customer satisfaction mediates the relationship between team identification and these team support behaviours.

Other studies that somewhat support the existence of a relationship between club identification and customer satisfaction are those that have demonstrated an effect of sport-specific group identification on spectator emotion (e.g., Wann et al., 1994) and enjoyment (e.g., Wann & Schrader, 1997). Customer satisfaction is believed to comprise an emotional dimension (Mittal, Ross & Baldasare, 1998) and is a similar construct to enjoyment.

Wann et al. (1994) conducted three studies, one of which was to investigate the interactive effect of game outcome and team identification on spectator emotions. Using spectators at three university basketball games, they found that high identity subjects who watched their team win a difficult game experienced the greatest increase

in positive emotions. The greatest decrease in positive emotions occurred for spectators who watched their team lose. Similarly, Wann and Schrader (1997) reported the highest levels of spectator enjoyment in their study were experienced by highly identified fans who witnessed their college basketball team win.

Social identity theory can therefore be used to support the existence of an indirect relationship between club identification and customer satisfaction. It can also be used to support the existence of a direct relationship between these constructs. Highly identified customers will experience more satisfaction with the season ticket than customers low in identity. This is because highly identified customers must feel satisfied with their club and its symbolic representations if they are to maintain a positive social identity. Satisfaction with the club and therefore the season ticket service is less important for those spectators low in club identification.

In view of the foregoing discussion the following proposition is made:

Proposition 17

There is a positive relationship between club identification and customer satisfaction.

4.3.3 Propositions arising from the win/lose phenomenon determinant

4.3.3.1 Win/lose → club identification

Five studies indicated that the win/lose phenomenon affects club identification (Branscombe & Wann, 1991; Fisher & Wakefield, 1998; Wann, 1996; Wann et al., 1994; Wann et al., 1996). These studies conceptualised the win/lose phenomenon in a seasonal context as well as an event-specific context.

The effect of winning on team identification was the focus of one of Branscombe and Wann's (1991) three studies. Team records for a five-year period (1984 – 1988) were used to determine the ratio of winning games for respondents' favourite Major League Baseball teams. The winning games ratios were then correlated with team identification levels. Respondents with high levels of identification were associated with teams with

high winning games ratios. The results indicated that spectators do identify with a team based on its success. However, this was only the case for those respondents whose favourite teams were geographically removed from them.

Wann et al. (1994) also conducted three studies, one of which investigated the effect of winning on team identification. Using two college basketball teams they measured the identification levels of spectators who watched historically successful (99 wins and 54 losses over a five year period) and historically unsuccessful (65 wins and 71 losses over a five year period) teams. Team identification was higher for those spectators who identified with the historically successful team than for those who identified with the historically unsuccessful team. However, identification with both teams was not affected by game outcome.

Fisher and Wakefield (1998) studied factors contributing to team identification using two professional hockey teams. Similar to Wann et al. (1994) one of the teams used had a successful history whereas the other had an unsuccessful history. They found that team performance was a substantial determinant of team identification for those spectators who supported the historically successful team but not for the supporters of the historically unsuccessful team. Supporters of the historically successful team reported higher levels of team identification when their team performed well than when it performed poorly. The team performance measures included references to winning and being the best in a seasonal context.

Wann et al. (1996) investigated reasons for the origination, continuation and cessation of identification with sport teams. Respondents answered with regard to their currently and previously favourite sport teams. A successful team was a commonly reported reason for the origination of identification with a sport team. It was also the main reason for the continuation of team identification. On the other hand, an unsuccessful team was the main reason for cessation of team identification.

Wann (1996) investigated seasonal changes in sport spectator identification, involvement and evaluations. Two college sport teams, a historically successful basketball team and a historically unsuccessful football team, were used in his study. Collecting data after every game within a given period, he found that game outcome

influenced team identification with the historically successful team but not with the unsuccessful team. Spectators who watched the historically successful team lose identified less with the team than when they watched it win.

An individual's need to maintain a positive social identity helps explain why the win/lose phenomenon in both an event-specific and season-specific context can influence club identification. A winning team is equated with a successful team, which is in turn associated with a successful club. Individuals have a greater opportunity to achieve a positive social identity by identifying with a successful team and the club it represents than with an unsuccessful one.

In view of the foregoing discussion the following proposition is made:

Proposition 18 (Non-Expectations Model only)

There is a positive relationship between the win/lose phenomenon and club identification.

4.3.3.2 Win/lose → perceived performance

Three studies (Dietz-Uhler & Murrell, 1999; Hirt et al., 1992; Lapidus & Schibrowsky, 1996) support the existence of a relationship between the win/lose phenomenon and perceived performance. With the exception of Lapidus and Schibrowsky (1996) these studies have been mentioned previously in support of a number of proposed relationships involving club identification.

Hirt et al. (1992) found that game outcome influenced spectator evaluations of team performance, individual player performance and game quality. Spectators who watched their home team win rated the team, individual players and game quality significantly more favourably than spectators who watched their team lose.

Dietz-Uhler and Murrell (1999) examined the main effect of spectators' identification with their university and not the win/lose phenomenon on evaluations of the university football team. They found that highly identified spectators evaluated the football team

more favourably than did spectators low in identification. Of particular relevance to the relationship proposed in this section is that they also found the combined effect of identification and the win/lose phenomenon on team evaluations to be significant. Respondents who identified strongly with the university evaluated the team more favourably after a win than after a loss.

Lapidus and Schibrowsky (1996) did not specifically examine the relationship between the win/lose phenomenon and perceived performance, but they did provide some supporting evidence for this relationship. Using three university basketball games they found the home team's on-court performance affected spectator evaluations of the event's off-court performance. Customer satisfaction ratings of the peripheral service aspects (e.g., music sound level) were more favourable when the home team performed better than expected than when they performed worse than expected. Thus on-court performance generated a halo effect.

Lapidus and Schibrowsky (1996) were unable to assess the effect of the win/lose phenomenon on spectator evaluations of performance as the home team won all three games used in their study. However, game outcome is very much related to playing performance. It is therefore logical to propose that the win/lose phenomenon will influence perceived performance.

In view of the foregoing discussion the following propositions are made:

Proposition 19

There is a positive relationship between the win/lose phenomenon and on-court perceived performance.

Proposition 20

There is a positive relationship between the win/lose phenomenon and off-court perceived performance.

4.3.3.3 Win/lose → disconfirmation

Disconfirmation is likely to be positively affected by the win/lose phenomenon in a similar fashion to perceived performance. This is because disconfirmation is the discrepancy between a customer's expectations and perceptions of performance. The higher the customer's perceived performance, then the greater their positive disconfirmation. The discussed research supporting the proposition that the win/lose phenomenon positively and directly affects perceived evaluations of performance, in particular Dietz-Uhler and Murrell (1999) and Hirt et al. (1992), also supports the proposition that the win/lose phenomenon affects disconfirmation.

In view of the foregoing discussion the following propositions are made:

Proposition 21

There is a positive relationship between the win/lose phenomenon and on-court disconfirmation.

Proposition 22

There is a positive relationship between the win/lose phenomenon and off-court disconfirmation.

4.3.3.4 Win/lose → customer satisfaction

It is not known exactly how the win/lose phenomenon influences customer satisfaction. The relationship between these two variables has not previously been subjected to empirical study. However, what is apparent from the research presented thus far is that a relationship does exist.

Most of the literature provides support for the existence of an indirect relationship, with the win/lose phenomenon influencing perceived performance (e.g., Dietz-Uhler & Murrell, 1999), disconfirmation (e.g., Hirt et al., 1992) and club identification (e.g., Wann, 1991; Wann et al., 1994). However, it is also possible there is a direct relationship between the win/lose phenomenon and customer satisfaction.

The work of Lapidus and Schibrowsky (1996) was discussed previously as a study supporting the proposed relationships between the win/lose phenomenon and both perceived performance and disconfirmation. It also provides some support for the existence of a direct relationship between the win/lose phenomenon and customer satisfaction. Lapidus and Schibrowsky (1996) demonstrated that a team's performance can generate a halo effect that influences spectator evaluations of other service components of the event. In their study the best performance produced the highest satisfaction ratings, whereas the worst performance produced the lowest satisfaction ratings. Similarly, in this thesis it is proposed that the extent to which a team wins or loses also influences spectator satisfaction.

Another study that provided support for the existence of a direct relationship between the win/lose phenomenon and customer satisfaction was Wann et al. (1994). Their research was discussed previously in support of the proposed relationship between club identification and customer satisfaction. The results revealed main effects of game outcome on spectator emotions. According to Mittal et al. (1998) customer satisfaction comprises an emotional dimension. Wann et al. (1994) found that spectators who watched their team win experienced the greatest increases in positive emotions. Spectators who watched their team lose experienced the greatest increases in negative emotions.

Similar to the relationship between club identification and customer satisfaction, there exists a complex relationship between the win/lose phenomenon and customer satisfaction. A variety of evidence supports the existence of direct as well as indirect relationships between the two variables.

In view of the foregoing discussion the following proposition is made:

Proposition 23

> *There is a positive relationship between the win/lose phenomenon and customer satisfaction.*

4.3.4 Propositions arising from the repeat purchase intention outcome

4.3.4.1 Customer satisfaction → repeat purchase intention

A relationship between customer satisfaction and repeat purchase intention has been established for a variety of products, including margarine, coffee, toilet tissues, paper towels and macaroni (LaBarbera & Mazursky, 1983), automobiles (Mooradian & Olver, 1997), health care services (Gotlieb et al., 1994; Mittal et al., 1998) and management consultancy services (Patterson et al., 1997). However, the general dearth of sport-specific customer satisfaction research means that the literature examining the relationship between spectator satisfaction and repeat purchase intention is minimal.

The only two studies located that specifically examined the relationship between sport spectator satisfaction and repeat purchase intention were conducted by Wakefield and Blodgett (1994) and Zhang et al. (1998). Researching baseball stadiums, Wakefield and Blodgett found that satisfaction with the sport servicescape influenced repatronage intentions. Similarly, Zhang et al. (1998) found that satisfaction with various peripheral aspects of the spectator service were positively predictive of not only intended game attendance but also actual game attendance.

Further support for the existence of a relationship between sport customer satisfaction and repeat purchase intention arises from the work of Wakefield, Blodgett and Sloan (1996). Using two college football games they investigated the relationships between a number of aspects of the sport servicescape, spectator perceptions of crowding, spectator pleasure, the desire of spectators to stay at a sport venue and repatronage intentions. A significant relationship was found between spectator pleasure, an emotional response sharing some similarity with customer satisfaction, and repatronage intentions. Spectators who experienced high levels of pleasure indicated a greater likelihood of repurchase behaviour.

Therefore, in view of the foregoing discussion and Madrigal's (1995) observation that "a satisfactory experience resulting from attending sporting events would appear to be an important predictor of a fan's likelihood of attending future events" (p. 206), the final proposition of this thesis is:

Proposition 24

There is a positive relationship between customer satisfaction and repeat purchase intention.

4.4 Summary

The aim of this chapter was to advance a series of research propositions to test the determinants of customer satisfaction with the season ticket service. The propositions were developed for two alternative research models. Twenty-four propositions were developed in total. Of these propositions, six are unique to the Expectations Model and one is unique to the Non-Expectations Model.

In developing the propositions the chapter provided theoretical support for the conceptual models as depicted in Figure 4.1 and Figure 4.2. The models propose a number of relationships among variables that have yet to be subjected to empirical study as a whole, or, in most instances, as independent relationships.

The models and thus the propositions developed in this chapter will now be tested empirically. In Chapter 5 the design of the research instruments and the process of data collection will be outlined. In Chapter 6 and 7 the research findings will be presented. A discussion of the research findings, theoretical conclusions and their managerial implications will form the basis of Chapter 8.

CHAPTER 5
RESEARCH METHODOLOGY

5.1 Introduction

The previous chapters reviewed the relevant literature and developed two alternative models for this thesis. The research propositions to be tested and their development were also presented. This chapter will now discuss the research methodology applicable to this study.

First, the research context will be described which involves the justification of the use of season tickets as the product of investigation and also the justification of customers of the NBL clubs as the customer group of interest. Second, the research design is outlined and this encompasses a description of the three stages of data collection and the employment of survey questionnaires. Third, the pilot study and its resulting scales are discussed. Fourth, the development and administration of the pre-season and post-season research instruments of the main study are outlined. Fifth, the operational definitions of the research constructs are presented and, finally, the pre-season and post-season research instruments are described.

5.2 Justification for the Season Ticket Service

The sport industry comprises a great variety of sport organisations. The diversity of the industry has been widely acknowledged especially by those attempting to segment it in some way (e.g., Pitts et al., 1994), as well as by those attempting to develop classification schemas for its constituent organisations (e.g., Chelladurai, 1985, 1992; Kikulis, Slack, Hinings, & Zimmermann, 1989; Shilbury, 1994). Despite the diversity of the sport industry, however, this thesis is concerned with customer satisfaction as it pertains to only one particular type of sport organisation, that is, the professional sport club where the sport of interest is a team sport.

The spectator sport service of professional sport clubs can be bought as a ticket to a single event or as a ticket to all, or a choice of several, home games for a season (i.e., a season ticket). Whereas single ticket purchasers experience the professional sport club's service for several hours, season ticket holders experience the service over a period of several months. Furthermore, some professional sport clubs will extend their services beyond the playing season. For example, the Sydney Swans Australian Rules Football Club hosts out-of-season social events for its season ticket customers.

A season ticket to a professional sport club comprises much more than just tickets to a series of individual sport events. A season ticket typically entitles a season ticket holder to a number of benefits that single ticket buyers do not receive. Some of these benefits may include discounted merchandise, access to play-off tickets, invitations to social functions and the opportunity to meet and mingle with the club's players.

Domestically, season ticket holders of professional sport clubs are often referred to as *members*. In the case of the Townsville Crocodiles, an NBL club, they are also referred to as *season ticket members*. The rationale for the change in terminology from season ticket holder, or customer, is to make the supporter feel like they are more a part of the club (D. Keeffe, personal communication, 21 April, 1999). While season ticket memberships have existed for many years in sport, Bhattacharya (1998) noted the proliferation of membership programs in non-sport contexts and described them as key marketing tools. Furthermore, a growing body of research (Bhattacharya, 1998; Bhattacharya et al., 1995; Ferreira, 1996) has begun to address the notion of customers as members in non-sport contexts.

Season ticket holders, or members, are extremely important customers of professional sport clubs. In the NBL for example, these customers are known to attend more games, buy more merchandise, purchase more concessions and spread more positive word-of-mouth about various aspects of the club than are single ticket buyers (A. Morris, personal communication, 26 October, 1999). Furthermore, a large season ticket holder customer base makes it easier for professional sport clubs to manage their finances as the bulk of season ticket purchases occur pre-season. Therefore, the more season ticket holders a professional sport club has, generally the better.

Despite the importance of season ticket sales to the professional sport club no customer satisfaction studies address the season ticket as a product meriting research interest. Instead the few studies that investigate some aspect of customer satisfaction with the spectator sport service do so in the context of specific events (Lapidus & Schibrowsky, 1996; Madrigal, 1995; Zhang et al., 1998) or venues (Wakefield & Blodgett, 1994). No research could be identified that investigated satisfaction with the season ticket service of professional sport clubs.

In summary, the choice of the season ticket as the product of interest to this study is justified on two counts. First, season ticket sales and therefore the satisfaction of season ticket holders are important to professional sport clubs. Second, there is a dearth of customer satisfaction research addressing the season ticket.

5.3 Justification for Selection of Basketball Season Ticket Holders

The population of interest to this study is season ticket holders of professional sport clubs, where the sport of interest is a team sport. Team sports played professionally in Australia include, amongst others, Basketball, Cricket, Soccer, Rugby Union, Rugby League and Australian Rules Football.

The following four criteria were used to select the sport from which season ticket holders were sampled:

1. the sport must offer a season ticket service comparable to those offered by most other professional sports;
2. the sport must be played internationally;
3. the individual clubs of the sport league must be supportive of the research; and
4. the individual clubs of the sport league must have sufficient numbers of season ticket customers.

The first two criteria relate to the generalisability of results. The results of a study using basketball season tickets are likely to have greater generalisability than a sport such as cricket which structures its season ticket service differently to most team sports. Furthermore, the results of a study using a global sport such as basketball are more

likely to be generalisable to an international population of season ticket holders than a study based on a domestic sport such as Australian Rules Football. It is possible the process driving the satisfaction of basketball spectators in Australia will more closely approximate the process driving the satisfaction of international sport spectators in general than those driving the satisfaction process for spectators of a domestic sport.

The third and fourth criteria relate to more practical considerations. The two-stage research design and data analysis requirements of this thesis necessitated a large final sample of approximately 500 respondents. It was anticipated that 200 season ticket holders from each participating club would need to be sampled initially to achieve this result. Finally, the research required contact details for each club's season ticket holders. The support of the clubs in providing this information was therefore vital for the success of this thesis.

The sport that best met each of the aforementioned criteria was Basketball. Thus the study's sample comprised season ticket holders of clubs from the NBL. The NBL commenced operations in 1979 with 10 teams. The maximum number of teams to play in the NBL was 15 in 1990. However, at the time of data collection there were 11.

Given the suitability of NBL club customers of the season ticket service for this research, the propositions of this thesis will now be examined using a cross-section of this population. Season ticket holders from 10 of the 11 NBL clubs participated in the research. The eleventh NBL club, which had initially agreed to participate, withdrew its support for the research immediately prior to data collection.

5.4 Research Design

The major research methodology used to collect the data for this thesis was survey research. The survey research method is the most popular method for assessing customer satisfaction and its determinants (e.g., Bearden & Teel, 1983; Churchill & Surprenant, 1982; Liljander & Strandvik, 1997; Mittal et al., 1998; Oliver, 1979, 1980a, 1993b; Patterson et al., 1997; Shemwell et al., 1998). Survey research is also the most frequently employed method for assessing other constructs of interest to this thesis

including sport-specific group identification, (e.g., Fisher & Wakefield, 1998; Wann & Branscombe, 1993; Wann & Dolan, 1994) and repeat purchase intention (e.g., Gotlieb et al., 1994; Mittal et al., 1998; Mooradian & Olver, 1997; Patterson et al., 1997; Wakefield & Blodgett, 1994). The only variable of interest to this thesis not measured via survey research was the seasonal outcome variable of the win/lose phenomenon which was provided by the NBL.

There are a variety of surveying options available to the researcher, including mail surveys, electronic surveys, telephone interviews and face-to-face interviews. This thesis employed self-administered mail questionnaires. The use of self-administered mail questionnaires was recommended by Salant and Dillman (1994, p. 37) for:

1. surveying people for whom a reliable address list is available and who are likely to respond accurately and completely in writing;
2. surveys in which an immediate turnaround is not required; and
3. projects in which money, qualified staff and professional help are all relatively scarce.

This thesis employed a three-stage research design, which included one pilot study survey, one pre-season survey and one post-season survey. Together, the pre-season and post-season surveys constituted the main study. Table 5.1 summarises the three stages of the research design. The pilot study was necessary primarily for the purpose of scale development. The pilot study comprised a qualitative and then a quantitative phase. The qualitative stage of the pilot study comprised several focus group discussions, whilst the quantitative stage comprised a mail survey. Sport marketers (Sutton, Irwin & Gladden, 1998) are increasingly advocating combined qualitative and quantitative methodologies.

The two-stage design of the main study was guided by Patterson's (1993a) study of the determinants of customer satisfaction with management consulting services. Swan and Trawick (1981) also used a two-stage design in their examination of the determinants of customer satisfaction with a dining experience. Both stages of the main study were quantitative and entailed mail surveys. Season ticket holders who responded to the Stage 1 pre-season questionnaire also received the Stage 2 post-season questionnaire eight months later.

Table 5.1 Three Stages of Research Design

Stage	Study	Component	Dates
1	Pilot Study	Qualitative focus groups	April 1999
		Quantitative survey	June 1999
2	Pre-season	Quantitative survey	August 1999
3	Post-season	Quantitative survey	April 2000

The two-stage longitudinal research design is one of the strengths of this thesis. There are two reasons for this. First, a two-stage design is preferred when studying the determinants of customer satisfaction (Oliver, 1997; Patterson, 1993b; Swan & Trawick, 1981). This is because the study of customer satisfaction determinants typically involves the measurement of both pre-purchase constructs and post-purchase constructs. Second, in accord with the structural equation modelling literature, causality among variables is much more easily established when the measurement of causes and effects is separated by time (Bollen, 1989; Mulaik & James, 1995).

5.5 Pilot Study

The pilot study was primarily concerned with scale development. Specifically, the pilot study aimed to develop scales to be used for both the on-court and off-court dimensions of expectations, perceived performance and disconfirmation, as well as scales for the two dimensions of club identification (i.e., team identification and fan identification). The pilot study also enabled a test of reliability for the customer satisfaction measure and the collection of several pieces of demographic and background information.

This section will now discuss several facets of the pilot study. First, the research instrument development process is described. Second, the administration of the

instrument is outlined. Third, the analysis of the pilot study data and the resulting scales are presented.

5.5.1 Pilot study research instrument development

The development of the pilot study research instrument was in accord with Churchill's (1979) recommended procedure for developing better marketing constructs, Krosnick and Fabrigar's (1997) guidelines for designing rating scales and Salant and Dillman's (1994) advice for developing quality survey questionnaires.

The development of the instrument involved a number of distinct stages. These stages included:

1. a review of literature;
2. focus groups; and
3. pre-tests.

5.5.1.1 Pilot study research instrument development – review of literature

5.5.1.1.1 Expectations

The review of literature resulted in the identification of many different customer expectations of the spectator sport service. However, most of these expectations pertained to service quality as opposed to customer satisfaction (e.g., Graaff, 1994; Kim & Kim, 1995; McDonald, Sutton & Milne, 1995; Shilbury & Westerbeek, 1996). The expectations used in service quality studies are not necessarily the same as expectations used in customer satisfaction studies (Oliver, 1997). This is because service quality and customer satisfaction are two separate, albeit related, constructs (Cadotte et al., 1987; Cronin & Taylor, 1994; Hennig-Thurau & Klee, 1997; Iacobucci et al., 1994a; Liljander & Strandvik, 1997; Oliver, 1993b; Parasuraman, Zeithaml & Berry, 1994; Swan et al., 1982).

Different types and dimensions of expectations are used in satisfaction judgments than in service quality judgments. Customer satisfaction can be determined by a much broader array of expectation dimensions than can service quality (Oliver, 1997). Some

of these dimensions may not even be under the control of the professional sport club (e.g., congestion on access roads, insufficient parking, poor quality of catering).

In addition to the lack of customer satisfaction specific expectations located in the literature, most sport related expectations have been explored in the context of events, venues and clubs (e.g., Graaff, 1994; Kim & Kim, 1995, 1998; Madrigal, 1995; McDonald et al., 1995; Shilbury & Westerbeek, 1996). No research could be located that investigated expectations of the season ticket service. Therefore, the sport-specific expectations identified in the literature were only partly useful in terms of scale development. In the main the expectations were used only to guide the focus group discussions described in Section 5.5.1.2. Several dimensions of spectator sport service aspects identified by Wakefield et al. (1996) and Zhang et al. (1998) were also used to guide the discussions.

5.5.1.1.2 Sport-specific group identification

The review of literature revealed four sport-specific group identification scales (i.e., Fisher, 1998; Fisher & Wakefield, 1998; Wakefield, 1995; Wann & Branscombe, 1993). The scales comprised five, four, three and seven items respectively. Each of these scales will now be discussed in order to establish why new sport-specific group identification measures needed to be developed for this thesis.

Wann & Branscombe (1993) scale

The Wann and Branscombe (1993) scale is the most frequently utilised sport-specific group identification scale in the literature (e.g., Madrigal, 1995; Wann, 1995, 1996; Wann & Branscombe, 1995; Wann & Dolan, 1994a, 1994b; Wann et al., 1994; Wann, Metcalf, Adcock, Choi, Dallas & Slaton, 1997; Wann & Schrader, 1996, 1997; Wann, et al., 1996; Wann & Wiggins, 1999). The scale is commonly referred to as the Sport Spectator Identification Scale (SSIS) (Wann, 1996; Wann & Schrader, 1996, 1997) and is purported to measure the degree of identification a spectator has with a particular sport team.

The SSIS comprises seven questions. Each question is scored using an 8-point Likert scale format. Wann and Branscombe (1993) reported the reliability of the SSIS, as measured by Cronbach's coefficient alpha, to be .91. Other researchers have reported

Cronbach alphas for the SSIS of .93 (Wann et al., 1996), .95 (Wann et al., 1994) and .96 (Wann & Wiggins, 1999).

Despite the popularity of the SSIS and its consistently high reliability scores, the validity of the scale is questionable for several reasons. First, Wann and Branscombe (1993) used the terms *commitment* and *identification* interchangeably in their research. However, these are two separate, although related constructs. The extent to which an individual is committed to a team does not necessarily equate with the extent to which the individual defines himself or herself in terms of the team.

Second, a number of the SSIS items are not measures of team identification but rather they are measures of behavioural outcomes arising from team identification. Two such examples include "During the season, how closely do you follow the (team name) via ANY of the following: (a) in person or on television, (b) on the radio, (c) televised news or a newspaper?" and "How often do YOU display the (team name's) name or insignia at your place of work, where you live, or on your clothing?" (Wann & Branscombe, 1993, p. 5).

Third, even though Wann and Branscombe (1993) maintained they were measuring team identification, a number of their measures appeared to assess the related fan identification construct instead. For example, one of their measures reads: "How strongly do you see yourself as a fan of the (team name)?" (Wann & Branscombe, 1993, p. 5).

Finally, Wann and Branscombe (1993) claimed to validate their scale by testing the association of various team identification levels with several behavioural, affective and cognitive reactions of sport spectators. Using a series of MANOVAs they proposed team identification was related to: (a) involvement with the team; (b) positive attributions regarding team successes; (c) investment in the team; and (d) perceptions of other spectators as unique. However, these outcomes may stem not just from team identification but also from other constructs such as team commitment (e.g., Kahle, Kambara & Rose, 1996). This is particularly so given Wann and Branscombe's (1993) confounding of the team identification and team commitment constructs.

Three other scales: Fisher (1998), Fisher & Wakefield (1998) and Wakefield (1995)
Unlike the popular Wann and Branscombe (1993) scale, use of the other three sport-specific group identification scales (Fisher, 1998; Fisher & Wakefield, 1998; Wakefield, 1995) could only be located once each in the literature. All three scales used a 7-point Likert scale to assess the degree to which respondents either agreed or disagreed with scale items. The reported reliabilities of these scales, as measured by Cronbach's coefficient alpha, were .88 (Fisher, 1998), .81 (Fisher & Wakefield, 1998) and .90 (Wakefield, 1995).

Wakefield (1995) developed a three-item team identification scale for his research. The content validity of the scale is superior to Wann and Branscombe's (1993) in that its measures do not tap into the behavioural components of team identification to the same extent to which the SSIS does. Furthermore, Wakefield established the discriminant and convergent validity of his scale via structural equation modelling. A limitation of Wakefield's study, however, is that it did not provide the reader with sufficient information detailing how the scale was constructed.

Another and more significant limitation of Wakefield's (1995) scale is that, despite referring to his scale in terms of team identification, it appears Wakefield developed a scale of fan identification. The three items it comprised read: "I am a loyal (team name) fan", "Win or lose, I will always be a (team name) fan" and "I like to let people know that I am a (team name) fan" (p. 339).

Fisher (1998) and Fisher and Wakefield (1998) constructed the two remaining sport-specific group identification scales located in the literature. Fisher (1998) used an eight-item scale, of which three items were later deleted in the purification process, to measure team identification. For their research, Fisher and Wakefield (1998) used a five-item scale, of which one item was later deleted. Similar to the items in Wakefield's (1995) scale the items in these two scales do not tap into the behavioural outcomes of team identification. Therefore, in this regard the content validity of the two scales is superior to the content validity of the SSIS. However, the scales did comprise items measuring not just team identification but also fan identification. For example, two of Fisher and Wakefield's items read: "I almost think of myself as part of the team" (i.e.,

team identification) and "One of the things I'd tell others about myself is that I'm a fan of the team" (i.e., fan identification) (p. 38).

Both Fisher (1998) and Fisher and Wakefield (1998) described the purification process for their team identification scales. However, neither detailed the sources from which the team identification measures were originally drawn. Finally, only Fisher specifically discussed scale validity. He utilised structural equation modelling to determine the discriminant and convergent validity of his measures.

In summary, a number of limitations of the four team identification scales were revealed by the review of literature. The limitations include: (a) insufficient information on scale construction; (b) the inclusion of measures of sport-specific group identification outcomes; (c) the inclusion of measures of both team identification and fan identification; (d) the lack of validity testing; and (e) the lack of accurate validity testing. The limitations of the four pre-existing scales, together with the requirement of this thesis for scales of both team identification and fan identification, necessitated that further scale development be undertaken.

The first step in the process of further scale development involved the pooling of each of the measures constituting the four sport-specific group identification scales. Items deemed to measure outcomes of group identification were then removed from the list of pooled items. The second step in the research instrument construction process involved focus group discussions.

5.5.1.2 Pilot study research instrument development – focus groups

Five focus group discussions with season ticket holders from three NBL clubs were conducted. Inglis (1992) advocated focus groups as a useful qualitative methodology in sport management research. The focus group discussions were planned and conducted in accord with guidelines specified by Gordon and Langmaid (1988). The size of the focus groups ranged from six to twelve participants. Participants represented both genders, first-time as well as long-term season ticket holders and a wide array of age groups.

The focus group discussions served two purposes. First, the discussions were used to assess the suitability of the reduced pool of items derived from the review of literature for inclusion in the research instrument. Suitable pooled items were modified where necessary to suit the research context of this thesis. Second, the focus group discussions enabled the generation of scale items over and above items appearing in the literature.

In total, a list of 13 on-court expectations and 46 off-court expectations were generated by the review of literature and focus group discussions. The same process generated 13 items to measure the team identification and fan identification dimensions of club identification. These item lists were restructured into questions and together with a number of other questions to measure customer satisfaction and to gather extra demographics and background information formed the first draft of the pilot study instrument. The third step in the research instrument construction process involved pre-tests.

5.5.1.3 Pilot study research instrument development – pre-tests

Two pre-tests were conducted to finalise the pilot study instrument. The first pre-test involved a panel of five sport management, sport psychology and sport sociology academics, as well as five NBL marketers. Upon completing the questionnaires the pre-tested individuals were interviewed. At these interviews each panel member was requested to identify any difficulties or ambiguities they experienced with the instrument. The pilot study instrument was subsequently revised to cater for as many of the panel's recommendations as was practicable and justifiable.

The second pre-test involved a panel of randomly selected NBL season ticket holders. Two season ticket holders from each of the NBL clubs were posted the revised pilot study instrument. Fifteen season ticket holders participated in the second pre-test. Once again, the season ticket holders completed the questionnaire and were interviewed for their feedback. The pre-test required minor adjustments be made to the phrasing of some of the instrument's questions.

In summary, the pilot study instrument's development entailed a three-stage process. This process included a review of literature, five focus group discussions and two pre-tests.

5.5.1.4 Final pilot study instrument

The final pilot study instrument required season ticket holders to respond to questions incorporating: (a) 10 on-court expectations items; (b) 31 off-court expectations items; (c) 13 items to measure the two dimensions of club identification (i.e., team identification and fan identification); and (d) 7 items measuring customer satisfaction.

The instrument required respondents to rate the expectations and club identification items on 10-point Likert scales. The customer satisfaction items also required respondents to use 10-point Likert scales as well as 10-point bipolar adjective scales. Likert scales and bi-polar adjective scales are some of the more commonly used scaling methods in the social sciences (Anderson, Basilevsky & Hum, 1983).

Finally, in addition to questions pertaining to expectations, club identification and customer satisfaction, the pilot study instrument also required season ticket holders to answer several questions designed to gather extra information, including the respondent's age, gender and club.

5.5.2 Pilot study research instrument administration

The pilot study instrument, a self-administered mail questionnaire, was distributed to 700 individuals who held a season ticket for the 1998/1999 NBL season. Season ticket holders from four NBL clubs participated in the pilot study. A stratified random sampling procedure to ensure adequate representation of each club's season ticket holders was used (Lehmann, Gupta & Steckel, 1998).

The instrument was administered two months following the end of the 1998/1999 season. A cover letter that ensured respondent anonymity accompanied the research

instrument. Approximately two weeks after the questionnaire and cover letter were dispatched the researcher mailed follow-up reminder postcards for the purpose of response rate maximisation. Season ticket holders were given six weeks to complete and return the pilot study instrument.

Of the 700 questionnaires distributed, 372 (i.e., 53%) were returned. The returned questionnaires were screened and 350 (i.e., 50%) of them were deemed suitable for analysis. The respondents were mostly male (i.e., 55.7%) and, whilst the dominant age category was 36 – 45 years (i.e., 32%), over half of the respondents were aged between 26 – 45 years (i.e., 60.9%). Each club comprised approximately a quarter (i.e., 24% – 28.6%) of the respondents.

5.5.3 Pilot study data analysis and results

Analysis of the pilot study data involved two distinct stages. The first stage entailed exploratory factor analysis whereas the second stage entailed reliability analysis. Both stages of the data analysis were conducted in SPSS (1999).

Exploratory factor analysis followed by reliability analysis is commonly recommended for the early stages of scale construction (Churchill, 1979; Clark & Watson, 1995; Gerbing & Hamilton, 1996). Exploratory factor analysis is a data reduction technique used to reduce a set of variables into an unknown number of underlying factors or dimensions (Anderson et al., 1983; Kim & Mueller, 1978). Reliability analysis is a technique that assesses the internal consistency, or common core, of scale items (Hair, Anderson, Tatham & Black, 1998).

In addition to being a data reduction technique, exploratory factor analysis is also used to assess the convergent and discriminant validity of scales. All items of a scale should load strongly on one factor if they are to satisfy the requirements of convergent validity and should load weakly on all other factors to satisfy the requirements of discriminant validity (Kohli, 1989).

The expectations and club identification data sets were factor analysed with the maximum likelihood method with oblimin rotation. The maximum likelihood method of factor extraction is posited as theoretically superior to a number of other methods (Abizadeh & Basilevsky, 1986; Cattell, 1988).

Following factor extraction and rotation, the researcher must determine the number of factors to retain. Zwick and Velicer (1986) described this as "one of the most critical decisions" (p. 432) confronting the researcher. In accord with several factor analysts (Cattell, 1988; Gorsuch, 1988; Kim & Mueller, 1978), the following criteria were used to select the most appropriate factor solutions:

1. content validity;
2. no more factors than suggested by the number of eigenvalues greater than one;
3. no fewer factors than suggested by the scree plot;
4. maximum explanation of variance; and
5. parsimony.

The expectations and club identification scales resulting from the exploratory factor analysis were subsequently submitted to reliability analysis using Cronbach's alpha coefficient (Cronbach, 1951). The acceptable range of alpha coefficients for this type of exploratory research is .5 – .6 (Nunnally, 1967).

5.5.3.1 On-court expectations: Exploratory factor analysis and reliability analysis

Maximum likelihood factor analysis with oblimin rotation was used to analyse the 10 on-court expectations items. The analysis revealed three items with communalities less than .4. These items were subsequently deleted from the analysis in accord with Clark and Watson (1995) and Hair et al. (1998). The factor analysis was re-run on the seven remaining items and a 1-factor solution emerged. The 1-factor solution accounted for 52.65 per cent of the variance and is presented in Table 5.2. The solution was considered acceptable since it was in accord with the previously noted criteria for accepting factor solutions as specified in Section 5.5.3. The eigenvalue for the single factor was 3.685.

The set of 7 on-court expectation items was subsequently submitted to reliability analysis, using Cronbach's alpha coefficient (Cronbach, 1951). The alpha coefficient for the on-court expectations scale was .85. The reliability measure was well in excess of what Nunnally (1967) regarded as minimally acceptable. Furthermore, the alpha-if-item-deleted scores confirmed each item contributed substantially to the alpha coefficient of the factor.

Table 5.2 On-Court Expectations: Factor Analysis Results

On-Court Expectations: Factor Analysis Results	
Items	**F1**
Be competitive in every game	.756
Play as a team	.717
Perform consistently	.708
Put in maximum effort at every game	.683
Demonstrate excellent skill levels	.645
Keep their cool under pressure	.597
Show camaraderie on the court	.565
% of variance explained	52.65

Note. Items with < .4 communalities excluded from the analysis.

The exploratory factor analysis and reliability analysis indicated the on-court expectations scale was unidimensional and possessed both convergent and discriminant validity. The content validity of the scale was assessed through the examination of the scale items by a panel of two sport management academics and two NBL marketers considered expert judges.

In summary, the on-court expectations scale was named *Professional Play*. The scale represents the dimension of expectations season ticket customers have for their season ticket's on-court performance. Examination of the Professional Play scale items

revealed season ticket holders want their clubs to conduct themselves professionally when they take to the basketball court.

5.5.3.2 Off-court expectations: Exploratory factor analysis and reliability analysis

Maximum likelihood factor analysis with oblimin rotation was used to analyse the 31 off-court expectation items. The analysis identified eight items with communalities less than .4. These items were subsequently deleted in accord with Clark and Watson (1995) and Hair et al. (1998).

The factor analysis was re-run on the 23 remaining items and a 5-factor solution emerged. However, this solution was considered unacceptable because one of its factors contained only a single item. Using the previously noted criteria that the factor solution should contain no more factors than suggested by the number of eigenvalues greater than one and no fewer factors than suggested by the scree plot, the factor analysis was re-run three times with the number of factors constrained to two, three and four respectively. The 4-factor solution was clearly the superior solution based on its content validity and percentage of variance accounted for (i.e., 55.29%). The eigenvalues for the first, second, third and fourth factors were 7.683, 2.029, 1.610 and 1.395 respectively. The solution is presented in part in Table 5.3. The full solution, that is with factor loadings of all items on all factors, is presented in Appendix A.

Overall, the factors in Table 5.3 display good content validity. However, they did require some refinement. First, one of the items (i.e., provide me with quality merchandise) in the second factor did not conceptually fit with the factor. Items within any given factor are supposed to share a common thematic core. Two other items (i.e., provide convenient and secure parking and/or be accessible by public transport and be fan focused and not sponsor focused) were also characterised by poor conceptual fit as well as by weak loadings (i.e., < .4). These three items were therefore deleted from the analysis in a procedure recommended by Churchill (1979) and Kohli (1989).[3]

[3] Not all weakly loading items were removed from the analysis. One item (deliver what they promise) was retained due to its strong conceptual fit with the first factor.

Table 5.3 Off-Court Expectations: Factor Analysis Results

Off-Court Expectations: Factor Analysis Results				
Items	**F1**	**F2**	**F3**	**F4**
Maintain a positive image	.807			
Employ courteous and professional staff	.757			
Have clear and accurate scoreboard information	.663			
Promote a family-friendly atmosphere	.477			
Be professionally marketed and managed	.474			
Deliver what they promise				
Provide convenient and secure parking and/or be accessible by public transport				
Organise social opportunities for fans		-.836		
Provide opportunities to meet and mingle with players		-.800		
Keep me up to date on club matters		-.543		
Make me feel like part of the club		-.469		
Provide quality merchandise		-.447		
Provide quality entertainment			-.679	
Provide a variety of entertainment			-.660	
Create an exciting atmosphere			-.577	
Provide a visually appealing stadium			-.467	
Provide me with one of the best seats in the stadium				.706
Give me benefits non-season ticket holders don't get				.592
Give me priority access to play-off tickets				.565
Maintain a comfortable stadium				.498
Give long-term season ticket holders better seats than new season ticket holders				.461
Allow me to choose my own seat				.453
Be fan focused and not sponsor focused				
% of variance explained	33.40	8.82	7.00	6.07

Note. Items with < .4 communalities excluded from the analysis.

Note. Items with < .4 loadings deleted from all factors.

Following the factor refinement process, the items constituting each of the four off-court expectations factors were submitted to reliability analysis, using Cronbach's alpha coefficient (Cronbach, 1951). The Cronbach's alpha coefficients for the four factors ranged from .70 – .82. In accord with Nunnally's (1967) recommended acceptable alpha coefficient range of .5 – .6 each of the factors demonstrated high internal consistency. Furthermore, the alpha-if-item-deleted scores confirmed each factor's items contributed substantially to the alpha coefficient of the factor. All items for all factors were thus retained.

The exploratory factor analysis and reliability analysis indicated the four off-court expectations scales were unidimensional and possessed both convergent and discriminant validity. A panel of two sport management academics and two NBL marketers considered expert judges assessed the content validity of the scales.

In summary, the four off-court expectations scales were named *Professional Management*, *Involvement*, *Atmosphere,* and *Seating and Ticketing*. The scales represent four separate dimensions of expectations season ticket holders have for their season ticket's off-court performance.

In brief, examination of the Professional Management scale items revealed season ticket holders have the expectation for their clubs to conduct themselves professionally off the court as well as on the court. Inspection of the Involvement scale items indicated season ticket holders do not just expect to spectate, they also expect opportunities to become involved in their club. The four Atmosphere items revealed season ticket holders have the expectation their clubs will provide them with entertainment, ambience and razzmatazz with their basketball. Finally, examination of the items comprising the Seating and Ticketing dimension indicated season ticket holders want special consideration with regard to seating and ticketing arrangements.

Few similarities exist between the dimensions developed from the pilot study of this thesis and pre-existing dimensions developed by Wakefield et al. (1996) and Zhang et al. (1998). The lack of similarity between the dimensions can be explained in terms of the season-ticket specific nature of this study, the venue specific nature of Wakefield et al. and the game operations specific nature of Zhang et al.

5.5.3.3 Club identification: Exploratory factor analysis and reliability analysis

In Chapter 3 of this thesis it was proposed that Team Identification and Fan Identification are two separate dimensions of club identification, a summary type of sport-specific group identification. No empirical evidence of these three separate types of sport-specific group identification exists in the literature.

Maximum likelihood factor analysis with oblimin rotation was used to analyse the 13 club identification items. The analysis produced two separate factors. The analysis also revealed three items with communalities less than .4 and one item with approximately equal loadings across both factors. These four items were subsequently deleted in accord with Clark and Watson (1995) and Hair et al. (1998).

The factor analysis was re-run on the nine remaining items and a 2-factor solution again emerged. The 2-factor solution accounted for 73.57 per cent of the variance. The eigenvalues for the first and second factors were 5.340 and 1.281 respectively. The 2-factor solution is presented in part in Table 5.4. . The full solution, that is with factor loadings of all items on both factors, is presented in Appendix B. In the main the resulting factors represent Team Identification and Fan Identification respectively.

The first factor contains items measuring Team Identification. This is with the exception of the second item (i.e., being a (club name) fan is an important part of who I am) which is more a measure of Fan Identification than Team Identification. Due to the exploratory nature of the pilot study research a decision was made to retain this item despite its poor conceptual fit with its factor. This is because the item fits very well with the second factor. The second factor contains items measuring Fan Identification.

Table 5.4 Club Identification: Factor Analysis Results

Club Identification: Factor Analysis Results		
Items	**F1**	**F2**
The (club name) failures feel like my failures	.835	
Being a (club name) fan is an important part of who I am	.798	
The (club name) successes feel like my successes	.739	
I almost think of myself as part of the (club name)	.737	
It's important for me to feel like part of the (club name)	.619	
I am a (club name) fan		-.891
I enjoy being a fan of the (club name)		-.870
Supporting the (club name) is important to me		-.698
One of the things I'd tell others about myself is that I'm a fan of the (club name)		-.620
% of variance explained	59.34	14.23

Note. Items with < .4 communalities excluded from the analysis.

Note. Items with < .4 loadings deleted from all factors.

The results of the factor analysis provide empirical evidence that different types of sport-specific group identification exist, with two of these being Team Identification and Fan Identification. Prior to this analysis the two types of group identification had been referred to interchangeably in the literature, but most frequently as Team Identification. Furthermore, sport-specific group identification had been posited as a unidimensional construct (Fisher, 1998; Fisher & Wakefield, 1998; Wann & Branscombe, 1990, 1993, 1995; Wann et al., 1994; Wann et al., 1996). However, the multidimensional nature of sport-specific group identification as conceptualised by this thesis and demonstrated by the pilot study results is also in accord with Karasawa (1991, 1995) as discussed previously in Chapter 3.

The Team Identification and Fan Identification scales were submitted to reliability analysis. Two separate reliability analyses were conducted for both scales. The first analyses were conducted on the two sets of items as they appear in Table 5.4. The

resulting Cronbach coefficient alphas for the Team Identification and Fan Identification scales were .89 and .84 respectively. These values are well in excess of Nunnally's (1967) minimal acceptable range of .5 – .6.

The second analyses involved the repositioning of the second item of the first factor (i.e., being a (club name) fan is an important part of who I am). This item was repositioned to the second factor for content validity purposes. It was more representative of a measure of Fan Identification than Team Identification. The resulting coefficient alphas for both scales were .86. Together with the improved content validity of the factors, the high reliability estimates indicate the item is best suited as a measure of Fan Identification. Furthermore, the alpha-if-item-deleted scores confirmed each factor's items contributed substantially to the alpha coefficient of the factor.

The exploratory factor analysis and reliability analysis revealed two separate types of sport-specific group identification. Both scales demonstrated sound internal reliability. Furthermore, repositioning of the second item of the Team Identification scale resulted in good content validity for both scales. An expert panel of two sport management academics and two NBL marketers determined the content validity of the scales.

Although the Team Identification and Fan Identification scales are characterised by good reliability and content validity, the convergent and discriminant validity of these scales is not as substantial as for the expectations scales. This is due to the item repositioning described above. The "Being a (club name) fan is an important part of who I am" item loaded more strongly on the Team Identification scale than the Fan Identification scale to which it was relocated. Irrespective of the diminished discriminant and convergent validity, however, the scales were retained due to their other desirable properties and the exploratory nature of the pilot study, and because there is no one way of determining the validity of a scale (Kline, 1986).

In summary, the Team Identification and Fan Identification scales represent two dimensions of sport-specific group identification. In this thesis, Team Identification and Fan Identification are conceptualised as two dimensions of club identification. Examination of the items in each scale reveals season ticket holders identify with their

team (i.e., Team Identification) as well as with other fans of their team (i.e., Fan Identification).

5.5.3.4 Summary of pilot study results

The pilot study analysis was conducted in accord with the scale development literature (Churchill, 1979; Clark & Watson, 1995; Comrey, 1988; Miller, 1991; Robinson, Shaver & Wrightsman, 1991; Smith & McCarthy, 1995) and Hair et al.'s (1998) factor analysis guidelines. Seven new scales were developed from the analysis of the pilot study data.

Analysis of the on-court expectations items resulted in the identification of one scale. The on-court expectations scale was named Professional Play. On the other hand, analysis of the much larger set of off-court expectations items produced four separate scales. The off-court expectations scales were named Professional Management, Involvement, Atmosphere, and Seating and Ticketing. Analysis of the club identification items revealed two scales. The two scales were named Team Identification and Fan Identification.

In summary, all seven scales resulting from the pilot study enjoyed good content validity as well as substantial reliability (i.e., Cronbach's coefficient alphas ranging from .70 – .86). In the main, the convergent and discriminant validity of these scales was also acceptable. The seven newly named scales and the number of items in each scale, as well as the respective coefficient alphas, are displayed in Table 5.5.

Table 5.5 Seven New Scales: Number of Items and Coefficient Alphas

Scale	Number of items	Coefficient alpha
On-Court Expectations		
• Professional Play	7	.85
Off-Court Expectations		
• Professional Management	6	.80
• Involvement	4	.82
• Atmosphere	4	.81
• Seating and Ticketing	6	.70
Club Identification		
• Team Identification	4	.86
• Fan Identification	5	.86

5.6 Main Study

5.6.1 Main study research instrument development

The main study of this thesis entailed two stages of data collection and two different research instruments. In line with the development of the pilot study instrument described previously in Section 5.5.1, the two research instruments of the main study were also developed in accord with Churchill (1979), Krosnick and Fabrigar (1997) and Salant and Dillman (1994). The pre-season and post-season research instruments appear in Appendix C and Appendix F respectively.

The development of the two research instruments necessitated three stages. These stages included:

1. the pilot study;
2. additional item generation by a panel of experts; and
3. pre-tests.

5.6.1.1 Main study research instrument development – pilot study

The pilot study described in Section 5.5 was primarily concerned with the development of scales for the subsequent development of the two research instruments required by the main study. The pilot study produced seven scales. The items constituting these scales formed the starting point for the two research instruments of the main study. Furthermore, the customer satisfaction measures as well as a number of background and demographic questions from the pilot study were also incorporated into the research instruments.

5.6.1.2 Main study research instrument development – additional item generation

The generation of additional scale items is common practice in the early stages of scale development. The various preliminary analyses often reveal the unsuitability of certain items in the original item pool thus necessitating their removal (Churchill, 1979; Clark & Watson, 1995; Comrey, 1988). This is why Clark and Watson (1995) recommended erring on the side of over-inclusiveness when generating scale items.

A panel of experts comprising the same individuals (i.e., two sport management academics and two NBL marketers) who assessed the content validity of the scales resulting from the analysis of the pilot study data developed four additional measures. Specifically the extra measures were needed for two of the off-court scales. The Involvement and Atmosphere scales each comprised only four measures whereas the other off-court scales each comprised six measures. The additional measures were subsequently incorporated into the two research instruments.

5.6.1.3 Main study research instrument development – pre-tests

Two pre-tests were conducted to finalise the research instruments of the main study. The first pre-test involved a panel of two sport management academics and two NBL marketers different to those individuals involved in the content validity and additional item generation stages described previously. As in the pilot study pre-tests the panel

members completed the questionnaires and were then interviewed so as to identify any difficulties or ambiguities they experienced with the instruments. The instruments were subsequently amended to cater for the panel's recommendations where possible.

The second pre-test involved a panel of randomly selected NBL season ticket holders. Five season ticket holders participated in the second pre-test. Once again, these individuals completed the questionnaires and were interviewed for their feedback. The pre-test required minor adjustments to be made to the phrasing of some of the instruments' questions.

In summary, the development of the main study's research instruments entailed a three-stage process. This process included a pilot study, additional item generation by a panel of experts and two pre-tests. A description of both the pre-season and post-season questionnaires appears in Section 5.8.

5.6.2 Main study pre-season data collection

The pre-season questionnaire measured constructs the customer satisfaction literature dictates should be measured *prior* to the customer experiencing the product. Therefore, customer expectations of on-court and off-court season ticket performance were measured with the pre-season questionnaire.

The pre-season questionnaire also measured pre-season club identification. There is a lack of agreement in the sport sociology and sport psychology literature as to whether sport-specific group identification is a relatively stable and enduring phenomenon (Wann & Schrader, 1996) or whether it is much more dynamic (Wann, 1996). However, social identity theorists (Brickson, 2000; Brown & Starkey, 2000; Hogg & Terry, 2000; Hogg et al., 1995) are typically in agreement that social identifications are dynamic. The possibility of club identification varying over the season under study necessitated that it be measured both pre-season and post-season.

In addition to measures of expectations and club identification, the pre-season questionnaire also gathered background and demographic information. The extent of this information is outlined later in Section 5.7.3.

The pre-season questionnaire (see Appendix C) was distributed in the middle of August 1999. A cover letter (see Appendix D) describing the research and outlining its importance accompanied the questionnaire. Questionnaire recipients had approximately six weeks to respond to the questionnaire as the 1999/2000 basketball season commenced in the second week of October, 1999. Questionnaires returned after the first week of October were not included in the analysis.

In total, 1830 pre-season questionnaires were mailed to season ticket holders of 10 of the 11 NBL clubs. Akin to the pilot study, a stratified random sampling procedure selected the season ticket holders. It was the researcher's original intent to sample 200 season ticket holders from each club. However, at the time the survey needed to be conducted, several of the clubs had secured fewer than 200 season ticket customers and others had secured considerably more. As a result, the number of season ticket holders surveyed from each club was disproportionate. The club with the lowest number of season ticket holders surveyed was Western Sydney (n = 30). The club with the highest number of season ticket holders surveyed was Adelaide (n = 249).

A response rate maximisation approach was taken to ensure the highest possible rate of questionnaire return. First, the questionnaire was made as visually appealing as possible with the use of coloured paper and basketball graphics. Second, the questionnaire was mailed in a large A4-sized envelope with *Basketball* stamped across its front. Third, a cover letter ensuring respondent confidentiality and expressing the importance and personal value of the research accompanied the questionnaire. Finally, approximately two weeks after the questionnaire was initially dispatched, a follow-up reminder postcard (see Appendix E) was mailed to each questionnaire recipient. The postcard thanked individuals who had returned questionnaires and reminded those who had not that their co-operation would be greatly appreciated. The importance of the survey was also reiterated.

In total, 838 of the original 1830 questionnaires were returned (i.e., 45.79%). Once returned, the questionnaires were screened and 808 (i.e., 44.15%) were considered suitable for analysis. Table 5.6 displays the number of pre-season questionnaires distributed to each club, the useable number of questionnaires returned for each club and the useable response rate for each club.

Table 5.6 Pre-Season Questionnaires Distributed and Returned

Club	Number distributed	Number returned (useable)	Response rate (%) (useable)
Adelaide	249	113	45.38
Brisbane	201	63	31.34
Canberra	134	70	52.24
Melbourne	224	99	44.20
Perth	197	98	49.75
Sydney	217	80	36.87
Townsville	199	79	39.70
Victoria	182	98	53.85
Western Sydney	30	11	36.67
Wollongong	197	97	49.24
Total	1830	808	

5.6.3 Main study post-season data collection

The post-season questionnaire measured constructs the customer satisfaction literature dictates should be measured *after* the customer has consumed or experienced the product. Therefore, on-court and off-court perceptions of performance and disconfirmation, as well as customer satisfaction, were measured with the post-season questionnaire. Repeat purchase intention along with club identification were also measured post-season.

The post-season questionnaire (see Appendix F) and accompanying cover letter (see Appendix G) were distributed in the middle of April 2000, approximately two weeks

after the last game in the NBL grand final. The questionnaire was distributed to all season ticket holders who returned useable pre-season questionnaires. Thus 808 post-season questionnaires were mailed to season ticket holders.

Once again, a response rate maximisation approach was undertaken. The approach was identical to that described previously for the pre-season survey. The follow-up reminder postcard used in the post-season survey is located in Appendix H. Upon return, the questionnaires were screened. In total, 596 (i.e., 73.76%) of the original 808 questionnaires were returned. Following a screening process, 577 (i.e., 71.41%) were considered suitable for analysis. Table 5.7 displays the number of questionnaires distributed to each club, the useable number of post-season questionnaires returned for each club and also the useable response rate for each club.

Table 5.7 Post-Season Questionnaires Distributed and Returned

Club	Number distributed	Number returned (useable)	Response rate (%) (useable)
Adelaide	113	88	77.88
Brisbane	63	43	68.25
Canberra	70	55	78.57
Melbourne	99	61	61.62
Perth	98	66	67.35
Sydney	80	48	60.00
Townsville	79	58	73.42
Victoria	98	77	78.57
Western Sydney	11	10	90.91
Wollongong	97	71	73.20
Total	808	577	

5.7 Operational Definitions of Research Constructs

Following is a discussion of the measures used for the constructs in the two models of this thesis. As recommended, all constructs utilise multi-item measures in an attempt to achieve validity and reliability and to reduce measurement error (Anderson et al., 1983; Churchill, 1979; Diamantopoulos, 1994; Nunnally, 1967). The exception is the measure for the win/lose phenomenon. The single item nature of the win/lose measure is discussed in Section 5.7.2.2.

5.7.1 Dependent variables

The dependent variable of most interest to this thesis is customer satisfaction. However, as has been the case in a number of other customer satisfaction studies (e.g., Anderson & Sullivan, 1993; Bearden & Teel, 1983; Hennig-Thurau & Klee, 1997; Oliver, 1980a; Oliver & Swan, 1989a; Patterson, 1993a; Swan & Trawick, 1981) and combined with the stipulation of the various NBL clubs involved in this research, this thesis has also incorporated repeat purchase intention as a dependent variable. The customer satisfaction and repeat purchase intention measures are described below in Sections 5.7.1.1 and 5.7.1.2 respectively.

5.7.1.1 Customer satisfaction

Customer satisfaction contains both affective as well as cognitive dimensions (Mittal et al., 1998; Oliver, 1997; Patterson, 1993a; Swan et al., 1982). Therefore, this thesis used items that tapped into the affective component of customer satisfaction as well as items that tapped into its cognitive component. The seven customer satisfaction measures employed by this thesis were derived from measures used by Oliver (1980a), Oliver and Swan (1989a) and Patterson (1993a) relevant to this study. The measures were modified slightly where necessary to suit the research context of this thesis.

The aforementioned studies reported reliability estimates of the customer satisfaction measures, as estimated by Cronbach's coefficient alpha (Cronbach, 1951), ranging from

.82 (Oliver, 1980a) to .95 (Oliver & Swan, 1989a). In addition to the high coefficient alphas reported in previous studies, the seven customer satisfaction items were also utilised in the pilot study described in Section 5.5. The pilot study results revealed the reliability of these items, as measured by Cronbach's coefficient alpha, to be .96.

Three of the seven customer satisfaction items were measured on a 7-point Likert scale. Respondents were asked to rate the extent to which they agreed or disagreed with the item statements. The statements read:

1. I am very satisfied with my decision to buy a season ticket;
2. If I had to do it all over again, I would still have bought a season ticket; and
3. My decision to buy a season ticket was a good one.

The remaining four customer satisfaction items were measured on a 7-point bipolar adjective scale. Respondents were asked to rate how they felt about their season ticket. The items read:

1. Very dissatisfied – Very satisfied;
2. Very displeased – Very pleased;
3. Very disgusted – Very delighted; and
4. A poor experience – A great experience.

The customer satisfaction measures appear in Questions 7.1 and 7.2 of the post-season questionnaire in Appendix F.

5.7.1.2 Repeat purchase intention

Repeat purchase intention is a type of behavioural intention. Other types of behavioural intention in the marketing literature include recommending particular products or brands (Boulding, Kalra, Staelin & Zeithaml, 1993) and using coupons (Bruner & Hensel, 1996).

Several behavioural intention measures, including purchase intention measures, appear in the literature (see Bruner & Hensel's 1996 edition of the *Marketing Scales Handbook* for a review). The repeat purchase intention measures used in this thesis were derived

from the work of Fishbein and Ajzen (1975), Oliver and Bearden (1985), Oliver and Swan (1989a) and Patterson (1993a). The aforementioned studies reported reliability estimates of the repeat purchase intention measures as estimated by Cronbach's coefficient alpha (Cronbach, 1951) ranging from .87 (Oliver & Bearden, 1985) to .98 (Patterson, 1993a).

The four repeat purchase intention items were measured on a 7-point bipolar adjective scale. Respondents were asked if they would buy another season ticket from their club. The items they responded to were:

1. Unlikely – Likely;
2. Impossible – Very possible;
3. Not probable – Very probable; and
4. Uncertain – Certain.

The repeat purchase intention measures appear in Question 8.1 of the post-season questionnaire in Appendix F.

5.7.2 Explanatory variables

The explanatory variables of this thesis include the following: Club Identification; the Win/Lose Phenomenon; On-Court Expectations; Off-Court Expectations; On-Court Perceived Performance; Off-Court Perceived Performance; On-Court Disconfirmation; and Off-Court Disconfirmation. The measures of these explanatory variables will now be discussed.

5.7.2.1 Club identification

It was proposed in Chapter 3 that team identification and fan identification are two separate dimensions of club identification, a summary type of sport-specific group identification. Therefore, this thesis used the team identification and fan identification scales developed in the pilot study as measures of club identification. The reliability

estimates of these two scales, as measured by Cronbach's coefficient alpha (Cronbach, 1951), were both .86.

The team identification measure utilised in this thesis comprised four items. On a 7-point Likert scale, respondents were asked to indicate the extent to which they agreed or disagreed with the following items:

1. The (club name) failures feel like my failures;
2. I almost think of myself as part of the (club name);
3. The (club name) successes feel like my successes; and
4. It's important for me to feel like part of the (club name).

The fan identification measure utilised in this thesis comprised five items. On a 7-point Likert scale, respondents were asked to indicate the extent to which they agreed or disagreed with the following items:

1. Being a (club name) fan is an important part of who I am
2. I am a (club name) fan
3. I enjoy being a fan of the (club name)
4. Supporting the (club name) is important to me
5. One of the things I'd tell others about myself is that I'm a fan of the (club name)

The club identification measures appear in Question 1.1 of the pre-season and post-season questionnaires in Appendix C and Appendix F respectively.

5.7.2.2 Win/lose phenomenon

Whether a team wins or loses would generally be considered a non-metric and nominal form of measurement. This is especially the case in an event-specific context where winning and losing are mutually exclusive. However, the notion of winning and losing in a seasonal context is decidedly more complex. In a seasonal context, winning and losing can be conceptualised as a matter of degree.

Although only one team can win a sport league's end-of-season grand final, each team will generally win and lose games throughout a season. The percentage of games won

throughout a sport season will vary greatly across a sport league. The focus groups discussed earlier in Section 5.5.1.2 supported the notion of various levels of winning in a seasonal context. For example, just qualifying for the play-offs was considered to be a form of winning, as was qualifying for the grand final series. In summary, the team did not have to win the grand-final to be considered a winner.

The win/lose measure employed by this thesis was a single item measure provided by the NBL. The measure was the percentage of games each team won throughout the 1999/2000 season. Theoretically the win/lose measure ranges from 0 – 100 percent. For the teams in the NBL the actual measures ranged from 25 – 77.78 percent. Each team's win/lose measure was rescaled to place it on a 1 – 7 scale akin to each of the other measures utilised in this thesis. The rescaling of the win/lose measure was in accord with Bollen's (1989) recommendation for structural equation modelling, the dominant mode of analysis employed by this thesis.

The win/lose measure does not appear in either of the survey questionnaires. Instead, the measure as provided by the NBL and rescaled for the purpose of this research appears in Appendix I.

5.7.2.3 On-court expectations and off-court expectations

This thesis employed measures for on-court expectations as well as measures for off-court expectations. These measures were developed primarily from the pilot study described in Section 5.5. However, as noted earlier a panel of experts was also used to generate additional measures for two of the off-court expectations scales.

The on-court expectations measure, or Professional Play scale, comprised seven items. The reliability estimate for the Professional Play scale, as measured by Cronbach's coefficient alpha (Cronbach, 1951), was .85.

The off-court expectations measures, or Professional Management, Involvement, Atmosphere, and Seating and Ticketing scales, each comprised six items. Prior to the generation of additional items for the Involvement and Atmosphere scales, the

reliability estimates for these scales, as measured by Cronbach's coefficient alpha (Cronbach, 1951), ranged from .70 – .82.

The expectations scales required respondents to use a 7-point Likert scale to indicate the extent to which they agreed or disagreed with a series of item statements pertaining to expectations of their recently purchased, but not yet experienced, season ticket. The stem statement read: "I expect the (club name) will …". An example of an on-court expectation item read: "… Play as a team." An example of an off-court expectation item read: "… Keep me up to date on club matters."

The sets of items for both the on-court expectations scale and the off-court expectations scale are presented in Tables 5.8 and 5.9 respectively. These measures also appear in Questions 3.1 and 4.1 of the pre-season questionnaire in Appendix C.

Table 5.8 Scale Items of On-Court Expectations Measure

Scale items
1. Be competitive in every game
2. Play as a team
3. Perform consistently
4. Put in maximum effort at every game
5. Demonstrate excellent skill levels
6. Keep their cool under pressure
7. Show camaraderie on the court

Table 5.9 Scale Items of Off-Court Expectations Measure

Scale items
1. Maintain a positive image
2. Employ courteous and professional staff
3. Have clear and accurate scoreboard information
4. Promote a family-friendly atmosphere
5. Be professionally marketed and managed
6. Deliver what they promise
7. Organise social opportunities for fans
8. Provide opportunities for me to meet and mingle with players
9. Keep me up to date on club matters
10. Make me feel like part of the club
11. Seek season ticket holder feedback *
12. Organise travel opportunities for fans to attend away games *
13. Provide quality entertainment
14. Provide a variety of entertainment
15. Create an exciting atmosphere
16. Provide a visually appealing stadium
17. Employ entertainers who will motivate the crowd *
18. Have fun competitions and prizes for season ticket holders *
19. Provide me with one of the best seats in the stadium
20. Give me benefits that non-season ticket holders don't get
21. Give me priority access to play-off tickets
22. Maintain a comfortable stadium
23. Give long-term season ticket holders better seats than new season ticket holders
24. Allow me to choose my own seat

Note. An asterisk (*) indicates a new item generated after scale purification.

5.7.2.4 On-court perceived performance and off-court perceived performance

Consistent with the approach adopted by Oliver and Burke (1999), Patterson (1993a, 1993b) and Shaffer and Sherrell (1997), the same seven statements used to measure on-court expectations were employed to assess perceptions of on-court performance. Likewise, the same 24 statements used to measure off-court expectations were employed to assess perceptions of off-court performance. Each of the perceived performance scales required respondents to use a 7-point Likert scale to indicate the extent to which they agreed or disagreed with a series of item statements pertaining to the performance of their season ticket.

The sets of items for both the on-court perceived performance scale and the off-court perceived performance scale were presented previously in Tables 5.8 and 5.9 in Section 5.7.2.3. These measures also appear in Questions 3.1 and 5.1 of the post-season questionnaire in Appendix F.

5.7.2.5 On-court disconfirmation and off-court disconfirmation

Disconfirmation is not an easy construct to measure (Churchill & Surprenant, 1982). However, two measurement options are available to the researcher. First, disconfirmation can be modelled as the inferred or subtractive difference between expectations and perceived performance (i.e., Expectations – Perceived Performance = Disconfirmation) (e.g., Patterson, 1993a; Swan & Trawick, 1981; Tse & Wilton, 1988). This inferred model, like SERVQUAL (Parasuraman et al., 1988), makes use of difference scores.

Second, disconfirmation can be modelled as the perceived or subjective evaluation of the difference between expectations and perceived performance (e.g., Oliver, 1980a, 1981; Oliver & DeSarbo, 1988; Patterson, 1993b; Shaffer & Sherrell, 1997; Swan & Trawick, 1980). This second model generally employs a *Better than Expected – Worse than Expected* heuristic.

The disconfirmation model most accepted by customer satisfaction researchers is the subjective model. This is due to the numerous problems associated with its alternative that makes use of difference scores. Difference scores are generally not well accepted in consumer research. Their use has been criticised for reasons associated with reliability, discriminant validity, spurious correlations and also variance restriction problems (Brown, Churchill & Peter, 1993; Carman, 1990; Iacobucci et al., 1994a; Peter, Churchill & Brown, 1993; Teas, 1993).

The subjective model of disconfirmation is also more popular because it is more logical. For most, if not all products, it is illogical that customers objectively allocate expectation scores and performance scores and then calculate the difference between these two original scores to arrive at yet another objective score (i.e., the disconfirmation score). This is far too complex and unreasonable a process for customers to undertake (Oliver, 1997), particularly when the product of interest is a longitudinal one such as the season ticket service.

In brief, the inferred model of disconfirmation has attracted little support. Instead, most of the literature has advocated the use of a subjective and comparative judgment of disconfirmation. Furthermore, Oliver (1980a) and also Patterson (1993a) have provided empirical evidence that subjective comparative judgments can be superior to difference scores. Moreover, Tse and Wilton (1988) argued that because subjective disconfirmation does not result in an immediate satisfaction judgment, it is more likely to provide a "richer explanation" of the complex processes underlying customer satisfaction formation (p. 205). For all of the previously noted reasons, this thesis employed subjective measures of disconfirmation.

Disconfirmation can be attribute-specific, dimension-specific, or relate to the product as a whole (Oliver, 1997). Shaffer and Sherrell (1997), Spreng and Mackoy (1996) and Spreng and Olshavsky (1993) incorporated attribute-specific measures of disconfirmation in their studies of customer satisfaction with a health care service, education service and camera respectively. In line with previous research, this thesis also employed attribute-specific measures of disconfirmation.

Consistent with the approach adopted by Shaffer and Sherrell (1997), the same seven statements used to measure on-court expectations and on-court perceived performance were employed to assess on-court disconfirmation. Likewise, the same 24 statements used to measure off-court expectations and off-court perceived performance were employed to assess off-court disconfirmation.

Respondents were asked how closely various aspects of the club's on-court and off-court performance compared to what they had expected. The disconfirmation scales required respondents to use a 7-point Likert scale to indicate the extent to which performance was better or worse than expected.

The sets of items for both the on-court disconfirmation scale and the off-court disconfirmation scales were presented previously in Tables 5.8 and 5.9 in Section 5.7.2.3. These measures also appear in Questions 4.1 and 6.1 of the post-season questionnaire in Appendix F.

5.7.3 Background and demographic information

A range of demographics and background information was considered suitable for the purposes of the survey and the research setting. This additional information was collected by the pre-season survey. The pre-season questionnaire gathered information pertaining to: importance of winning (Questions 2.1 and 2.2); new or renewing season ticket holder (Question 5.1.1); number of years as a season ticket holder (Question 5.1.2); fan status (Question 5.1.3); number of years as a fan (Question 5.1.4); single or group season ticket (Question 5.1.5); people included in group ticket (Question 5.1.6); gender (Question 5.1.7); and age (Question 5.1.8). Space was also provided at the end of both the pre-season and post-season questionnaires for any additional comments the respondents wished to make.

5.8 Research Instruments

The two research instruments (i.e., pre-season questionnaire and post-season questionnaire) in Appendices C and F were designed following Salant and Dillman's (1994) recommendations. The questionnaires were printed on coloured paper and incorporated basketball-specific graphics to help attract and then maintain the respondents' interest. The more personal data requests were located towards the end of the questionnaires. Furthermore, as recommended by Babbie (1990), the questionnaires were divided into several sections to aid the respondents' understanding of the different information requirements.

The pre-season questionnaire was divided into five sections. The five sections and the measures they comprised are summarised in Table 5.10.

Table 5.10 Pre-Season Questionnaire Sections and Measures

Section number	Section title	Measures
1	You and the (club name)	Pre-season club identification (i.e., team identification and fan identification)
2	Importance of Winning	Pre-season importance of winning Pre-season winning orientation
3	Expectations of On-Court Performance	Expectations of on-court performance
4	Expectations of Off-Court Performance	Expectations of off-court performance
5	You and Your Season Ticket	Background and demographics

The post-season questionnaire was somewhat longer than the pre-season questionnaire. This is because the post-season questionnaire needed to provide post-season measures

of club identification and the importance of winning, as well as several additional post-purchase constructs. The post-season questionnaire was divided into eight sections. These eight sections and the measures they comprised are summarised in Table 5.11.

Table 5.11 Post-Season Questionnaire Sections and Measures

Section number	Section title	Measures
1	You and the (club name)	Post-season club identification (i.e., team identification and fan identification)
2	Importance of Winning	Post-season importance of winning Post-season winning orientation
3	On-Court Performance	On-court perceived performance
4	Comparison of Performance and Expectations (on-court)	On-court disconfirmation
5	Off-Court Performance	Off-court perceived performance
6	Comparison of Performance and Expectations (off-court)	Off-court disconfirmation
7	Satisfaction with the Season Ticket	Customer satisfaction
8	Intent to Buy Another Season Ticket	Repeat purchase intention

Attached to both of the questionnaires were a cover letter and a return postage-paid envelope addressed to the researcher at the university. The questionnaires required code numbers so that each pre-season response could be correctly matched with its post-season counterpart. Although the research design could not provide anonymity the respondents were guaranteed complete confidentiality.

5.9 Summary

This chapter commenced with the justification for choosing the season ticket as the product of interest to this thesis as well as the justification for choosing basketball season ticket holders as the customers of interest. In the main, however, this chapter has described the research and questionnaire design as well as the data collection for this thesis. One pilot survey and two main surveys were undertaken to effect this research. Respondents in each of the surveys were selected by stratified random sampling and assured complete confidentiality. The response rates for the surveys were maximised by a personalised cover letter, a colourful and visually interesting questionnaire and a follow-up reminder postcard.

Most of the construct measures employed in this thesis required initial development or considerable further development of scales for the research to proceed. Specifically, the on-court scale (i.e., Professional Play) and the four off-court scales (i.e., Professional Management, Involvement, Atmosphere, and Seating and Ticketing) were completely new scales developed for this thesis (as reported in Sections 5.5.3.1 and 5.5.3.2). In contrast, the development of the two club identification scales (i.e., Team Identification and Fan Identification) borrowed somewhat from pre-existing sport-specific group identification scales. However, these two scales should not be considered mere refinements or modifications of pre-existing scales. They do not closely approximate the pre-existing scales from which they in part emerged. Indeed they represent two separate dimensions of what was previously conceptualised as a unidimenisonal construct. In this sense, they too can be considered *newly developed* scales.

This thesis used three measures not developed by the researcher. These were measures for customer satisfaction, repeat purchase intention and the win/lose phenomenon. The customer satisfaction and repeat purchase intention measures were extensively referenced as outlined in Sections 5.7.1.1 and 5.7.1.2. The win/lose measure described in Section 5.7.2.2 is an objective measure provided by the NBL. The next chapter will present the preliminary results of the data from the main study.

CHAPTER 6
PRELIMINARY DATA ANALYSIS AND RESULTS

6.1 Introduction

The previous chapter outlined the research methodology for this thesis. The research methodology chapter comprised a review of the research context, including the merit of examining the season ticket service, as well as the suitability of this study's respondents, NBL season ticket holders. An overview of the research design describing both the pilot study and the two-stage main study was then presented. Details on the development and administration of the pilot study research instrument were followed by an outline of how the pilot study data were analysed. Then the development of the two research instruments of the main study, including the use of the pilot study results, was described. An outline of the administration of the two research instruments then followed. The chapter concluded with a presentation of the operational definitions of the research variables and with a description of the main study's two questionnaires.

The purpose of this chapter is to present the preliminary analysis of the data necessary for the subsequent testing of the propositions developed in Chapter 4. This chapter begins with a discussion of the sample profile, namely the final sample characteristics. A review of structural equation modelling (SEM) is then presented. The SEM review is followed by the results of the first of the two steps of the SEM process, the development of the measurement model. Specifically, the development of one-factor congeneric models of each of the research constructs (excluding winning) is presented. The derivation of composite scales from the one-factor congeneric models then follows. Finally, the maximal reliabilities, regression coefficients and error variances associated with the composite scales are computed.

In summary, this chapter focuses on the development of the measurement model necessary for the subsequent proposition testing reported in Chapter 7, the next results chapter. Chapter 7 addresses the results of the proposition testing by modelling the structural relationships among the research variables.

6.2 Sample Profile

6.2.1 Sample characteristics

The previous chapter outlined the two-stage sampling process of this thesis which resulted in a final sample of 577 season ticket holder respondents from 10 different NBL clubs. The characteristics of the sample are displayed in Table 6.1. In summary, most of the sample had renewed previous season tickets. Only 7.6 percent of the respondents were first-time season ticket holders. Thus the majority of the sample had held a season ticket for two or more years. Furthermore, the sample was characterised by mainly long-term season ticket holders. That is, 61 percent of the sample had held a ticket for five or more years.

Most of the respondents (i.e., 72.5%) had held a season ticket for two or more persons, whereas the minority (i.e., 18.5%) had held a ticket just for themselves. Of the 470 individuals who held a season ticket for two or more persons, the most common category of additional persons included in the ticket was *family members* (i.e., 75.1%). The second most common category of additional persons was *family and friends* (i.e., 13.4%), with the least popular category being *friends* (i.e., 11.5%).

The sample comprised more males than females (i.e., 53.6 % compared to 46.4%). The most common age bracket for the sample was from 35-44 years (i.e., 30.5%). Furthermore, more than three-quarters of the season ticket holders were aged from 25-54 years (i.e., 78.7%).

6.2.2 Sample representativeness

While the pre-season survey requested demographic information over a range of issues (i.e., Section 5 of the questionnaire) the NBL clubs kept only a limited amount of information on record that was pertinent to the survey. Furthermore, the nature of season ticket holder demographic information varied between clubs. Therefore, the extent to which the sample was representative of the population of interest was difficult to determine.

Table 6.1 Sample Characteristics

Characteristic	Category	Number of persons	Percentage of persons
New or renewing season ticket holder	New	44	7.6
	Renewing	533	92.4
Total number of years as a season ticket holder	1	44	7.6
	2-4	181	31.4
	5-9	207	35.9
	10+	145	25.1
Single or group ticket	Single	107	18.5
	Group	470	81.5
Persons included on group ticket	Family	353	75.1
	Friends	54	11.5
	Combination	63	13.4
Gender	Female	268	46.4
	Male	309	53.6
Age	18-24	47	8.1
	25-34	114	19.8
	35-44	176	30.5
	45-54	164	28.4
	55-64	61	10.6
	65+	15	2.6

The representativeness of the sample was, however, partly ensured by the very nature of the research design. That is, season ticket holders from all but one of the NBL clubs participated in the research. Furthermore, the demographic characteristics of the sample are very similar to those of the season ticket holders who participated in the pilot study.

6.3 Structural Equation Modelling (SEM)

This section focuses on SEM, the dominant method of statistical analysis employed in this thesis. The section commences with an introduction to SEM. Then a description of the highly regarded two-step approach to SEM is provided. A discussion of SEM estimation methods and model fit is then presented. Finally, the process and principles of model respecification followed in this thesis are outlined.

6.3.1 SEM: An introduction

SEM has also been referred to as covariance structure analysis, covariance structure modelling, analysis of covariance structures and causal modelling (Kline, 1998). SEM is now a commonly employed technique across many disciplines and has gained considerable credibility among marketing researchers (Baumgartner & Homburg, 1996; Diamantopoulos, 1994; Hulland, Chow & Lam, 1996). Furthermore, SEM has been widely used in studies of customer satisfaction determinants (Babin & Griffin, 1998; Churchill & Surprenant, 1982; Oliver & Burke, 1999; Shaffer & Sherrell, 1997).

SEM is a large sample statistical technique used to test hypotheses about relations among latent and observed variables (Hoyle, 1995). Latent variables are hypothetical constructs. They are not directly measurable and must therefore be measured indirectly, hence inferred (Schumacker & Lomax, 1996). The latent variable most central to this thesis is customer satisfaction.

Observed or indicator variables are variables that are directly measurable (Bollen, 1989). Two examples of observed variables used in this thesis to measure the latent variable of customer satisfaction were: (a) the extent to which the respondent believed

the decision to purchase the season ticket was a good one and (b) the extent to which the respondent was either pleased or displeased with the season ticket.

SEM is similar to multiple regression and path analysis in that it is concerned with testing relationships among several variables simultaneously. However, SEM is the superior technique. A significant limitation of multiple regression is that it does not allow the same variable to be both a predictor and a criterion in the one analysis. A second limitation of multiple regression is that it does not account for the measurement error of variables (Kline, 1998). Unlike multiple regression, path analysis does allow a variable to be both a predictor and a criterion. However, path analysis does not overcome the problem of measurement error. One of the main limitations of path analysis is that it uses single item measures for each of the constructs among which it attempts to model relations (Kline, 1998). A multi-item measurement approach is generally accepted as a superior approach (Anderson et al., 1983; Bollen, 1989; Diamantopoulos, 1994; Schumacker & Lomax, 1996). In summary, in this thesis SEM was preferred to multiple regression and path analysis because it accounts for measurement error and it allows the same variable to be both a predictor and criterion.

6.3.2 Two-step approach

Structural equation models typically comprise two parts: a measurement model and a structural model. In the main, the measurement model specifies how the latent variables are measured in terms of the observed variables. In contrast, the structural model specifies the relationships among the latent variables (Diamantopoulos, 1994).

It is common practice to analyse the measurement and structural models separately. This is referred to as the two-step approach to SEM (Anderson & Gerbing, 1988, 1992; Kline, 1998; Schumacker & Lomax, 1996). In a study examining the use of SEM among marketing researchers, Hulland et al. (1996) reported that the majority (i.e., 59%) of the models in their database were analysed via a two-step approach.

The first step of the two-step SEM process entails the development of the measurement model. The measurement model is then used as input for the structural model. The

analysis of separate measurement and structural models is highly recommended (Anderson & Gerbing, 1988, 1992; Jöreskog & Sörbom, 1993b; Kline, 1998; Schumacker & Lomax, 1996) as indicated by Jöreskog and Sörbom's (1993b) claim: "The testing of the structural model, i.e., the testing of the initially specified theory, may be meaningless unless it is first established that the measurement model holds" (p. 113).

A two-step approach was undertaken for this thesis. The development of the measurement model by way of composite scales derived from one-factor congeneric models is outlined in Section 6.4 of this chapter. The analysis of the structural models is the focus of Chapter 7.

6.3.3 Estimation method

The estimation method is the method by which the SEM program estimates the values of the unknown parameters in a research model. There are a number of different estimation methods available. Two such estimation methods are the Maximum Likelihood (ML) method and Asymptotic Distribution Free (ADF) method.

The ML method is the most frequently used and recommended method of estimation (Benson & Fleishman, 1994; Diamantopoulos, 1994; Hoyle & Panter, 1995; Kline, 1998). Sample size requirements of the ML method vary given model complexity but a sample size between 250 to 500 subjects is generally deemed acceptable (Kline, 1998). The ML method assumes multivariate normally distributed data. However, parameter estimates derived within large samples are reasonably accurate even when the normality assumption is violated (Kline, 1998).

Whilst the ML method assumes multivariate normally distributed data, the ADF method does not. Indeed the ADF estimation method was especially designed for data that are not multivariate normally distributed (Browne, 1982, 1984). A substantial limitation of the ADF method is its requirement for large sample sizes. Kline (1998) recommended that sample sizes of 200 – 500 might be necessary for simple models with more complex models possibly requiring minimal sample sizes of 1000.

Both the ML and ADF estimation methods were used in this thesis. The ADF method was employed in the development of the measurement model. The non-normal distribution of the data, as detected in the preliminary data screening stage of the analysis, together with the simplicity of each measurement model and the sample size of 577 resulted in the use of the ADF method.

Alternatively, the ML method was employed in the analysis of the structural models. The robustness of the ML method to non-normally distributed data, combined with the complexity of the structural models and the sample size of 577, resulted in the use of the ML method. Furthermore, preliminary data screening analysis revealed that the composite variables employed in the structural models were not as severely non-normal as the individual observed items employed in the measurement models, thus making the ML method even more preferable to the ADF method.

6.3.4 Model fit

Once model estimation has taken place the degree to which the model fits the data can be assessed. There are a variety of statistics available to test the adequacy of model fit. These statistics are referred to as goodness of fit statistics. They indicate the similarity between the sample covariance matrix and the population covariance matrix (Hoyle, 1995).

The most common way of assessing model fit is the use of the chi-square (χ^2) statistic combined with a selection of several of the many additional statistics developed to supplement its use (Hoyle, 1995). The plethora of fit indices available to the SEM researcher necessarily results in the question: Which are the *best* test statistics to evaluate model fit? Unfortunately there is no simple answer to this question for there are several factors that may influence the accuracy of these statistics and thus their appropriateness to a given piece of research. These include model misspecification, small-sample bias, estimation-method effect, the effect of violation of normality and independence (Hu & Bentler, 1998) and model complexity (Gribbons & Hocevar, 1998).

This thesis will employ nine test statistics to evaluate the fit of the measurement model and the structural models. The statistics chosen are among those more highly recommended and commonly used (Bollen, 1989; Hu & Bentler, 1998, 1999; Kline, 1998; Schumacker & Lomax, 1996). Two tests of model parsimony will also be used to evaluate the models. Each of the tests of model fit and model parsimony employed by this thesis is presented in Table 6.2.

Table 6.2 Goodness of Fit and Parsimony Tests

Test statistic	Abbreviated test statistic	References
Chi-square with accompanying degrees of freedom and probability level	(χ^2, df, p)	Fan, Thompson & Wang (1999) Hu & Bentler (1995)
Normed chi-square	(Normed χ^2)	Kline (1998) Schumacker & Lomax (1996)
Root mean-square error of approximation	(RMSEA)	Steiger (1990) Steiger & Lind (1980)
Root mean-square residual	(RMR)	Bollen (1989) Hulland, Chow & Lam (1996)
Standardised root mean-square residual	(SRMR)	Hu & Bentler (1995) Kline (1998)
Goodness of fit index	(GFI)	Hoyle & Panter (1995) Jöreskog & Sörbom (1984)

Table continues ...

Test statistic	Abbreviated test statistic	References
Adjusted goodness of fit index	(AGFI)	Jöreskog & Sörbom (1984) Kline (1998)
Non-normed fit index	(NNFI)	Bentler & Bonnett (1980) Hu & Bentler (1998)
Comparative fit index	(CFI)	Bentler (1990) Hoyle & Panter (1995)
Akaike information criterion	(AIC)	Akaike (1987) Kline (1998)
Consistent Akaike information criterion	(CAIC)	Bozdogan (1987) Kline (1998)

It is important to note that tests of model fit, including the tests presented in Table 6.2, can point to conflicting conclusions about model fit (Hoyle, 1995). That is, one test statistic may indicate acceptable fit whereas another may not. The fit indicated by the χ^2 statistic, for example, often contradicts the fit indicated by other tests. This is often due to its sensitivity to sample size. When sample size becomes large the χ^2 statistic can reject a model based on only a trivial difference between the sample covariance matrix and the fitted model (Hu & Bentler, 1995). A large sample (i.e., n = 577) was used in this thesis. Therefore, in this thesis a significant χ^2 statistic was not necessarily considered an indicator of poor model fit.

Due to anticipated conflicting results in model fit, in this thesis additional consideration was given to fit indices recommended by Hu and Bentler (1998). Hu and Bentler evaluated the sensitivity of fit indices based on three different estimation methods to

model misspecification, under conditions that varied sample size and distribution. With the ADF method, they recommended the use of the SRMR, supplemented by indices such as the NNFI or CFI. With the ML method they recommended the use of the SRMR supplemented by such indices as the NNFI, CFI or RMSEA.

In addition to treating the test statistics recommended by Hu and Bentler (1998) as the more robust of the chosen test statistics, this thesis also evaluated model fit in accord with Kline's (1998) recommendation that the more fit statistics indicating an adequate fit the better. Furthermore, indicators of model fit in addition to the test statistics were employed. Model fit is a multifaceted concept (Bollen, 1989). A good fitting model must not only be characterised by acceptable fit statistics, it should also be characterised by low standardised residuals, substantial squared multiple correlations and parameters of the right size, significance and directionality. Additionally, inappropriate values such as negative variances and squared multiple correlations greater than 1 should not be present (Bollen, 1989; Diamantopoulos, 1994; Kline, 1998).

6.3.4.1 Cut-off values for fit indices

Similar to the confusion over which goodness of fit statistics are the best are the conflicting viewpoints on the acceptable cut-off values for these statistics. For many of the fit statistics used in this thesis there exist a number of different recommended cut-off values.

Despite the limited agreement in the literature as to which are the right cut-off values for these statistics though, there is a growing belief that no cut-off value should be blindly accepted as an indicator of model fit (Fan & Thompson, 1999; Hu & Bentler, 1995; Kline, 1998; Weng & Cheng, 1997). The tests and the cut-off values that guided the evaluation of model fit for both the measurement model and structural models of this thesis are presented in Table 6.3. These cut-off values were applied more stringently to the development of the measurement model than to the structural models because model complexity sometimes effects model fit. Often measures of fit associated with complex models are lower than those associated with simpler models (Gribbons & Hocevar, 1998).

Table 6.3 Goodness of Fit Tests and Cut-off Values

Test	Cut-off values	References
χ^2, df, p	χ^2 should be roughly similar to the df with p > .05	Fan, Thompson & Wang (1999) Hu & Bentler (1995)
Normed χ^2	< 5	Bollen (1989) Schumacker & Lomax (1996)
RMSEA	< .10	Fan, Thompson & Wang (1999)
RMR	< .08	Hulland, Chow & Lam (1996)
SRMR	Close to .08	Hu & Bentler (1999)
GFI	> .9	Kline (1998) Schumacker & Lomax (1996)
AGFI	> .9	Kline (1998) Schumacker & Lomax (1996)
NNFI	Close to .95	Hu & Bentler (1999)
CFI	Close to .95	Hu & Bentler (1999)
AIC	No defined cut-off value. With non-hierarchical models, the one with the lowest AIC is preferred.	Kline (1998)
CAIC	No defined cut-off value. With non-hierarchical models, the one with the lowest CAIC is preferred.	Kline (1998)

6.3.5 Model respecification

It is common for goodness of fit test statistics to indicate that the proposed research model does not fit the data well. One reason for a poorly fitting model is misspecification (Schumacker & Lomax, 1996). The source of a misspecification problem is generally the incorrect inclusion or exclusion of a parameter (Bollen, 1989).

A number of general principles guided the anticipated model respecification process for this thesis. These principles are in accord with the recommendations of Bollen (1989), Diamantopoulos (1994) and Schumacker and Lomax (1996). The principles are outlined as follows:

1. Respecification is to be primarily guided by theory and substantive reasoning. No parameters should be included or excluded without substantial theoretical support.
2. The specification search is to consider the modification indices, the size, significance and directionality of parameter estimates, the size of residuals and the size and direction of squared multiple correlations.
3. Respecification is to be iterative in nature. Parameters are to be added or removed one at a time, with the model being re-run after each modification until a conceptually sound and acceptably fitting model is achieved.
4. Deletion of measurement items is preferred to the post hoc covariation of error terms.

In addition to the guidelines outlined above, respecification of the measurement models was also guided by research design. The research design of this thesis involved the same items being used to measure expectations, perceived performance and disconfirmation for each of the five season ticket dimensions. Thus for many of the measurement models, the research design necessitated that the inclusion or exclusion of parameters be guided in part by the suitability of the inclusion or exclusion of parameters from other measurement models. For example, the respecification of the Professional Play expectations model was guided in part by the respecification of both the Professional Play perceived performance model and the Professional Play disconfirmation model.

6.4 Step One: The Measurement Model

This section focuses on the development of the measurement model. As outlined previously, the development of a measurement model is the first step of the recommended two-step approach to SEM (Anderson & Gerbing, 1988, 1992; Kline, 1998; Schumacker & Lomax, 1996).

The approach taken to the analysis of the measurement model involved two distinct stages. The first stage comprised the development of 21 one-factor congeneric measurement models representing each of the scales outlined previously in Chapter 5. That is, an individual measurement model was developed for:

- team identification (1 x pre-season and 1 x post-season);
- fan identification (1 x pre-season and 1 x post-season);
- expectations (1 x on-court and 4 x off-court);
- perceived performance (1 x on-court and 4 x off-court);
- disconfirmation (1 x on-court and 4 x off-court);
- customer satisfaction; and
- repeat purchase intention.

A diagrammatical representation of a one-factor congeneric measurement model appears in Figure 6.1.

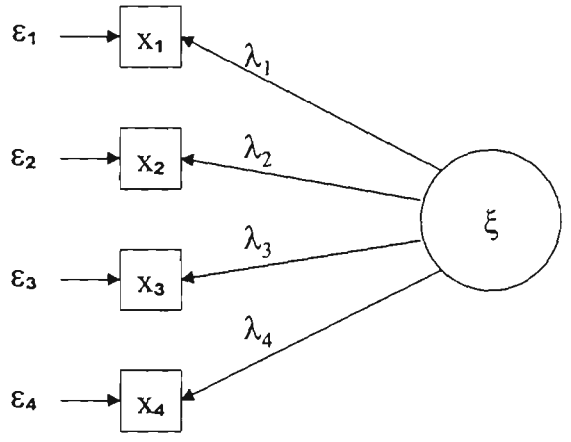
Where:

- ξ is the latent variable
- $X_1 - X_4$ are the observed indicator variables
- $\varepsilon_1 - \varepsilon_4$ are the errors associated with the measurement of $X_1 - X_4$
- $\lambda_1 - \lambda_4$ are the regression coefficients of ξ in the regression of $X_1 - X_4$ on ξ

Standard expected graphic techniques as described by Schumacker and Lomax (1996) have been utilised in the diagrammatical representations of the one-factor congeneric measurement models. The observed variables are enclosed by squares and a circle encloses the latent variable. The error terms are not enclosed. The following relationships are depicted by unidirectional arrows: (a) the factor loadings that relate

the latent variables to the observed variables and (b) the relationships between the measurement errors and their observed variable.

Figure 6.1 One-factor Congeneric Measurement Model



The development of the one-factor congeneric models simultaneously enabled the assessment of two of the criteria for construct validity: (a) unidimensionality and (b) convergent validity (Steenkamp & Van Trijp, 1991). Unidimensionality refers to whether the items that constitute a scale assess a single underlying factor or construct (Clark & Watson, 1995). Convergent validity refers to the extent to which a construct's items load onto it (Kohli, 1989).

Unidimensionality is determined by the fit of the model. A good fit indicates that the set of items is unidimensional (Kumar & Dillon, 1987). A good fit is also a requirement of convergent validity. Additionally, however, the regression coefficients must be significant and substantial for the model to possess convergent validity. With respect to the latter criterion, Hildebrandt (1987) suggested that the correlation between the item and the construct should exceed .50.

The second stage in the analysis of the measurement model comprised the derivation of a *composite* measurement model from each of the one-factor congeneric models. The second stage of model development enabled the assessment of a further two criteria of construct validity: (a) discriminant validity and (b) reliability (Steenkamp & Van Trijp, 1991).

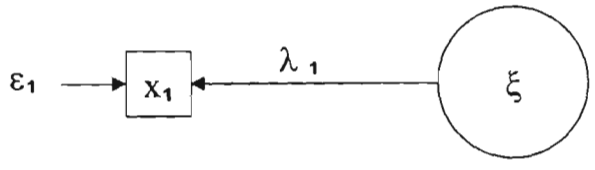
Discriminant validity is defined as the extent to which similar concepts are distinct and is achieved when the correlation among constructs is low (Hair et al., 1998; Kline, 1998). Therefore, discriminant validity was determined by the correlation of composite measures (see Section 6.4.2.1). Reliability, as described earlier in Chapter 5, is the degree of internal consistency of scale items (Hair et al., 1998). The reliability of each composite measure was assessed using Werts, Rock, Linn and Jöreskog's (1978) procedure for weighted composites (see Section 6.4.2.2).

A diagrammatic representation of a composite measurement model appears in Figure 6.2. The same graphic techniques described previously are also used in this figure.

Where:

- ξ is the latent variable
- X_1 is the observed composite variable
- ε_1 is the error associated with the measurement of X_1
- λ_1 is the regression coefficient of ξ in the regression of X_1 on ξ

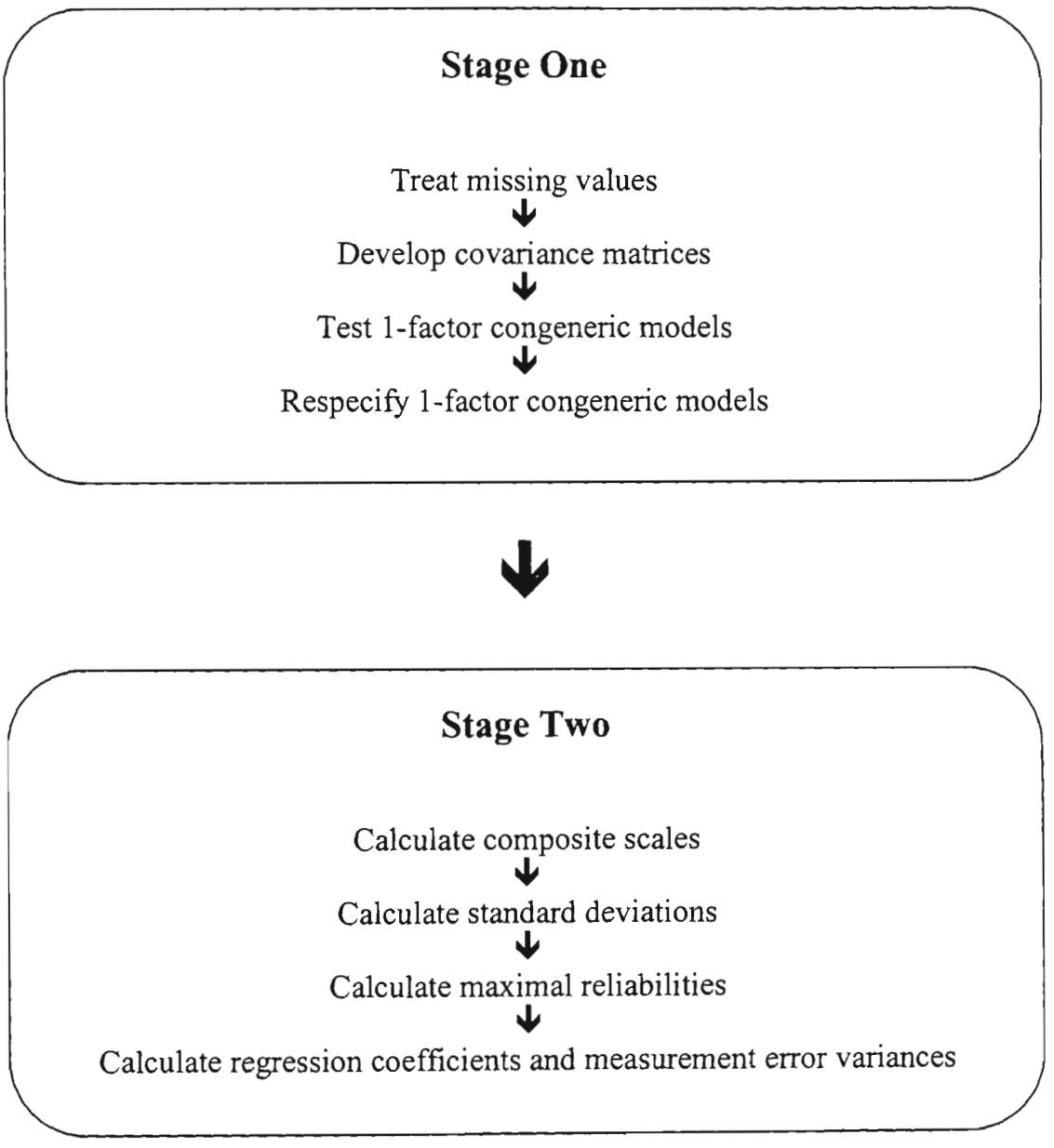
Figure 6.2 Composite Measurement Model



In the main, the composite measurement models act as the necessary input for the structural modelling analysis reported in Chapter 7. The composite observed variable (X_1), regression coefficient (λ_1) and error variance (ε_1) values of each *unidimensional* construct (i.e., on-court expectations, perceived performance and disconfirmation, customer satisfaction and repeat purchase intention) are used as structural modelling input in Chapter 7. For each *multidimensional* construct (i.e., club identification and off-court expectations, perceived performance and disconfirmation) only the composite observed variable (X_1) is used as input with the regression coefficient (λ_1) and error variance (ε_1) values left free to vary.

The first and second stages of the development of the measurement model are outlined in greater detail in Sections 6.4.1 and 6.4.2 respectively. A diagrammatic representation of these two stages, summarising the necessary steps in each, appears in Figure 6.3.

Figure 6.3 Two Stages of Measurement Model Development



6.4.1 One-factor congeneric measurement models

Congeneric measurement models are a popular form of measurement model in SEM (e.g., Holmes-Smith & Rowe, 1994; Rowe & Hill, 1998). Jöreskog (1971) first described the congeneric measurement model. In such models, each indicator reflects

the same generic true score. However, each of the indicators contributes to it in varying degrees. Moreover, the error variances of the indicators are also dissimilar.

Fleishman and Benson (1987) noted the advantage of using congeneric measures as opposed to tau-equivalent or parallel measures. They emphasised the congeneric measure's ability to allow for differences in the degree to which each individual observed measure contributes to the overall composite scale, thus providing a more realistic representation of the data. The use of congeneric measures can therefore maximise the reliability of composite and latent variables for use in fitting structural equation models to data (Holmes-Smith & Rowe, 1994). Such was the rationale for employing congeneric measures in this thesis.

The LISREL (Jöreskog & Sörbom, 1993a) SEM program was used to fit each of the one-factor congeneric measurement models. First the data were treated for missing values. Missing values were replaced with Maximum Likelihood estimates in accord with Dempster, Laird and Rubin (1977) and Rubin and Thayer (1982). Then outliers in the data were modified in accord with Kline (1998). The treated raw data for each model were then analysed in PRELIS (Jöreskog & Sörbom, 1993c). PRELIS is a data preparation program associated with LISREL. (See Appendix J for an example of a PRELIS command file.) For each model, PRELIS generated an asymptotic covariance matrix for use in the Asymptotically Distribution Free (ADF) fit function.

The matrices developed in PRELIS were then used in a series of LISREL runs to estimate and test the one-factor congeneric models. (See Appendix K for an example of a LISREL command file.) The estimation and testing of the models is described in Section 6.4.1.1 through to Section 6.4.1.9. For brevity and clarity the results of the expectations, perceived performance and disconfirmation models for each of the five season ticket dimensions (Professional Play, Professional Management, Involvement, Atmosphere, and Seating and Ticketing) are presented together. The results of the pre-season and post-season models for the two club identification dimensions (Team Identification and Fan Identification) are also presented together.

6.4.1.1 Analysis and respecification of the Professional Play models

Inspection of the goodness of fit statistics indicated that the expectations, perceived performance and disconfirmation models of the Professional Play dimension did not fit the data well. The poor fit of the three on-court models necessitated a specification search and the subsequent respecification of the models.

The respecification process for each of the models was in accord with the principles outlined previously in Section 6.3.5. In summary, the models were respecified by the deletion of the second item (i.e., consistent performance) and the fifth item (i.e., camaraderie on the court). The removal of the second and fifth items resulted in an acceptable level of fit for each of the Professional Play models. Table 6.4 displays the fit statistics for the three models.

Table 6.4 Fit Statistics for the Respecified Professional Play Models

Test statistic	Expectations	Perceived Performance	Disconfirmation
χ^2, df, p	52.075, 5, .000	13.231, 5, .021	15.303, 5, .009
Normed χ^2	10.415	2.646	3.061
RMSEA	.128	.054	.059
RMR	.055	.015	.015
SRMR	.059	.015	.015
GFI	.906	.983	.985
AGFI	.719	.948	.955
NNFI	.973	.998	.996
CFI	.986	.999	.998
AIC	72.075	32.231	35.303
CAIC	125.653	86.810	88.882

In addition to being characterised by acceptable fit statistics, the standardised regression weights for the models were all significant (t values between 12.257 and 34.130) and

substantial (r values between .650 and .935). These characteristics attest to the unidimensionality and convergent validity of the models. Furthermore, the models displayed good content validity.

The respecified models are represented by Figures 6.4 – 6.6. In summary, the models show that the three Professional Play latent variables are each indicated by:

- Demonstrating excellent skill levels (X_1);
- Playing as a team (X_2);
- Putting in maximum effort (X_3);
- Keeping cool under pressure (X_4); and
- Being competitive (X_5).

Figure 6.4 One-factor Congeneric Model for Professional Play Expectations

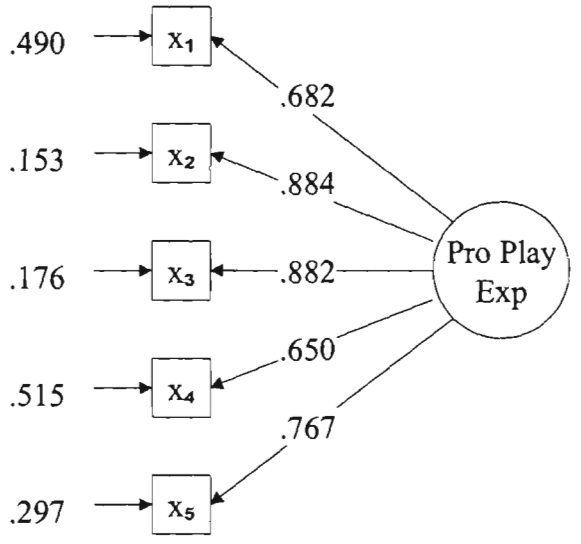


Figure 6.5 One-factor Congeneric Model for Professional Play Perceived Performance

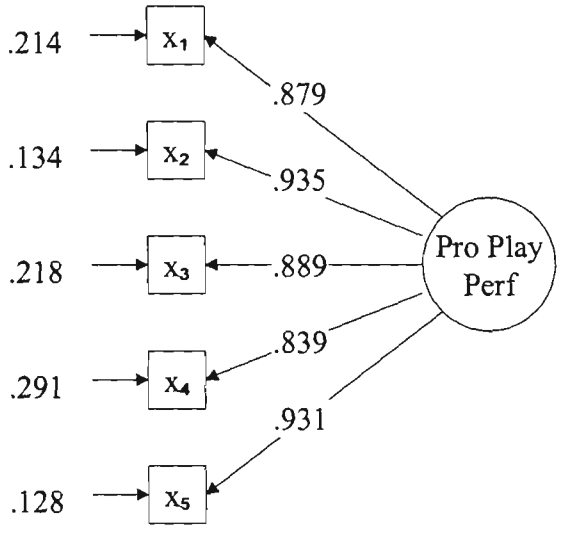
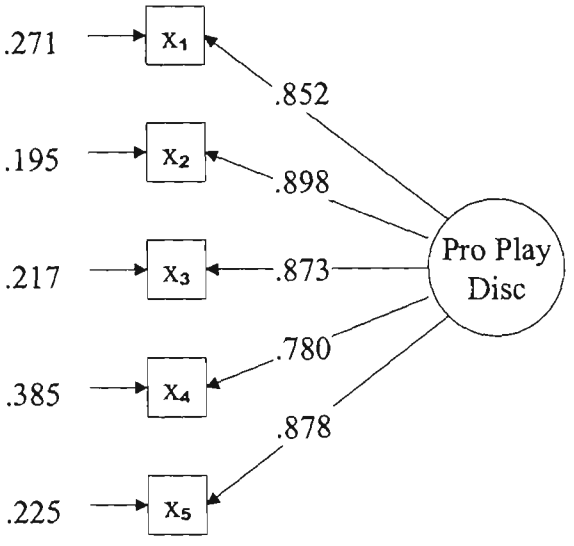


Figure 6.6 One-factor Congeneric Model for Professional Play Disconfirmation



6.4.1.2 Analysis and respecification of the Professional Management models

Inspection of the goodness of fit statistics indicated that the expectations, perceived performance and disconfirmation models of the Professional Management dimension did not fit the data well. The poor fit of each model necessitated a specification search and the subsequent respecification of the models.

The respecification process for each of the models was in accord with the principles outlined previously in Section 6.3.5. In summary, the models were respecified by the deletion of the first item (i.e., clear and accurate scoreboard information) and the third item (i.e., promotion of a family friendly atmosphere). The removal of the first and third items resulted in an acceptable level of fit for each of the Professional Management models. Table 6.5 displays the fit statistics for the three models.

Table 6.5 Fit Statistics for the Respecified Professional Management Models

Test statistic	Expectations	Perceived Performance	Disconfirmation
χ^2, df, p	15.754, 2, .000	12.966, 2, .002	2.414, 2, .299
Normed χ^2	7.877	6.483	1.207
RMSEA	.109	.098	.019
RMR	.041	.035	.012
SRMR	.042	.037	.012
GFI	.976	.980	.996
AGFI	.879	.901	.981
NNFI	.942	.971	.999
CFI	.981	.990	1.000
AIC	31.754	28.966	18.414
CAIC	74.617	71.289	61.277

In addition to being characterised by acceptable fit statistics, the standardised regression weights for the models were all significant (t values between 14.832 and 22.702) and

substantial (r values between .664 and .871). These characteristics attest to the unidimensionality and convergent validity of the models. Furthermore, the models displayed good content validity.

The respecified models are represented by Figures 6.7 – 6.9. In summary, the models show that the three Professional Management latent variables are each indicated by:

- Professionally marketing and managing the club (X_1);
- Maintaining a positive image (X_2);
- Employing courteous and professional staff (X_3); and
- Delivering promises (X_4).

Figure 6.7 One-factor Congeneric Model for Professional Management Expectations

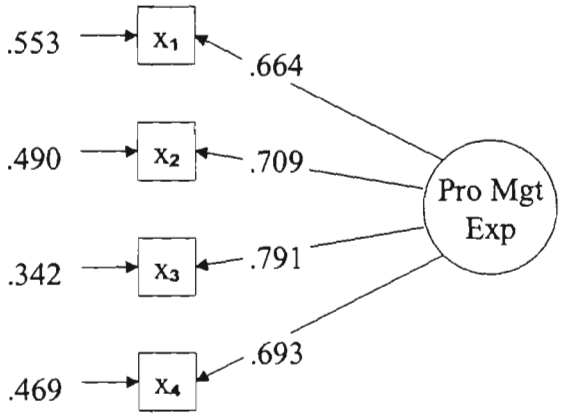


Figure 6.8 One-factor Congeneric Model for Professional Management Perceived Performance

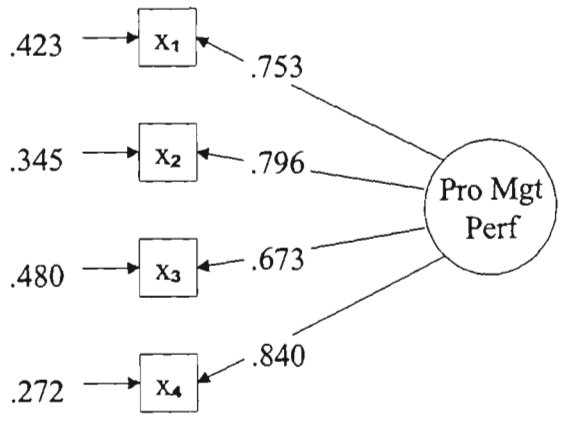
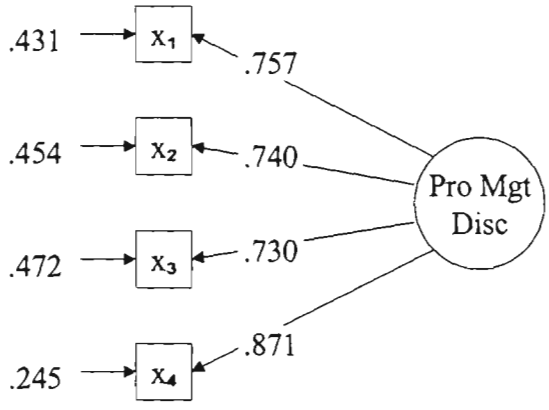


Figure 6.9 One-factor Congeneric Model for Professional Management Disconfirmation



6.4.1.3 Analysis and respecification of the Involvement models

Inspection of the goodness of fit statistics indicated that the expectations, perceived performance and disconfirmation models of the Involvement dimension did not fit the data well. The poor fit of each model necessitated a specification search and the subsequent respecification of the models.

The respecification process for each of the models was in accord with the principles outlined previously in Section 6.3.5. In summary, the models were respecified by the deletion of the third item (i.e., provide opportunities to meet and mingle with players) and the sixth item (i.e., organise travel opportunities for away games). The removal of the third and sixth items resulted in an acceptable level of fit for each of the Involvement models. Table 6.6 displays the fit statistics for the three models.

In addition to being characterised by acceptable fit statistics, the standardised regression weights for the models were all significant (t values between 10.710 and 20.722) and substantial (r values between .522 and .821). These characteristics attest to the unidimensionality and convergent validity of the models. Furthermore, the models displayed good content validity.

Table 6.6 Fit Statistics for the Respecified Involvement Models

Test statistic	Expectations	Perceived Performance	Disconfirmation
χ^2, df, p	8.385, 2, .015	1.265, 2, .531	5.066, 2, .0794
Normed χ^2	4.192	.633	2.533
RMSEA	.074	.000	.052
RMR	.032	.009	.017
SRMR	.032	.009	.017
GFI	.991	.999	.993
AGFI	.956	.993	.965
NNFI	.969	1.003	.988
CFI	.990	1.000	.996
AIC	24.385	17.265	21.066
CAIC	67.247	60.128	63.929

The respecified models are represented by Figures 6.10 – 6.12. In summary, the models show that the three Involvement latent variables are each indicated by:

- Keeping season ticket holders up to date on club matters (X_1);
- Making season ticket holders feel like part of the club (X_2);
- Organising social opportunities and functions for fans (X_3); and
- Seeking season ticket holder feedback (X_4).

Figure 6.10 One-factor Congeneric Model for Involvement Expectations

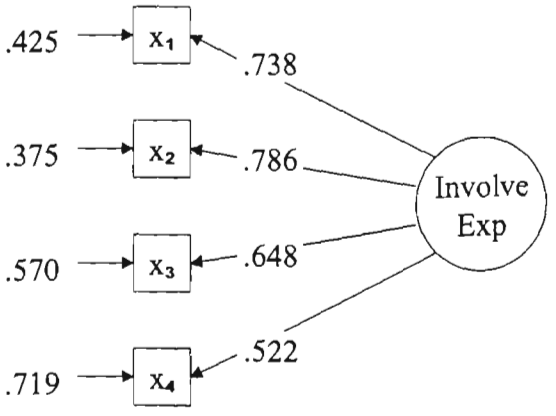


Figure 6.11 One-factor Congeneric Model for Involvement Perceived Performance

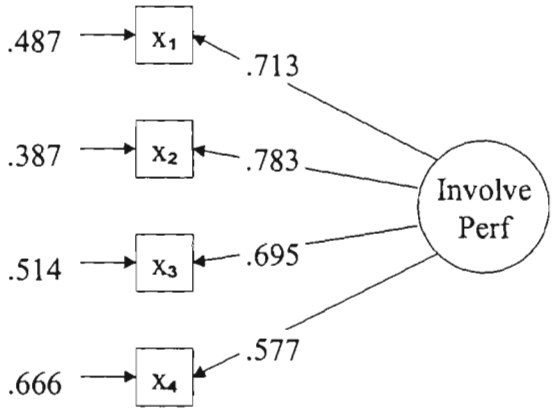
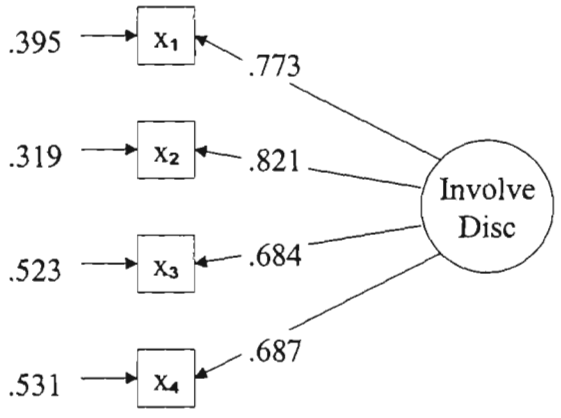


Figure 6.12 One-factor Congeneric Model for Involvement Disconfirmation



6.4.1.4 Analysis and respecification of the Atmosphere (Entertainment) models

Inspection of the goodness of fit statistics indicated that the perceived performance and disconfirmation models of the atmosphere dimension fitted the data. However, an acceptable fit was not indicated for the expectations data. All three models are required to fit the data.

Purely empirical evidence suggested that the fit of each of the models would improve substantially if the third item (i.e., create an exciting atmosphere) was removed. However, the third item is central to the dimension's atmosphere theme. Removal of

the third item would ruin the content validity of the models. Further examination of the modification indices, standardised residuals, squared multiple correlations and the items themselves indicated that this dimension was more concerned with the theme of entertainment than atmosphere. There is further evidence to support this notion.

First, if it is accepted that this dimension measures entertainment and not atmosphere, two of the remaining five items detract from the dimension's content validity. These are the second item (i.e., provide a visually appealing stadium) and the sixth item (i.e., have fun competitions and prizes). Both of these items were characterised by low (< .4) squared multiple correlations for each of the models. Furthermore, the second item was associated with large standardised residuals for each of the models and the sixth item was associated with large standardised residuals for both the expectations and perceived performance models.

Given the empirical and content validity support for the removal of three of the models' items, together with the fact the initial atmosphere model subsumed the entertainment theme, a three-item entertainment dimension was chosen as a replacement for the six-item atmosphere dimension. Due to the three-item nature of this model, LISREL could not produce any goodness of fit statistics. However, the entertainment dimension has strong content validity. Also, the significant (t values between 16.483 and 24.203) and substantial (r values between .672 and .899) standardised regression weights attest to the unidimensionality and convergent validity of the models. Furthermore, the good maximal reliability of each of the models (as reported later in Section 6.4.2.2) merit this dimension as a worthy alternative to the initial atmosphere dimension. Henceforth this particular dimension of the season ticket service will be referred to as the *Entertainment* dimension.

The respecified Entertainment models are represented by Figures 6.13 – 6.15. In summary, the models show that the three Entertainment latent variables are each indicated by:

- Providing a variety of entertainment (X_1);
- Providing quality entertainment (X_2); and
- Employing entertainers to motivate the crowd (X_3).

Figure 6.13 One-factor Congeneric Model for Entertainment Expectations

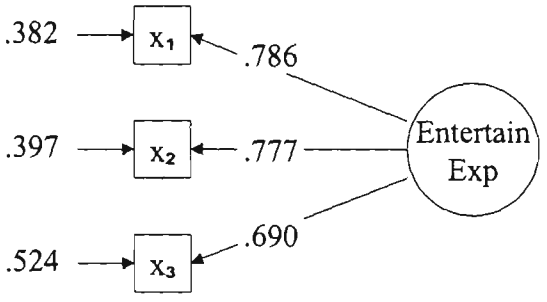


Figure 6.14 One-factor Congeneric Model for Entertainment Perceived Performance

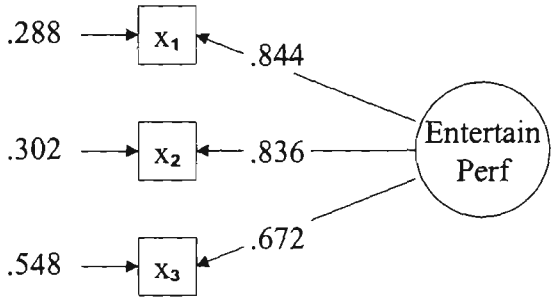
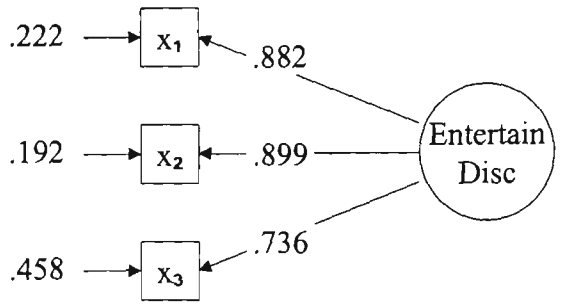


Figure 6.15 One-factor Congeneric Model for Entertainment Disconfirmation



6.4.1.5 Analysis and respecification of the Seating and Ticketing models

Inspection of the goodness of fit statistics indicated that the expectations, perceived performance and disconfirmation models of the Seating and Ticketing dimension did not fit the data well. The poor fit of each model necessitated a specification search and the subsequent respecification of the models.

The respecification process for each of the models was in accord with the principles outlined previously in Section 6.3.5. In summary, the models were respecified by the deletion of the second item (i.e., maintain a comfortable stadium) and the fifth item (i.e., give me benefits that non season ticket holders don't get). The removal of the second and fifth items resulted in an acceptable level of fit for each of the Seating and Ticketing models. Table 6.7 displays the fit statistics for the three models.

Table 6.7 Fit Statistics for the Respecified Seating and Ticketing Models

Test statistic	Expectations	Perceived Performance	Disconfirmation
χ^2, df, p	3.591, 2, .166	.420, 2, .811	3.739, 2, .154
Normed χ^2	1.796	.210	1.869
RMSEA	.037	.000	.039
RMR	.020	.006	.019
SRMR	.020	.006	.019
GFI	.997	1.000	.994
AGFI	.987	.998	.970
NNFI	.990	1.011	.991
CFI	.997	1.000	.997
AIC	19.591	16.420	19.739
CAIC	62.454	59.282	62.602

In addition to being characterised by acceptable fit statistics, the standardised regression weights for the models were all significant (t values between 7.843 and 18.719) and most were also substantial (i.e., > .5). These characteristics indicate the

unidimensionality and general convergent validity of the models. Furthermore, the models displayed good content validity.

The respecified models are represented by Figures 6.16 – 6.18. In summary, the models show that the three Seating and Ticketing latent variables are each indicated by:

- Providing the best seats (X_1);
- Giving priority access to play-off tickets (X_2);
- Allowing choice of own seat (X_3); and
- Giving long-term season ticket holders better seats than new season ticket holders (X_4).

Figure 6.16 One-factor Congeneric Model for Seating and Ticketing Expectations

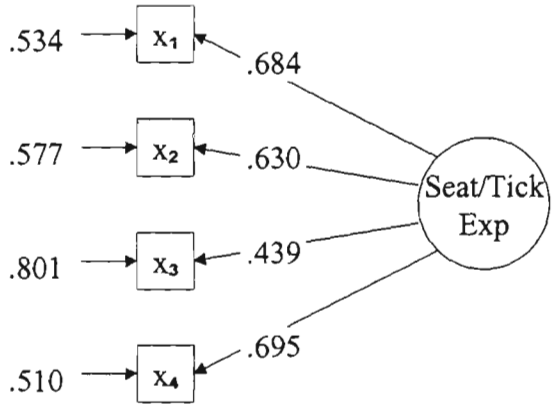


Figure 6.17 One-factor Congeneric Model for Seating and Ticketing Perceived Performance

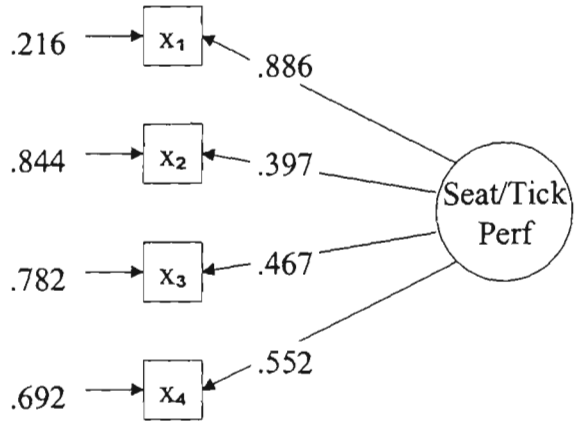
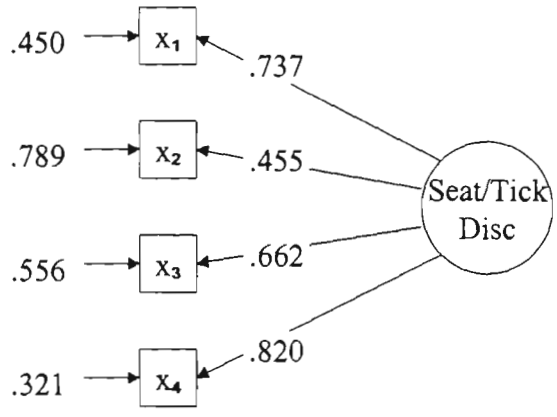


Figure 6.18 One-factor Congeneric Model for Seating and Ticketing Disconfirmation



6.4.1.6 Analysis and respecification of the Customer Satisfaction model

Inspection of the goodness of fit statistics indicated the Customer Satisfaction model did not fit the data well. The poor fit of the model necessitated a specification search and its subsequent respecification.

The respecification process for the model was in accord with the principles outlined previously in Section 6.3.5. In summary, the model was respecified by the deletion of the seventh item (i.e., poor experience – great experience). The removal of the seventh item resulted in a barely acceptable level of fit for the Customer Satisfaction model. Table 6.8 displays the fit statistics for the model.

As previous research posits the six items as good measures of customer satisfaction no further items were removed purely for the sake of producing an improvement in model fit. Furthermore, the content validity of the model was strong, the squared multiple correlations were very good (.839 to 1.000) and the standardised regression weights were all significant (t values between 12.257 and 34.130) and substantial (r values between .875 and .968). These characteristics indicated the unidimensionality and convergent validity of the model.

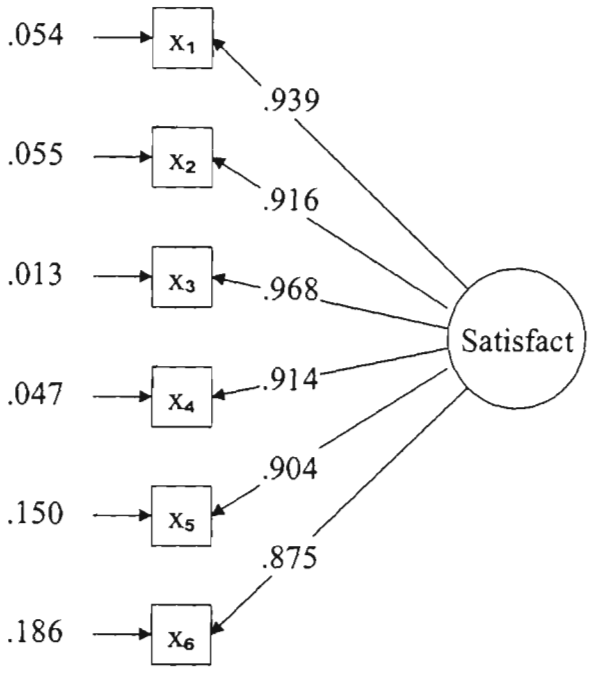
Table 6.8 Fit Statistics for the Respecified Customer Satisfaction Model

Test statistic	Customer satisfaction
χ^2, df, p	121.479, 9, .000
Normed χ^2	13.497
RMSEA	.147
RMR	.059
SRMR	.064
GFI	.815
AGFI	.563
NNFI	.998
CFI	.999
AIC	145.479
CAIC	209.779

The respecified model is represented by Figure 6.19. In summary, the model shows that the Customer Satisfaction latent variable is indicated by:

- Satisfaction with decision to buy a season ticket (X_1);
- Willingness to buy the season ticket all over again (X_2);
- Belief the decision to buy a season ticket was a good one (X_3);
- Very dissatisfied – Very satisfied (X_4);
- Very displeased – Very pleased (X_5); and
- Very disgusted – Very delighted (X_6).

Figure 6.19 One-factor Congeneric Model for Customer Satisfaction



6.4.1.7 Analysis of the Repeat Purchase Intention model

Inspection of the goodness of fit statistics indicated the Repeat Purchase Intention model fitted the data well. Table 6.9 displays the fit statistics for the model.

In addition to the good model fit, inspection of the modification indices and standardised residuals provided no indication an even better fit could be achieved. Furthermore, the model was characterised by strong content validity and each of the Repeat Purchase Intention items have been used extensively in the literature. Moreover, in this study the items were characterised by very good squared multiple correlations (.923 to 992) and the standardised regression weights were all significant (t values between 22.022 and 23.675) and substantial (r values between .954 and 1.00). These characteristics support the unidimensionality and convergent validity of the model.

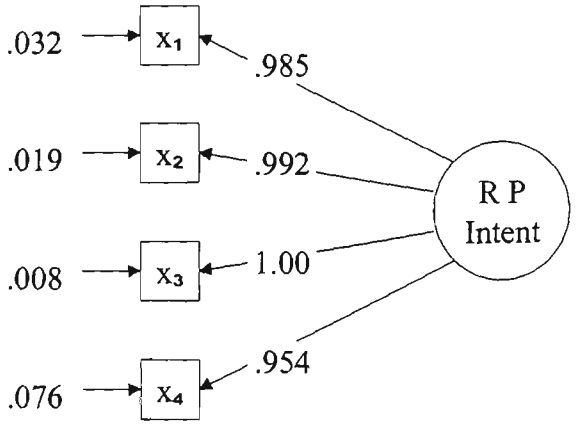
Table 6.9 Fit statistics for the Repeat Purchase Intention Model

Test statistic	Repeat purchase intention
χ^2, df, p	1.502, 2, .472
Normed χ^2	.751
RMSEA	.000
RMR	.006
SRMR	.006
GFI	.992
AGFI	.959
NNFI	1.000
CFI	1.000
AIC	17.502
CAIC	60.365

The model is represented by Figure 6.20. In summary, the model shows that the Repeat Purchase Intention latent variable is indicated by:

- Unlikely – Likely (X_1);
- Impossible – Very possible (X_2);
- Not probably – Very probable (X_3); and
- Uncertain – Certain (X_4).

Figure 6.20 One-factor Congeneric Model for Repeat Purchase Intention



6.4.1.8 Analysis of the Team Identification models

Inspection of the goodness of fit statistics indicated both the pre-season Team Identification model and the post-season Team Identification model fitted the data well. Table 6.10 displays the fit statistics for the models.

Table 6.10 Fit Statistics for the Team Identification Models

Test statistic	Pre-season	Post-season
χ^2, df, p	21.119, 2, .000	13.816, 2, .000
Normed χ^2	10.559	6.908
RMSEA	.129	.101
RMR	.034	.023
SRMR	.034	.023
GFI	.984	.987
AGFI	.918	.934
NNFI	.984	.989
CFI	.995	.996
AIC	37.119	29.816
CAIC	79.982	72.679

In addition to the acceptable model fits, the models demonstrated sound content validity. Furthermore, the models' items were characterised by acceptable squared multiple correlations (.562 to .820) and the standardised regression weights were all significant (t values between 22.006 and 32.619) and substantial (r values between .744 and .903). These characteristics indicate the unidimensionality and convergent validity of the models.

The models are represented by Figures 6.21 and 6.22. In summary, the models show that the Team Identification latent variables are indicated by:

- Team successes feeling like season ticket holder successes (X_1);
- Season ticket holders thinking of themselves as part of the team (X_2);
- Team failures feeling like season ticket holder failures (X_3); and
- Season ticket holders thinking it is important to feel like part of the team (X_4).

Figure 6.21 One-factor Congeneric Model for Pre-Season Team Identification

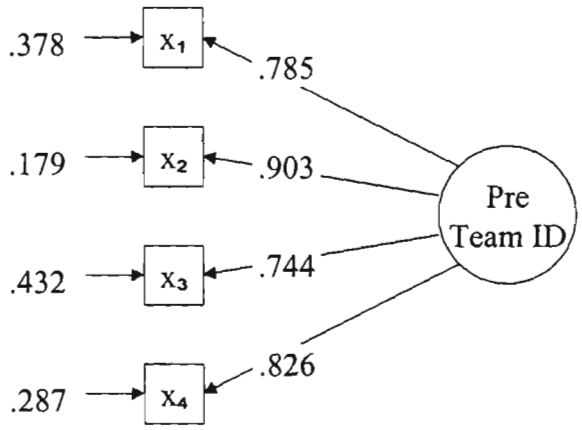
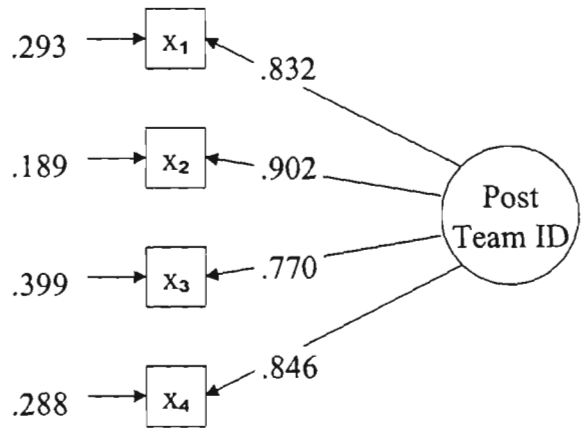


Figure 6.22 One-factor Congeneric Model for Post-Season Team Identification



6.4.1.9 Analysis and respecification of the Fan Identification models

Inspection of the goodness of fit statistics indicated neither the pre-season Fan Identification model nor the post-season Fan Identification model fitted the data well. The poor fit of the Fan Identification models necessitated a specification search and the subsequent respecification of the models.

The respecification process for the models was in accord with the principles outlined previously in Section 6.3.5. In summary, the models were respecified by the deletion of the third item (i.e., being a club name fan is an important part of who I am). The removal of the third item resulted in an acceptable level of fit for both models. Table 6.11 displays the fit statistics for the models.

Table 6.11 Fit Statistics for the Respecified Fan Identification Models

Test statistic	Pre-season	Post-season
χ^2, df, p	25.974, 2, .000	18.095, 2, .000
Normed χ^2	12.987	9.048
RMSEA	.144	.118
RMR	.050	.035
SRMR	.054	.036
GFI	.964	.975
AGFI	.821	.875
NNFI	.985	.988
CFI	.995	.996
AIC	41.974	34.095
CAIC	84.837	76.958

In addition to being characterised by acceptable fit statistics, the standardised regression weights for the models were all significant (t values between 17.715 and 25.730) and substantial (r values between .715 and .932). These characteristics support the

unidimensionality and convergent validity of the models. Furthermore, the models displayed good content validity.

The respecified models are represented by Figures 6.23 and 6.24. In summary, the models show the Fan Identification latent variables are indicated by:

- Season ticket holders telling others they are a fan of the team (X_1);
- Season ticket holders believing supporting the team is important (X_2);
- Season ticket holders enjoying being a team fan (X_3); and
- Season ticket holders believing they are a team fan (X_4).

Figure 6.23 One-factor Congeneric Model for Pre-Season Fan Identification

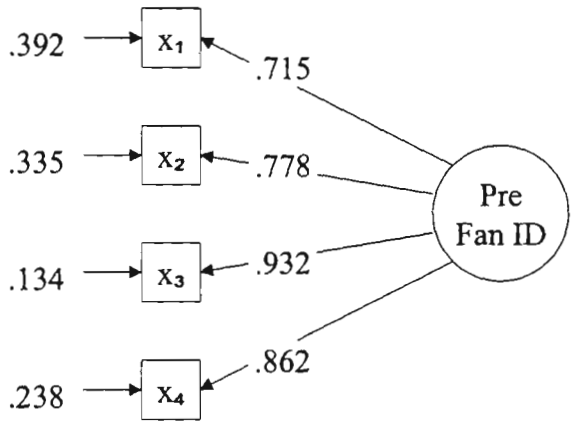
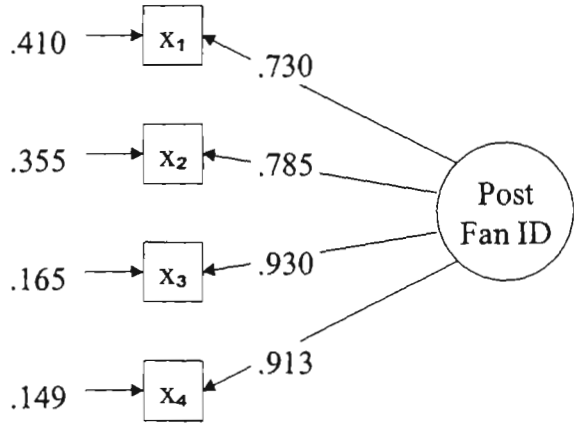


Figure 6.24 One-factor Congeneric Model for Post-Season Fan Identification



In summary, 21 one-factor congeneric measurement models were developed for this thesis. In general, the models were characterised by the desirable properties of content validity, unidimensionality and convergent validity. The models were developed in order to compute composite scales and the accompanying reliabilities, regression coefficients and error variances of these scales required by the second step of the two-step approach to SEM.

6.4.2 Composite measurement models

This section is concerned with the derivation of a composite scale from each of the one-factor congeneric measures developed in the previous section. This section is also concerned with the calculation of the maximal reliability and error variance of each scale, as well as its associated regression coefficient. The work of Fleishman and Benson (1987), Holmes-Smith and Rowe (1994), Munck (1979) and Rowe and Hill (1998) guided this section.

The derivation of composite scales is in accord with the two-step approach to SEM and Bagozzi and Heatherton's (1994) work on the aggregation and disaggregation of construct measurement. This thesis employed a partial aggregation model in which separate dimensions (e.g., Team Identification and Fan Identification) of a latent variable (e.g., Club Identification) were treated as indicators of the latent variable, with each dimension being an aggregation of items (Bagozzi & Heatherton, 1994). Marsh (1992) also employed a partially aggregated model in his examination of academic self-concept.

A composite scale combines several measures of the one concept into the one variable. The use of composite scales, as opposed to individual observed measures, greatly reduces the number of variables in subsequent structural models and thus contributes much to improving model parsimony. As such composite scales do much to reduce the problem of model fit (Gribbons & Hocevar, 1998; Schumacker & Lomax, 1996).

6.4.2.1 Calculation of composite scales

Factor score regression weights derived from the LISREL output of the one-factor congeneric modelling described previously in Section 6.4.1.1 through to Section 6.4.1.9 were used to develop the composite scales. The scales were calculated in SPSS (2000).

Jöreskog and Sörbom (1989) showed that a composite scale could be computed for each subject by the formula:

$$\hat{\xi} = \boldsymbol{\omega x}$$

Where:

- ω is a row vector of factor score regressions
- x is a column vector of the subject's observed indicator variables

In this thesis the composite scale value for each subject was standardised by dividing it by the sum of the factor score regressions. The standardisation of the composite scales is depicted by the formula:

$$\hat{\xi} = \boldsymbol{\omega x} / \Sigma \boldsymbol{\omega}$$

Twenty-one composite scales were developed. These scales, along with accompanying descriptive statistics, are presented in Table 6.12. The means of the scales range from 3.838 for Entertainment Disconfirmation to 6.409 for Professional Play Expectations. The standard deviations of the scales range from .627 for Professional Management Expectations to 1.467 for Post-Season Team Identification.

The calculation of composite scales enabled the derivation of two correlation matrices (i.e., one matrix for the Expectations Model and another for the Non-Expectations Model) from which the discriminant validity of the measures could be determined. These matrices appear in Appendix L and Appendix M respectively.

Table 6.12 Composite Scales: Descriptive Statistics

Composite scale	Mean	SD	Min	Max
Pre-season team identification	4.151	1.449	1.00	7.00
Post-season team identification	4.224	1.467	1.00	7.00
Pre-season fan identification	6.044	.902	2.75	7.00
Post-season fan identification	6.058	.919	2.77	7.00
Professional play expectations	6.409	.6115	3.58	7.00
Professional play performance	5.150	1.392	1.00	7.00
Professional play disconfirmation	4.437	1.164	1.66	7.00
Professional management expectations	6.258	.627	4.00	7.00
Professional management performance	5.123	1.067	1.54	7.00
Professional management disconfirmation	4.393	.899	2.00	7.00
Entertainment expectations	5.329	.988	3.00	7.00
Entertainment performance	4.388	1.290	1.42	7.00
Entertainment disconfirmation	3.838	1.158	1.00	7.00
Involvement expectations	5.587	.874	3.00	7.00
Involvement performance	4.783	1.133	1.00	7.00
Involvement disconfirmation	4.176	.946	1.82	7.00
Seating and ticketing expectations	6.001	.733	3.70	7.00
Seating and ticketing performance	4.971	1.184	1.16	7.00
Seating and ticketing disconfirmation	4.149	.971	1.37	7.00
Customer satisfaction	5.670	1.293	1.05	7.00
Repeat purchase intention	6.193	1.251	1.94	7.00

Discriminant validity refers to the extent to which two constructs are distinct (Kline, 1998). Perfect discriminant validity implies a correlation of zero. Discriminant validity diminishes the closer the correlation approaches unity. There is disagreement over what degree of correlation should be used as a cut-off point in determining discriminant validity. Although a rule of thumb cut-off value of .5 has often been used there is growing acknowledgement among structural equation modellers (e.g., Fleming, 1996; Markus, 1996) that much higher correlations do not necessarily indicate a lack of discriminant validity. (Readers are referred to the Structural Equation Modeling Discussion Group's SEMNET listserv [SEMNET@BAHMA.EDU] for a discussion on this issue.)

The research design of this thesis together with the customer satisfaction literature dictated that the same items be used to measure many of the research constructs (i.e., expectations, perceived performance and disconfirmation). Therefore, quite high correlations between constructs were anticipated and, consequently, more generous interpretations of discriminant validity were utilised. Although the correlation matrices presented in Appendices L and M are generally characterised by sufficiently low correlations there are several that do exceed the traditional .5 cut-off value. As anticipated the correlations that exceeded this value were typically between constructs of the same expectations, perceived performance and disconfirmation dimensions (e.g., entertainment).

In summary, inspection of the aforementioned correlation matrices indicated that the constructs generally do possess the desirable characteristic of discriminant validity. However, the strength of the discriminant validity does vary.

6.4.2.2 Calculation of maximal reliabilities

Once the composite scales were developed the maximal reliability of each scale was then calculated. Reliability estimates provide information about measurement consistency or precision (Hair et al., 1998; Kline, 1986). One of the more popular reliability estimates is Cronbach's coefficient alpha (Cronbach, 1951). Despite its popularity, Cronbach's alpha was not used to measure composite reliability in this

thesis. Raykov (1997a, 1997b, 1998) cautioned against the use of alpha when measures are congeneric. Contrary to the common belief that alpha acts as a lower bound of reliability, it can actually overestimate reliability when a scale's indicators contribute to the generic true measure in varying degrees and the error variances of the indicators are not equal.

Due to the congeneric nature of the scales employed in this thesis, another means of calculating the reliability of the composites was preferred to Cronbach's alpha. Werts et al. (1978) showed that the reliability of a weighted composite (r_c) can be determined by the following formula:

$$r_c = \omega(\hat{\Sigma} - \Theta_\delta)\omega' / \omega\hat{\Sigma}\omega'$$

Where:

- ω is the row vector of factor score regression weights
- $\hat{\Sigma}$ is the fitted matrix of covariances among the research variables
- Θ_δ is the matrix of variances and covariances among the measurement error terms
- ω' is the transpose of a row vector of factor score regression weights

The necessary matrix calculations for the estimates of reliability took place in EXCEL (2000). The fitted covariance matrix, theta delta matrix and factor score regression weights produced by the LISREL analysis of the one-factor congeneric models provided the necessary information for the calculations. (See Appendix N for a worked example of the calculation of maximal reliability.) The maximal reliability for each composite measure appears in Table 6.13 along with each measure's respective regression coefficient and error variance.

The maximal reliabilities of the models' composites ranged from .733 for Seating and Ticketing Expectations through to .995 for Repeat Purchase Intention. The reliability estimates are all in excess of Nunnally's (1967) minimum recommended range of .5 – .6 for exploratory research, attesting to the internal consistency of the measures.

6.4.2.3 Calculation of regression coefficients and measurement error variances

Once the reliabilities of composites are known it is possible to build this information into structural models and account for the known amount of error associated with the measurement of each latent variable. The reliability estimates and standard deviations of the composite measures provided the necessary information to calculate regression coefficients and error variances for each of the composite measures. Munck (1979) provided the formula for each of these calculations. (See Appendix O for a worked example of the calculation of a regression coefficient and error variance of a composite measure.)

Munck (1979) demonstrated that a regression coefficient (λ) is given by the formula:

$$\lambda = \sigma(x)\sqrt{r_c}$$

Where:

- $\sigma(x)$ is the standard deviation of the composite
- $\sqrt{r_c}$ is the square root of the composite reliability

Munck (1979) also showed that a measurement error variance (θ) is given by the formula:

$$\theta = \sigma^2(x)(1-r_c)$$

Where:

- $\sigma^2(x)$ is the variance of the composite
- $(1-r_c)$ is 1 minus the composite reliability

The regression coefficients and error variances of the composite scales are presented in Table 6.13. The regression coefficients of the models ranged from .569 for Professional Management Expectations to 1.403 for Post-season Team Identification. The error variances ranged from .007 for Repeat Purchase Intention to .259 for Entertainment Perceived Performance.

Table 6.13 Composite Scales: Reliabilities, Regression Coefficients and Error Variances

Composite scale	Composite reliability	Regression coefficient	Error variance
Pre-season team identification	.908	1.381	.194
Post-season team identification	.914	1.403	.185
Pre-season fan identification	.927	.868	.059
Post-season fan identification	.933	.887	.057
Professional play expectations	.930	.590	.026
Professional play performance	.958	1.363	.081
Professional play disconfirmation	.939	1.128	.083
Professional management expectations	.824	.569	.069
Professional management performance	.870	.995	.147
Professional management disconfirmation	.871	.839	.104
Entertainment expectations	.802	.885	.194
Entertainment performance	.844	1.185	.259
Entertainment disconfirmation	.899	1.098	.135
Involvement expectations	.802	.783	.152
Involvement performance	.803	1.015	.253
Involvement disconfirmation	.844	.869	.140
Seating and ticketing expectations	.733	.628	.143
Seating and ticketing performance	.819	1.071	.254
Seating and ticketing disconfirmation	.813	.876	.176
Customer satisfaction	.993	1.288	.012
Repeat purchase intention	.995	1.248	.007

6.5 Summary

First this chapter provided a description of the sample profile. In total, 577 season ticket holders from 10 different basketball clubs constituted the final sample. The season ticket holders varied in several ways including whether they were a first-time or repeat season ticket holder, their length of tenure as a season ticket holder, whether they held a single or group ticket and who was included in their group ticket, as well as their gender and age.

The chapter proceeded with a review of the SEM literature relevant to this thesis. In particular, the two-step approach to SEM was described. This was followed by a review of estimation methods, model fit and model respecification. The remainder of the chapter concentrated on the first step of SEM, that is, the development of the measurement model.

The development of the measurement model comprised two stages. The first stage focused on the estimation, testing and respecification of the one-factor congeneric measurement models. The second stage involved the derivation of individual composite measurement models from each of the one-factor congeneric models.

A total of 21 composite measurement models, characterised by both reliability and validity, constituted the measurement model. The individual models each comprised an observed composite variable (x), an error term (ε), a regression coefficient (λ) and a latent variable (ξ).

Many of the results arising from this chapter will now be used as input in the second step of the SEM analysis outlined in the next chapter, Chapter 7, which details the results of the structural modelling and therefore the proposition testing.

CHAPTER 7
RESULTS AND PROPOSITION TESTING

7.1 Introduction

The previous chapter presented the preliminary results of the analysis. The primary outcome of the previous chapter was the development of a measurement model as necessitated by the two-step approach to SEM.

The purpose of this chapter is twofold. First, the relationships depicted in the two alternative research models and thus the propositions outlined in Chapter 4 are tested. Second, arising from the results of the proposition testing, one of the two models is identified as the superior model. That is, one of the models is selected as the better representation of the process of customer satisfaction with the season ticket service of professional sport clubs.

The structure of this chapter is as follows. First, a brief description of the analytic procedures central to the chapter will be outlined. Then the analysis of the Expectations Model will be presented, followed by the analysis of the Non-Expectations Model. The analyses of the models will be followed by the identification of the superior research model. Finally, a brief summary of the data analysis findings will be presented.

7.2 Step Two: The Structural Model

In the second step of the two-step approach to SEM, the measurement model is added to the structural model. Accordingly, the conceptual Expectations and Non-Expectations Models, which were first presented in Chapter 1 as Figures 1.1 and 1.2, were used as starting points for the structural modelling. Then, the appropriate components of the measurement model developed in Chapter 6 as well as the single item observed winning variable provided by the NBL were added to each of the structural models.

Figures 7.1 and 7.2 represent the resulting models.[4] Similar to the models presented in Chapter 6, straight unidirectional arrows depict the factor loadings that relate the latent variables to their observed variables. However, these arrows also depict the structure coefficients that relate the latent variables to one another and to the observed winning variable.

The analysis of the two models will now be presented. Each of the models was tested, respecified and then tested again. The analysis of the Expectations Model is presented first.

7.3 Expectations Model

Due to its inclusion of the expectations variable, the Expectations Model is the more complex of the two models tested. The model comprises 9 latent variables and 20 observed variables. Figure 7.1 represents the Expectations Model.

7.3.1 Expectations Model: Initial analysis

The data used in the analysis were the composite scales developed in the previous chapter as well as the observed winning variable. A correlation matrix including each of the measures appears in Appendix L.

The data were first analysed in PRELIS (Jöreskog & Sörbom, 1993c). The PRELIS analysis developed the covariance matrices necessary to estimate the model. The matrices served as input for the SEM program. LISREL (Jöreskog & Sörbom, 1993a) was used to estimate and test the model. Formal specification of the model in LISREL language appears in Appendix P. For reasons outlined previously in Chapter 6, the Maximum Likelihood procedure was chosen as the preferred estimation method.

[4] Certain SEM components have been omitted from the figures in this chapter due to the complexity of the models. The omitted components include: (a) measurement errors of indicator variables; (b) the relationships between measurement errors and their respective observed variable; (c) equation prediction errors; and (d) the relationships between equation prediction errors and their respective latent variable.

Figure 7.1 Expectations Model:
Structural and Measurement Combined

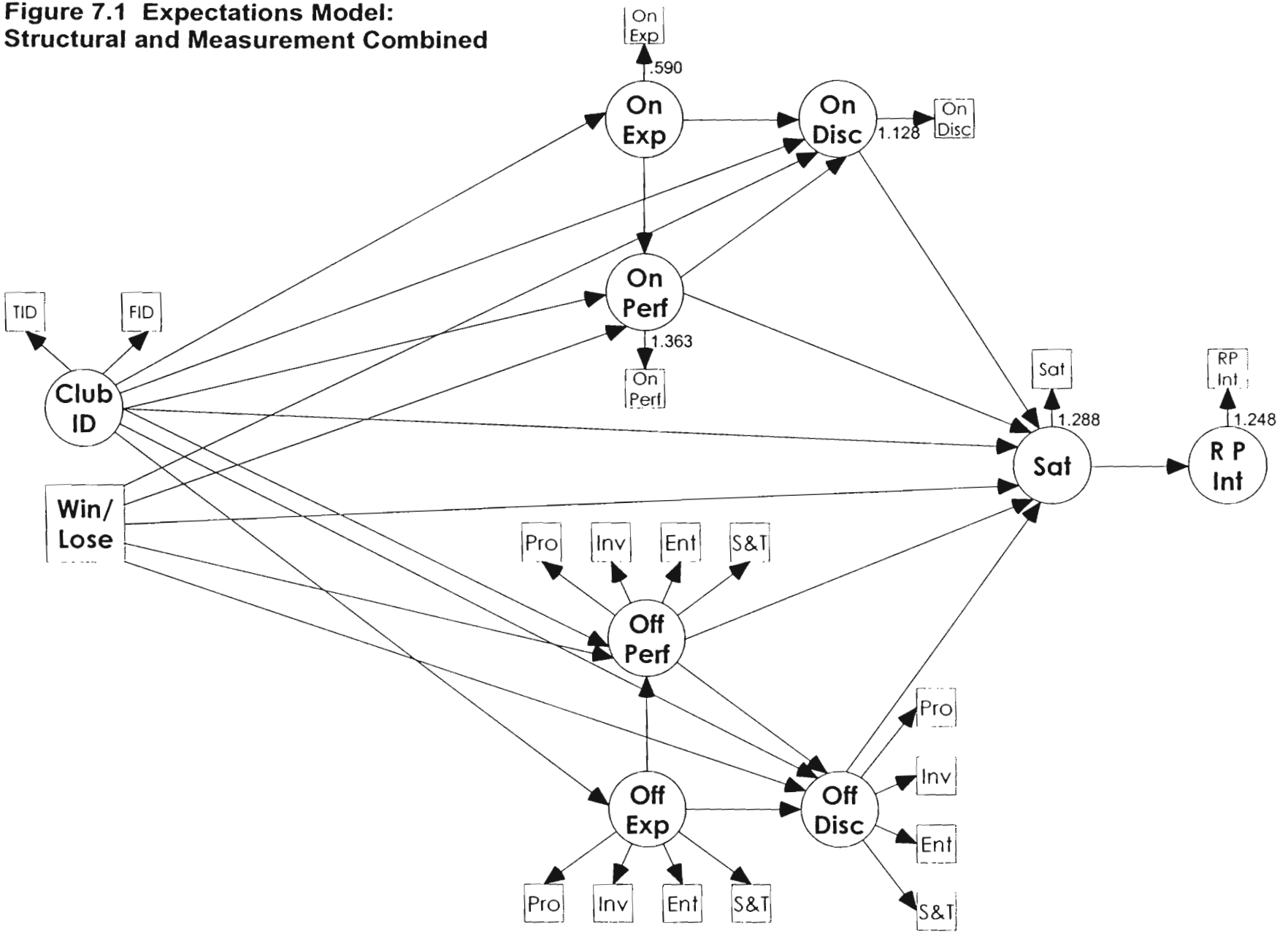
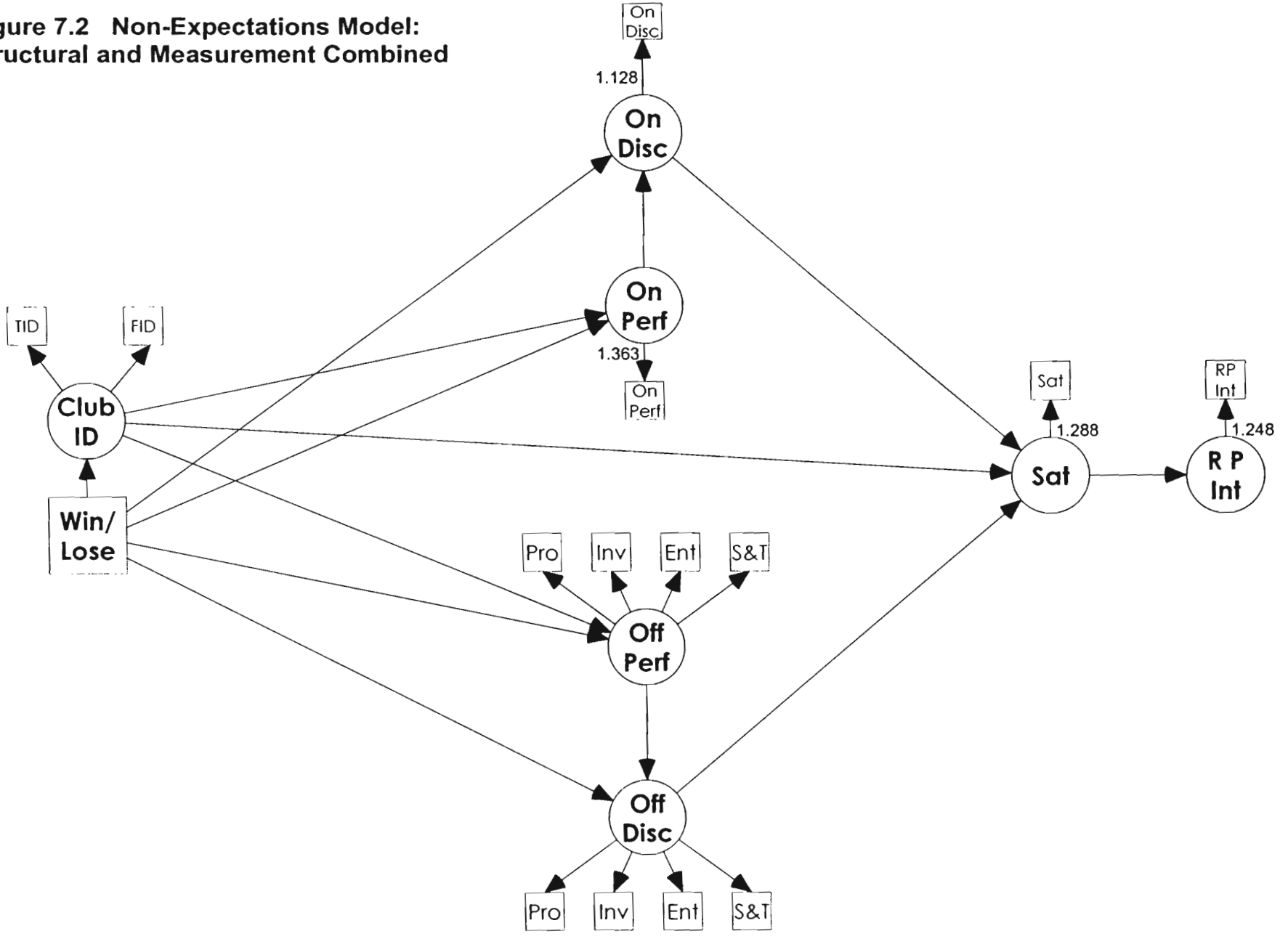


Figure 7.2 Non-Expectations Model: Structural and Measurement Combined



The model converged in 14 iterations. Inspection of the goodness of fit statistics (Table 7.1) indicated that overall, the model fitted the data. The only statistics that did not indicate an acceptable fit were the significant χ^2 (χ^2 = 576.830, df = 147, p = .000) and the AGFI (.863). Significant χ^2 values are common in SEM even when the model fits the data well because the statistic is particularly sensitive to sample size (Bollen, 1989; Hu & Bentler, 1995; Schumacker & Lomax, 1996).

Table 7.1 Goodness of Fit Statistics for the Expectations Model

Goodness of fit test	Test statistic
χ^2, df, p	576.830, 147, .000
Normed χ^2	3.924
RMSEA	.071
RMR	.068
SRMR	.060
GFI	.904
AGFI	.863
NNFI	.912
CFI	.932
AIC	702.830
CAIC	1040.374

Despite the goodness of fit measures indicating the model fitted the data, other indices of fit revealed model fit was poor. These indices included several non-significant path coefficients as well as paths of an unexpected directionality. The indices are presented in Table 7.2. The indices of poor fit revealed the model was probably misspecified (Kline, 1998).

Table 7.2 Path Coefficients and t values for the Expectations Model

Parameter	Coefficient		t value
On-court expectations → On-court disconfirmation	*	- .010	- .370
On-court expectations → On-court performance	*	+ .068	+ 1.836
On-court performance → On-court disconfirmation		+ .704	+ 22.805
On-court performance → Customer satisfaction		+ .277	+ 4.020
On-court disconfirmation → Customer satisfaction	***	- .008	- .106
Off-court expectations → Off-court disconfirmation	***	+ .020	+ .441
Off-court expectations → Off-court performance		+ .179	+ 2.253
Off-court performance → Off-court disconfirmation		+ .618	+ 17.529
Off-court performance → Customer satisfaction		+ .450	+ 5.345
Off-court disconfirmation → Customer satisfaction	*	+ .154	+ 1.560
Club identification → On-court expectations		+ .420	+ 6.675
Club identification → Off-court expectations		+ .335	+ 7.277
Club identification → On-court performance		+ .211	+ 3.981
Club identification → Off-court performance		+ .220	+ 3.934
Club identification → On-court disconfirmation	*	+ .044	+ 1.188
Club identification → Off-court disconfirmation	**	- .078	- 2.520
Club identification → Customer satisfaction		+ .250	+ 5.201
Win/lose → On-court performance		+ .519	+ 14.741
Win/lose → Off-court performance		+ .283	+ 8.309
Win/lose → On-court disconfirmation		+ .232	+ 7.810
Win/lose → Off-court disconfirmation		+ .067	+ 3.479
Win/lose → Customer satisfaction	***	- .018	- .462
Customer satisfaction → Repeat purchase intention		+ .647	+ 19.950

Note. An asterisk (*) indicates the path coefficient was not significant. Two asterisks (**) indicate the path coefficient was not in the proposed direction. Three asterisks (***) indicate the path coefficient was neither significant nor in the proposed direction.

7.3.2 Expectations Model: Respecification

In the main, the principles guiding the respecification of the measurement model in Chapter 6 were also used to guide the respecification of the structural models in this chapter. An additional respecification principle for the structural models, however, is that no non-significant parameters were to be retained in the models. Non-significant parameters contribute little to a model's explanatory power (Diamantopoulos, 1994).

Model respecification was iterative in nature. Parameters were removed one at a time, with the model being re-run after each modification until a conceptually sound and acceptably fitting model was identified. The modifications to the Expectations Model included the removal of seven path coefficients:

1. On-court expectations → On-court disconfirmation;
2. On-court perceived performance → Customer satisfaction;
3. Off-court expectations → Off-court disconfirmation;
4. Off-court perceived performance → Customer satisfaction;
5. Club identification → On-court disconfirmation;
6. Club identification → Off-court disconfirmation; and
7. Win/lose → Customer satisfaction.

On-court expectations → On-court disconfirmation (Proposition 1)

Although the path coefficient (- .010) was in the proposed direction it was not significant (t value = - .370). Therefore, this relationship was not supported in this thesis. A plausible explanation for the lack of support for this relationship was outlined in Chapter 2. That is, because expectations change, the expectations season ticket holders referred to during their assessment of disconfirmation may not be the original expectations they held prior to the season commencing.

The lack of support for the proposition may be specific to this thesis. This is probable given the substantial support for this relationship in the study of customer satisfaction determinants with a great variety of products, the longitudinal nature of the season-ticket service and the two-stage research design employed in this thesis.

On-court perceived performance → Customer satisfaction (Proposition 4)

The path coefficient (+ .277) was in the proposed direction and significant (t value = + 4.020). Typically these characteristics would entail the retention of a parameter, not its removal. However, the presence of this parameter rendered the relationship between on-court disconfirmation and customer satisfaction to be in the unanticipated direction (- .008) and not significant (t value = - .106). There is theoretical support for a direct relationship between perceived performance and customer satisfaction (e.g., Churchill & Surprenant, 1982; Jayanti & Jackson, 1991; Patterson, 1993b; Shaffer & Sherrell, 1997; Spreng & Olshavsky, 1993) with some research (i.e., Jayanti & Jackson, 1991; Patterson, 1993b) indicating that perceived performance can play a greater role in determining customer satisfaction than can disconfirmation. However, in the main there is greater theoretical support for the relationship between disconfirmation and customer satisfaction.

Furthermore, the process of respecification identified a greater explanation of the customer satisfaction construct when the relationship between on-court disconfirmation and customer satisfaction was retained, than when the on-court perceived performance and customer satisfaction relationship was retained.

Off-court expectations → Off-court disconfirmation (Proposition 6)

The path coefficient (+ .020) was not in the proposed direction nor was it significant (t value = + .441). The rationale for the removal of this parameter is similar to the rationale provided previously for the removal of the parameter linking on-court expectations to on-court disconfirmation. That is, the path coefficient was not significant. Additional support for the removal of this parameter was the unanticipated direction of the path coefficient (+ .020). It does not make sense that higher expectations of the season ticket service contributed to the season ticket holders believing the service provided them with more than they expected. This is because the literature maintains that the higher the customer expectations, the more difficult it is for the service organisation to meet those expectations.

Off-court perceived performance → Customer satisfaction (Proposition 9)

The path coefficient (+ .450) was in the proposed direction and significant (t value = + 5.345). The rationale for the removal of this parameter is identical to the rationale provided previously for the removal of the parameter linking on-court perceived performance to customer satisfaction.

Club identification → On-court disconfirmation (Proposition 15)

Although the path coefficient (+ .044) was in the proposed direction it was not significant (t value = + 1.188). Social identity theorists (e.g., Hogg & Terry, 2000; Turner, 1987) claim that group members positively evaluate their ingroup. Disconfirmation is an outcome of an evaluation, however, the relationship between club identification and on-court disconfirmation was not supported.

The lack of support for this proposition is difficult to explain, as there is very little literature that addresses the relationship between group identification and disconfirmation. Indeed only two studies (Bhattacharya et al., 1995; Ferreira, 1996) could be located. However, the contexts of these studies were dissimilar to this thesis and predominantly correlational in nature.

Club identification → Off-court disconfirmation (Proposition 16)

Unlike the relationship between club identification and on-court disconfirmation, the relationship between club identification and off-court disconfirmation was significant (t value = - 2.520). However, the path coefficient for this relationship was not in the proposed direction (- .078).

The negative direction of the path coefficient is illogical. It does not make sense that high levels of club identification would contribute to season ticket holders evaluating the season ticket service as worse than expected. This is because the season ticket service is a symbolic representation of the club. Social identity theory indicates that the season ticket should therefore be important to the social identity of highly identified season ticket holders. As such, social identity theory indicates that these individuals should be inclined to evaluate the season ticket as better than expected.

Win/lose ➜ Customer satisfaction (Proposition 23)

The path coefficient (- .018) was not in the proposed direction nor was it significant (t value = - .462). The negative direction of the path coefficient is nonsensical as there is substantial theoretical support for a positive relationship between winning and customer satisfaction.

Whilst theory strongly suggests a positive relationship between these two variables, there is no known empirical support for this relationship. Furthermore, there is little empirical evidence regarding the nature (i.e., direct, indirect, or both) of the relationship. Although the proposed relationship between winning and customer satisfaction was not supported by the path coefficient results, other results revealed a substantial albeit indirect relationship between the variables (see Section 7.3.4).

In summary, several post hoc modifications were made to the original Expectations Model. The modifications entailed the exclusion of seven path coefficients. The removal of the problematic parameters subsequently resulted in the elimination of the adverse effects they were having on other parameters. The relationship between on-court expectations and on-court perceived performance became significant. Furthermore, the path coefficients between the two types of disconfirmation and customer satisfaction also became significant and were in the proposed direction.

7.3.3 Expectations Model: Final analysis

Following the respecification process, LISREL (Jöreskog & Sörbom, 1993a) was again used to analyse the Expectations Model. Respecification of the model in LISREL language appears in Appendix Q. The results of the final analysis are represented diagrammatically in Figure 7.3.

The respecified model converged in 13 iterations. Inspection of the goodness of fit statistics (Table 7.3) indicated that overall the model fitted the data. The statistics that did not indicate an acceptable fit were the significant χ^2 (χ^2 = 668.972, df = 154, p = .000), the GFI (.892) and the AGFI (.853).

Figure 7.3 Expectations Model: Results of Final Analysis

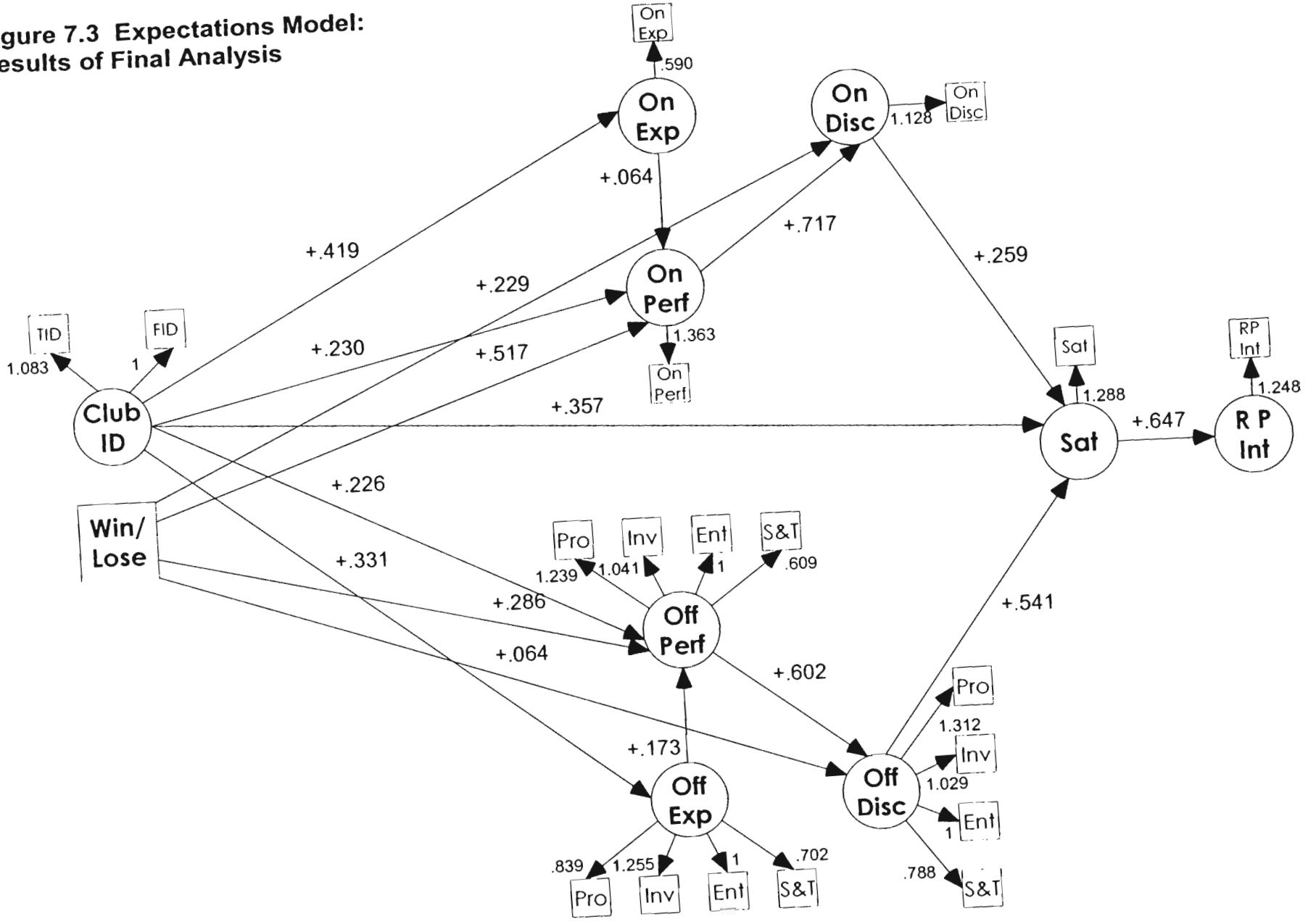


Table 7.3 Goodness of Fit Statistics for the Respecified Expectations Model

Goodness of fit test	Test statistic
χ^2, df, p	668.972, 154, .000
Normed χ^2	4.344
RMSEA	.076
RMR	.075
SRMR	.063
GFI	.892
AGFI	.853
NNFI	.900
CFI	.919
AIC	780.972
CAIC	1081.011

Together with the goodness of fit statistics, other indices of fit revealed the general acceptability of the model. These included the modification indices, residuals, squared multiple correlations and significance and directionality of the path coefficients.

For example, the squared multiple correlation for the customer satisfaction structural equation (.441) indicated the model explained a substantial proportion (i.e., 44.1%) of the variance in season ticket holder satisfaction. Furthermore, all path coefficients were significant and in the proposed direction. The path coefficients and associated t values are summarised in Table 7.4.

Table 7.4 Path Coefficients and t values for the Respecified Expectations Model

Parameter	Coefficient	t value
On-court expectations → On-court performance	+ .064	+ 2.733
On-court performance → On-court disconfirmation	+ .717	+ 24.111
On-court disconfirmation → Customer satisfaction	+ .259	+ 6.437
Off-court expectations → Off-court performance	+ .173	+ 2.193
Off-court performance → Off-court disconfirmation	+ .602	+ 18.118
Off-court disconfirmation → Customer satisfaction	+ .541	+ 7.735
Club identification → On-court expectations	+ .419	+ 6.755
Club identification → Off-court expectations	+ .331	+ 7.339
Club identification → On-court performance	+ .230	+ 4.349
Club identification → Off-court performance	+ .226	+ 4.067
Club identification → Customer satisfaction	+ .357	+ 7.084
Win/lose → On-court performance	+ .517	+ 14.740
Win/lose → Off-court performance	+ .286	+ 8.363
Win/lose → On-court disconfirmation	+ .229	+ 7.814
Win/lose → Off-court disconfirmation	+ .064	+ 3.304
Customer satisfaction → Repeat purchase intention	+ .647	+ 20.008

7.3.4 Expectations Model: Direct and indirect effects

The structural model represents two different types of effects on customer satisfaction: direct and indirect. Consideration of both direct and indirect effects is important. Finch, West and MacKinnon (1997) reported: "the failure to consider both types of effects can obscure the true nature of a causal process and lead to incorrect causal inferences" (p. 87).

A direct effect is the effect of an independent variable on a dependent variable. The path coefficients described previously represent direct effects. For example, the effect of on-court perceived performance on on-court disconfirmation (on-court perceived

performance → on-court disconfirmation). An indirect effect, or mediator effect, is the effect of an independent variable on a dependent variable through one or more intervening, or mediating, variables (Baron & Kenny, 1986). For example, the effect of on-court perceived performance on customer satisfaction through on-court disconfirmation (on-court perceived performance → on-court disconfirmation → customer satisfaction).

The effects of the latent variables and the observed winning variable on customer satisfaction are displayed in Table 7.5. The table shows three variables had a significant direct effect on customer satisfaction. These were club identification (+ .419), on-court disconfirmation (+ .259) and off-court disconfirmation (+ .541). The table also shows that six variables had an indirect effect on customer satisfaction. These were club identification (+ .140), both types of expectations (on-court = + .012 and off-court = + .056), both types of perceived performance (on-court = + .185 and off-court = + .325) and winning (+ .283). The only variable to have both direct and indirect effects on customer satisfaction was club identification.

Table 7.5 Direct and Indirect Effects on Customer Satisfaction for the Respecified Expectations Model

Independent variable	Coefficient		
	Direct effect	Indirect effect	Total effect
Club identification	+ .419	+ .140	+ .497
On-court expectations	-	+ .012	+ .012
On-court perceived performance	-	+ .185	+ .185
On-court disconfirmation	+ .259	-	+ .259
Off-court expectations	-	+ .056	+ .056
Off-court perceived performance	-	+ .325	+ .325
Off-court disconfirmation	+ .541	-	+ .541
Win/lose	-	+ .283	+ .283

Note. A dash (-) indicates the parameter was not estimated.

The relative overall importance of each variable in determining customer satisfaction is depicted in the total effects column in Table 7.5. The results indicate that off-court disconfirmation (+ .541) influenced customer satisfaction the most. The variable with the next largest influence was club identification (+ .497), followed by off-court perceived performance (+ .325), winning (+ .283) and on-court disconfirmation (+ .259). Variables with considerably less influence on customer satisfaction were on-court perceived performance (+ .185) and off-court expectations (+ .056). The variable that contributed the least to customer satisfaction was on-court expectations (+ .012). Indeed the total effect of on-court expectations on customer satisfaction was shown to be non-significant (t value = 1.664).

7.3.5 Expectations Model: Results of proposition testing

A total of 23 of the 24 propositions outlined in Chapter 4 were depicted in the original Expectations Model. Only proposition 18 (i.e., Win/lose ➔ Club identification) was not tested. Of the 23 propositions, 16 were retained in the respecified model. The results of the proposition testing are described as follows.

Proposition 1:

> *There is a negative relationship between on-court expectations and on-court disconfirmation.*

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.3.2.

Proposition 2:

> *There is a positive relationship between on-court expectations and on-court perceived performance.*

A statistically significant (t value = + 2.733) and positive path coefficient (+ .064) links on-court expectations to on-court perceived performance in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of on-court

expectations contribute to increases in levels of on-court perceived performance. Therefore, there is support for proposition 2.

Proposition 3:

There is a positive relationship between on-court perceived performance and on-court disconfirmation.

A statistically significant (t value = + 24.111) and positive path coefficient (+ .717) links on-court perceived performance to on-court disconfirmation in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of on-court perceived performance contribute to increases in levels of positive on-court disconfirmation. Therefore, there is support for proposition 3.

Proposition 4:

There is a positive relationship between on-court perceived performance and customer satisfaction.

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.3.2.

Proposition 5:

There is a positive relationship between on-court disconfirmation and customer satisfaction.

A statistically significant (t value = + 6.437) and positive path coefficient (+ .259) links on-court disconfirmation to customer satisfaction in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of positive on-court disconfirmation contribute to increases in levels of customer satisfaction. Therefore, there is support for proposition 5.

Proposition 6:

There is a negative relationship between off-court expectations and off-court disconfirmation.

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.3.2.

Proposition 7:

> *There is a positive relationship between off-court expectations and off-court perceived performance.*

A statistically significant (t value = + 2.193) and positive path coefficient (+ .173) links off-court expectations to off-court perceived performance in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of off-court expectations contribute to increases in levels of off-court perceived performance. Therefore, there is support for proposition 7.

Proposition 8:

> *There is a positive relationship between off-court perceived performance and off-court disconfirmation.*

A statistically significant (t value = + 18.118) and positive path coefficient (+ .602) links off-court perceived performance to off-court disconfirmation in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of off-court perceived performance contribute to increases in levels of positive off-court disconfirmation. Therefore, there is support for proposition 8.

Proposition 9:

> *There is a positive relationship between off-court perceived performance and customer satisfaction.*

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.3.2.

Proposition 10:

> *There is a positive relationship between off-court disconfirmation and customer satisfaction.*

A statistically significant (t value = + 7.735) and positive path coefficient (+ .541) links off-court disconfirmation to customer satisfaction in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of positive off-court disconfirmation contribute to increases in levels of customer satisfaction. Therefore, there is support for proposition 10.

Proposition 11:

> *There is a positive relationship between club identification and on-court expectations.*

A statistically significant (t value = + 6.755) and positive path coefficient (+ .419) links club identification to on-court expectations in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of club identification contribute to increases in levels of on-court expectations. Therefore, there is support for proposition 11.

Proposition 12:

> *There is a positive relationship between club identification and off-court expectations.*

A statistically significant (t value = + 7.339) and positive path coefficient (+ .331) links club identification to off-court expectations in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of club identification contribute to increases in levels of off-court expectations. Therefore, there is support for proposition 12.

Proposition 13:

> *There is a positive relationship between club identification and on-court perceived performance.*

A statistically significant (t value = + 4.349) and positive path coefficient (+ .230) links club identification to on-court perceived performance in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of club identification contribute

to increases in levels of on-court perceived performance. Therefore, there is support for proposition 13.

Proposition 14:

There is a positive relationship between club identification and off-court perceived performance.

A statistically significant (t value = + 4.067) and positive path coefficient (+ .226) links club identification to off-court perceived performance in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of club identification contribute to increases in levels of off-court perceived performance. Therefore, there is support for proposition 14.

Proposition 15:

There is a positive relationship between club identification and on-court disconfirmation.

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.3.2.

Proposition 16:

There is a positive relationship between club identification and off-court disconfirmation.

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.3.2.

Proposition 17:

There is a positive relationship between club identification and customer satisfaction.

A statistically significant (t value = + 7.084) and positive path coefficient (+ .357) links club identification to customer satisfaction in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of club identification contribute to

increases in levels of customer satisfaction. Therefore, there is support for proposition 17.

Proposition 19:

There is a positive relationship between the win/lose phenomenon and on-court perceived performance.

A statistically significant (t value = + 14.740) and positive path coefficient (+ .517) links winning to on-court perceived performance in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of on-court perceived performance. Therefore, there is support for proposition 19.

Proposition 20:

There is a positive relationship between the win/lose phenomenon and off-court perceived performance.

A statistically significant (t value = + 8.363) and positive path coefficient (+ .286) links winning to off-court perceived performance in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of off-court perceived performance. There is support for proposition 20.

Proposition 21:

There is a positive relationship between the win/lose phenomenon and on-court disconfirmation.

A statistically significant (t value = + 7.814) and positive path coefficient (+ .229) links winning to on-court disconfirmation in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of positive on-court disconfirmation. Therefore, there is support for proposition 21.

Proposition 22:

There is a positive relationship between the win/lose phenomenon and off-court disconfirmation.

A statistically significant (t value = + 3.304) and positive path coefficient (+ .064) links winning to off-court disconfirmation in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of positive off-court disconfirmation. Therefore, there is support for proposition 22.

Proposition 23:

> *There is a positive relationship between the win/lose phenomenon and customer satisfaction.*

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.3.2.

Proposition 24:

> *There is a positive relationship between customer satisfaction and repeat purchase intention.*

A statistically significant (t value = + 20.008) and positive path coefficient (+ .647) links customer satisfaction to repeat purchase intention in Figure 7.3. The characteristics of this path coefficient indicate that increases in levels of customer satisfaction contribute to increases in levels of repeat purchase intention. Therefore, there is support for proposition 24.

In summary, 23 propositions were advanced in Chapter 4 for inclusion in the original version of the Expectations Model. Sixteen of these propositions were retained in the respecified model. The path coefficients in the respecified model are all significant and in the theoretically supported direction.

7.4 Non-Expectations Model

The Non-Expectations Model is the less complex of the two models tested in this chapter. Unlike its alternative, it comprises only 7 latent variables and 15 observed variables. The Non-Expectations Model was presented earlier as Figure 7.2.

7.4.1 Non-Expectations Model: Initial analysis

The data used in the analysis were, with the exception of the expectation scales, the composite scales developed in the previous chapter as well as the observed winning variable. A correlation matrix including each of the measures appears in Appendix M.

The analysis of the Non-Expectations Model mirrored the previous analysis of the Expectations Model. That is, the data were first analysed in PRELIS (Jöreskog & Sörbom, 1993c) and then in LISREL (Jöreskog & Sörbom, 1993a). Formal specification of the model in LISREL language appears in Appendix R.

The model converged in 10 iterations. Inspection of the goodness of fit statistics (Table 7.6) indicated that overall the model fitted the data. The only statistics that did not indicate an acceptable fit were the significant χ^2 ($\chi^2 = 311.510$, df = 72, p = .000) and the AGFI (.881).

Table 7.6 Goodness of Fit Statistics for the Non-Expectations Model

Goodness of fit test	Test statistic
χ^2, df, p	311.510, 72, .000
Normed χ^2	4.327
RMSEA	.076
RMR	.077
SRMR	.061
GFI	.928
AGFI	.881
NNFI	.938
CFI	.957
AIC	407.510
CAIC	664.686

Similar to those of the Expectations Model, the goodness of fit statistics indicated a generally acceptable model fit. However, as with the alternative research model, other indices of fit indicated that model fit was inadequate. These indices included several non-significant path coefficients as well as paths of an unexpected directionality. The indices are presented in Table 7.7. They indicated the Non-Expectations Model was probably misspecified.

Table 7.7 Path Coefficients and t values for the Non-Expectations Model

Parameter		Coefficient	t value
On-court performance → On-court disconfirmation		+ .727	+ 22.407
On-court performance → Customer satisfaction		+ .192	+ 2.729
On-court disconfirmation → Customer satisfaction	*	+ .058	+ .810
Off-court performance → Off-court disconfirmation		+ .623	+ 17.292
Off-court performance → Customer satisfaction		+ .452	+ 5.405
Off-court disconfirmation → Customer satisfaction	*	+ .119	+ 1.240
Club identification → On-court performance		+ .362	+ 7.352
Club identification → Off-court performance		+ .341	+ 7.164
Club identification → On-court disconfirmation	***	- .046	- 1.455
Club identification → Off-court disconfirmation	**	- .064	- 2.716
Club identification → Customer satisfaction		+ .259	+ 5.404
Win/lose → Club identification		+ .247	+ 6.695
Win/lose → On-court performance		+ .452	+ 12.641
Win/lose → Off-court performance		+ .221	+ 6.498
Win/lose → On-court disconfirmation		+ .235	+ 7.850
Win/lose → Off-court disconfirmation		+ .074	+ 3.781
Win/lose → Customer satisfaction	***	- .045	1.171
Customer satisfaction → Repeat purchase intention		+ .647	+ 20.156

Note. An asterisk (*) indicates the path coefficient was not significant. Two asterisks (**) indicate the path coefficient was not in the proposed direction. Three asterisks (***) indicate the path coefficient was neither significant nor in the proposed direction.

7.4.2 Non-Expectations Model: Respecification

Respecification of the Non-Expectations Model followed the same guidelines as the respecification of the Expectations Model. That is, the principles outlined in Chapter 6 were adhered to. Furthermore, as with the Expectations Model and in accord with Diamantopoulos (1994), the principle that no non-significant parameters be retained in the model was employed. Respecification of the model in LISREL language appears in Appendix S.

Once again, model respecification was iterative in nature. Parameters were removed one at a time, with the model being re-run after each modification until a conceptually sound and acceptably fitting model was identified. The modifications to the Non-Expectations Model included the removal of five path coefficients. These same path coefficients were also removed from the original Expectations Model. Therefore, the rationale for each of the modifications is only described very briefly. The path coefficients removed were:

1. On-court perceived performance ➔ Customer satisfaction;
2. Off-court perceived performance ➔ Customer satisfaction;
3. Club identification ➔ On-court disconfirmation;
4. Club identification ➔ Off-court disconfirmation; and
5. Win/lose ➔ Customer satisfaction.

On-court perceived performance ➔ Customer satisfaction (Proposition 4)

The path coefficient (+ .192) was in the proposed direction and significant (t value = + 2.729). However, the presence of the relationship adversely affected the characteristics of the relationship between on-court disconfirmation and customer satisfaction. That is, the path coefficient (+ .058) for the on-court disconfirmation and customer satisfaction relationship was not significant (t value = + .810). The rationale for the removal of this parameter was identical to the rationale provided previously for its removal from the Expectations Model.

Off-court perceived performance → Customer satisfaction (Proposition 9)

The path coefficient (+ .452) was in the proposed direction and significant (t value = + 5.405). The rationale for the removal of this parameter was identical to the rationale provided previously for its removal from the Expectations Model.

Club identification → On-court disconfirmation (Proposition 15)

The path coefficient (- .046) was not in the proposed direction nor was it significant (t value = - 1.455). The rationale for the removal of this parameter was in accord with the rationales proposed previously for the removal of the club identification and on-court disconfirmation parameter as well as the club identification and off-court disconfirmation parameter.

Club identification → Off-court disconfirmation (Proposition 16)

The path coefficient (- .064) was not in the proposed direction, although it was significant (t value = - 2.716). The rationale for the removal of this parameter was identical to the rationale provided previously for its removal from the Expectations Model.

Win/lose → Customer satisfaction (Proposition 23)

The path coefficient (- .045) was not in the proposed direction, nor was it significant (t value = - 1.171). The rationale for the removal of this parameter was identical to the rationale provided previously for its removal from the Expectations Model.

In summary, several post hoc modifications were made to the original Non-Expectations Model. The modifications involved the exclusion of five path coefficients. Removing the five parameters subsequently resulted in the elimination of the adverse effects they were having on other parameters and produced a more theoretically supportable model. The path coefficients between the two types of disconfirmation and customer satisfaction became positive and significant.

7.4.3 Non-Expectations Model: Final analysis

Following the respecification process, LISREL (Jöreskog & Sörbom, 1993a) was again used to analyse the research model. The results of the final analysis are represented diagrammatically in Figure 7.4.

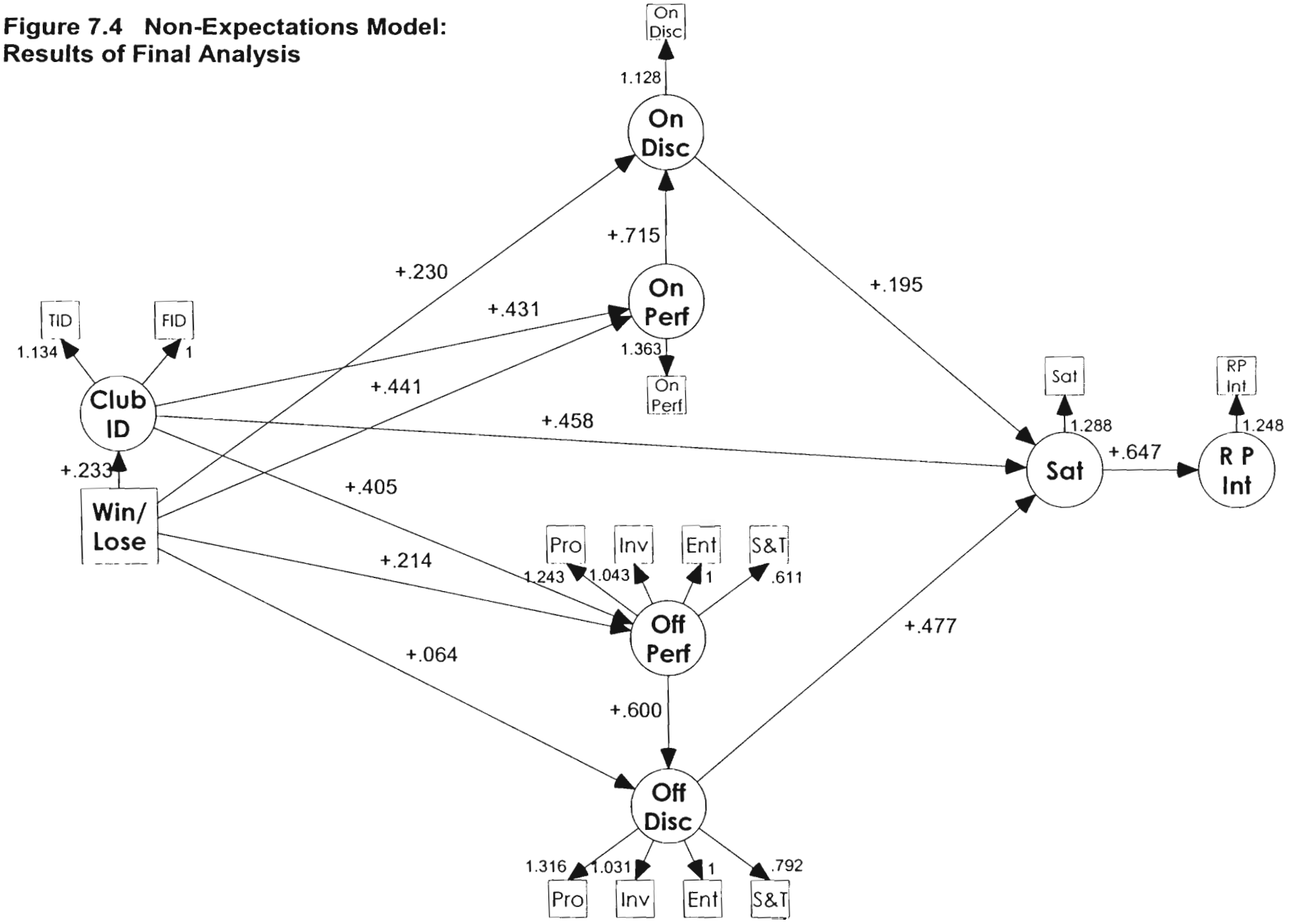
The respecified model converged in 11 iterations. Inspection of the goodness of fit statistics (Table 7.8) indicated that overall the model fitted the data. The statistics that did not indicate an acceptable fit were the significant χ^2 ($\chi^2 = 376.410$, df = 77, p = .000) and the AGFI (.870).

Table 7.8 Goodness of Fit Statistics for the Respecified Non-Expectations Model

Goodness of fit test	Test statistic
χ^2, df, p	376.410, 77, .000
Normed χ^2	4.888
RMSEA	.082
RMR	.082
SRMR	.064
GFI	.917
AGFI	.870
NNFI	.927
CFI	.947
AIC	462.410
CAIC	692.797

Together with the goodness of fit statistics, other indices of fit revealed the general acceptability of the model. These included the modification indices, residuals, squared multiple correlations and significance and directionality of the path coefficients.

Figure 7.4 Non-Expectations Model: Results of Final Analysis



For example, the squared multiple correlation for the customer satisfaction structural equation (.498) indicated the model explained a considerable proportion (i.e., 49.8%) of the variance in season ticket holder customer satisfaction. Furthermore, all path coefficients were significant and in the proposed directionality. The path coefficients and associated t values are summarised in Table 7.9.

Table 7.9 Path Coefficients and t values for the Respecified Non-Expectations Model

Parameter	Coefficient	t value
On-court performance → On-court disconfirmation	+ .715	+ 23.935
On-court disconfirmation → Customer satisfaction	+ .195	+ 4.793
Off-court performance → Off-court disconfirmation	+ .600	+ 18.095
Off-court disconfirmation → Customer satisfaction	+ .477	+ 6.978
Club identification → On-court performance	+ .431	+ 8.371
Club identification → Off-court performance	+ .405	+ 8.019
Club identification → Customer satisfaction	+ .458	+ 8.291
Win/lose → Club identification	+ .233	+ 6.357
Win/lose → On-court performance	+ .441	+ 12.418
Win/lose → Off-court performance	+ .214	+ 6.338
Win/lose → On-court disconfirmation	+ .230	+ 7.696
Win/lose → Off-court disconfirmation	+ .064	+ 3.254
Win/lose satisfaction → Repeat purchase intention	+ .647	+ 20.336

7.4.4 Non-Expectations Model: Direct and indirect effects

The effects of the latent variables and the observed winning variable on customer satisfaction are displayed in Table 7.10. The table shows that three variables had a significant direct effect on customer satisfaction. These were club identification (+ .458), on-court disconfirmation (+ .195) and off-court disconfirmation (+ .477). The table also shows that four variables had an indirect effect on customer satisfaction.

These were club identification (+ .176), both types of perceived performance (on-court = + .139 and off-court = + .286) and winning (+ .345). The only variable to have both direct and indirect effects on customer satisfaction was club identification.

Table 7.10 Direct and Indirect Effects on Customer Satisfaction for the Respecified Non-Expectations Model

Independent variable	Coefficient		
	Direct effect	Indirect effect	Total effect
Club identification	+ .458	+ .176	+ .634
On-court perceived performance	-	+ .139	+ .139
On-court disconfirmation	+ .195	-	+ .195
Off-court perceived performance	-	+.286	+ .286
Off-court disconfirmation	+ .477	-	+ .477
Win/lose	-	+ .345	+ .345

Note. A dash (-) indicates the parameter was not estimated.

The relative overall importance of each variable in determining customer satisfaction is depicted in the total effects column in Table 7.10. The results indicate that club identification (+ .634) influenced customer satisfaction the most. The variable with the next largest influence on customer satisfaction was off-court disconfirmation (+ .477), followed by winning (+ .345), off-court perceived performance (+ .286), on-court disconfirmation (+ .195) and on-court perceived performance (+ .139).

7.4.5 Non-Expectations Model: Results of proposition testing

A total of 18 of the 24 propositions outlined in Chapter 4 were depicted in the original Non-Expectations Model. Of these 18 propositions, 13 were retained in the respecified model. The results of the proposition testing are described as follows.

Proposition 3:

There is a positive relationship between on-court perceived performance and on-court disconfirmation.

A statistically significant (t value = + 23.935) and positive path coefficient (+ .715) links on-court perceived performance to on-court disconfirmation in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of on-court perceived performance contribute to increases in levels of positive on-court disconfirmation. Therefore, there is support for proposition 3.

Proposition 4:

There is a positive relationship between on-court perceived performance and customer satisfaction.

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.4.2.

Proposition 5:

There is a positive relationship between on-court disconfirmation and customer satisfaction.

A statistically significant (t value = + 4.793) and positive path coefficient (+ .195) links on-court disconfirmation to customer satisfaction in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of positive on-court disconfirmation contribute to increases in levels of customer satisfaction. Therefore, there is support for proposition 5.

Proposition 8:

There is a positive relationship between off-court perceived performance and off-court disconfirmation.

A statistically significant (t value = + 18.095) and positive path coefficient (+ .600) links off-court perceived performance to off-court disconfirmation in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of off-court

perceived performance contribute to increases in levels of positive off-court disconfirmation. Therefore, there is support for proposition 8.

Proposition 9:

There is a positive relationship between off-court perceived performance and customer satisfaction.

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.4.2.

Proposition 10:

There is a positive relationship between off-court disconfirmation and customer satisfaction.

A statistically significant (t value = + 6.978) and positive path coefficient (+ .477) links off-court disconfirmation to customer satisfaction in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of positive off-court disconfirmation contribute to increases in levels of customer satisfaction. Therefore, there is support for proposition 10.

Proposition 13:

There is a positive relationship between club identification and on-court perceived performance.

A statistically significant (t value = + 8.371) and positive path coefficient (+ .431) links club identification to on-court perceived performance in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of club identification contribute to increases in levels of on-court perceived performance. Therefore, there is support for proposition 13.

Proposition 14:

There is a positive relationship between club identification and off-court perceived performance.

A statistically significant (t value = + 8.019) and positive path coefficient (+ .405) links club identification to off-court perceived performance in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of club identification contribute to increases in levels of off-court perceived performance. Therefore, there is support for proposition 14.

Proposition 15:

> *There is a positive relationship between club identification and on-court disconfirmation.*

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.4.2.

Proposition 16:

> *There is a positive relationship between club identification and off-court disconfirmation.*

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.4.2.

Proposition 17:

> *There is a positive relationship between club identification and customer satisfaction.*

A statistically significant (t value = + 8.291) and positive path coefficient (+ .458) links club identification to customer satisfaction in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of club identification contribute to increases in levels of customer satisfaction. Therefore, there is support for proposition 17.

Proposition 18:

> *There is a positive relationship between the win/lose phenomenon and club identification.*

A statistically significant (t value = + 6.357) and positive path coefficient (+ .233) links winning to club identification in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of club identification. Therefore, there is support for proposition 18.

Proposition 19:

There is a positive relationship between the win/lose phenomenon and on-court perceived performance.

A statistically significant (t value = + 12.418) and positive path coefficient (+ .441) links winning to on-court perceived performance in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of on-court perceived performance. Therefore, there is support for proposition 19.

Proposition 20:

There is a positive relationship between the win/lose phenomenon and off-court perceived performance.

A statistically significant (t value = + 6.338) and positive path coefficient (+ .214) links winning to off-court perceived performance in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of off-court perceived performance. Therefore, there is support for proposition 20.

Proposition 21:

There is a positive relationship between the win/lose phenomenon and on-court disconfirmation.

A statistically significant (t value = + 7.696) and positive path coefficient (+ .230) links winning to on-court disconfirmation in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of positive on-court disconfirmation. Therefore, there is support for proposition 21.

Proposition 22:

There is a positive relationship between the win/lose phenomenon and off-court disconfirmation.

A statistically significant (t value = + 3.254) and positive path coefficient (+ .064) links winning to off-court disconfirmation in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of winning contribute to increases in levels of positive off-court disconfirmation. Therefore, there is support for proposition 22.

Proposition 23:

There is a positive relationship between the win/lose phenomenon and customer satisfaction.

This proposition was not tested in the respecified model. The rationale for its post hoc exclusion was presented previously in Section 7.4.2.

Proposition 24:

There is a positive relationship between customer satisfaction and repeat purchase intention.

A statistically significant (t value = + 20.336) and positive path coefficient (+ .647) links customer satisfaction to repeat purchase intention in Figure 7.4. The characteristics of this path coefficient indicate that increases in levels of customer satisfaction contribute to increases in levels of repeat purchase intention. Therefore, there is support for proposition 24.

In summary, 18 propositions were advanced in Chapter 4 for inclusion in the original version of the Non-Expectations Model. Thirteen of these propositions were retained in the respecified model. The path coefficients in the respecified model are all significant and in the theoretically supported direction. Issues concerning the implications of these findings will be discussed in Chapter 8.

7.5 Identification of the Superior Research Model

This thesis proposed two models as possible representations of the customer satisfaction process with the season ticket service of professional sport clubs. Alternative models were proposed for two reasons. First, there are conflicting viewpoints in the literature regarding the determinants of customer satisfaction. Second, the alternative models approach to SEM is highly recommended (Hoyle & Panter, 1995; Rigdon, 1999). Bagozzi (1984), for example, outlined the importance of researchers considering alternative hypotheses in theory construction and emphasised that these rival hypotheses are best tested within the same study.

This section aims to establish the superiority of one of the two research models tested in this thesis. As the names of the models suggest, the main conceptual difference between the Expectations Model and the Non-Expectations Model is whether expectations is included. There are competing views in the literature as to the utility of employing expectations in the study of customer satisfaction determinants. These views were explored in Chapter 2. The other difference between the models is whether pre-season or post-season measures of club identification were employed. The Expectations Model incorporated pre-season club identification measures whereas the Non-Expectations Model incorporated post-season measures of club identification. The rationale for measuring club identification both prior to and after the sport season was outlined in Chapter 5. Specifically, the stability of club identification over a sport season is unknown.

There are a number of criteria available for evaluating alternative models. The alternative models in this thesis were evaluated on the statistical criteria of:

1. model fit;
2. model parsimony; and
3. proportion of explained variation in customer satisfaction.

In addition to the aforementioned statistical criteria, the models were also evaluated on theoretical grounds.

7.5.1 Model fit

A comparison of model fit is a popular way to choose between alternative models (e.g., Jayanti & Jackson, 1991; Madrigal, 1995; Westbrook & Reilly, 1983). There are several ways of assessing how well a model fits its data. In accord with the discussion of model fit presented in Chapter 6 a well fitting model should not only be characterised by acceptable fit statistics, but it should also be characterised by low standardised residuals and substantial squared multiple correlations and parameters of the right size, significance and directionality (Bollen, 1989; Kline, 1998). Each of these indices of model fit is considered in the comparison of the two models. First, the goodness of fit test statistics displayed in Table 7.11 are considered.

Table 7.11 Goodness of Fit Statistics for the Alternative Research Models

Goodness of fit test	Test statistic	
	Expectations Model	**Non-Expectations Model**
χ^2, df, p	668.972, 154, .000	376.410, 77, .000
Normed χ^2	4.344	4.888
RMSEA	.076	.082
RMR	.075	.082
SRMR	.063	.064
GFI	.892	.917
AGFI	.853	.870
NNFI	.900	.927
CFI	.919	.947

The Normed χ^2, RMSEA, RMR and SRMR values slightly favoured the Expectations Model. However, the GFI, AGFI, NNFI and CFI values slightly favoured the Non-Expectations Model. Unlike the other goodness of fit statistics, the χ^2 values were not used to compare the models. A χ^2 difference test cannot be used to choose one model

over another when the models comprise different numbers of variables (Hoyle & Panter, 1995).

Overall, the difference in the goodness of fit statistics between the two models was not substantial. Furthermore, with the exception of the AGFI and the χ^2, which indicated a substandard fit for both models, each of the other statistics indicated both models fitted. The conclusion to be drawn from the comparison of the goodness of fit test statistics is that the models fitted equally well.

Following the comparison of the models' respective goodness of fit statistics, the models were compared on other indices of fit. Inspection of each model's residuals and modification indices revealed the Non-Expectations Model was characterised by fewer excessive residuals than the Expectations Model. Furthermore, the modification indices of the Non-Expectations Model suggested fewer changes to model specification than did the modification indices of the Expectations Model. In brief, inspection of each model's residuals and modification indices pointed to the Non-Expectations Model as the superior fitting model.

Consideration of the squared multiple correlations for structural equations also indicated that the fit of the models could be perceived as dissimilar. The squared multiple correlations for structural equations of the alternative models appear in Table 7.12. The squared multiple correlations for the Non-Expectations Model were greater than the squared multiple correlations for the Expectations Model. The conclusion to be drawn from the comparison of these values is that the fit of the Non-Expectations Model was superior to the fit of the Expectations Model.

In summary, the models differed little in model fit as indicated by the goodness of fit statistics. However, the fit of the models did differ with respect to the residuals, modification indices and squared multiple correlations for structural equations. Overall, when judged on the criterion of model fit the Non-Expectations Model was the superior model.

Table 7.12 Squared Multiple Correlations for Structural Equations of Alternative Research Models

Structural equation	Squared multiple correlation	
	Expectations Model	Non-Expectations Model
Club identification	-	.076
On-court expectations	.117	-
On-court performance	.323	.416
On-court disconfirmation	.728	.730
Off-court expectations	.256	-
Off-court performance	.215	.304
Off-court disconfirmation	.643	.645
Customer satisfaction	.441	.498
Repeat purchase intention	.415	.423

Note. A dash (-) indicates the squared multiple correlation was not estimated.

7.5.2 Model parsimony

Model parsimony is an important concept in SEM (Browne & Cudeck, 1993; Hair et al., 1998). Parsimony refers to the number of estimated coefficients required to achieve a specific level of model fit (Schumacker & Lomax, 1996). The objective is to maximise the degree of fit per estimated coefficient (Hair et al., 1998).

The more parameters a model comprises, the less parsimonious it becomes. The Expectations Model comprises substantially more parameters than the Non-Expectations Model. The numbers of parameters for both models are displayed in Table 7.13. Also displayed in Table 7.13 are two measures of model parsimony: the Akaike (1987) Information Criterion (AIC) and Bozdogan's (1987) Consistent Akaike Information Criterion (CAIC).

Table 7.13 Number of Parameters and Parsimony Measures for Alternative Research Models

Parameter/Variable	Number of parameters	
	Expectations Model	Non-Expectations Model
Latent variables	9	7
Observed variables	20	15
Factor loadings	19	14
Structural paths	16	13
Unexplained variance in the endogenous variables and covariance among these residual terms	12	9
Variance of and covariance among observed variables' error terms	23	18

Parsimony test	Parsimony values	
	Expectations Model	Non-Expectations Model
AIC	780.972	462.410
CAIC	1081.011	692.797

The AIC and CAIC are especially useful when making a comparison between models that are not hierarchically related such as the models in this thesis. Given two non-hierarchical models, the one with the lowest AIC and CAIC values is preferred (Kline, 1998).

The Non-Expectations Model was clearly the more parsimonious of the two models. It was characterised by much lower AIC (462.410) and CAIC (692.797) values than was

the Expectations Model. In summary, the Non-Expectations Model is posited as the superior model on the criterion of model parsimony.

7.5.3 Proportion of explained variation in customer satisfaction

The proportion of explained variation in customer satisfaction is depicted by the squared multiple correlation for the customer satisfaction structural equation. Table 7.12 displays these statistics. The squared multiple correlation for the Expectations Model (.441) indicates the model explained 44.1 percent of the variation in customer satisfaction. On the other hand, the squared multiple correlation for the Non-Expectations Model (.498) reveals the model accounted for 49.8 percent of the variation in customer satisfaction. The Non-Expectations Model is therefore posited as the superior model on the criterion of the amount of variation in customer satisfaction explained.

7.5.4 Theoretical grounds

The theoretical rationale for developing alternative models was outlined in some detail much earlier in this thesis in Chapter 2 and revisited briefly in this chapter in Section 7.5. In the main, alternative models were developed due to the questionable merit of including expectations as a determinant of customer satisfaction, particularly given the two-stage, longitudinal nature of the research design employed in this thesis.

Season ticket holder expectations are likely to change over a sport season. That is, the expectations held by season ticket holders prior to the season commencing are unlikely to be the same expectations that influence season ticket holder perceptions of performance, disconfirmation and customer satisfaction once the season has finished. In brief, the dynamic nature of expectations and the two-stage design of this thesis support the Non-Expectations Model as the theoretically superior research model. Further support for theoretical superiority of the Non-Expectations Model is presented in the next chapter in Section 8.3.1.

7.5.5 The superior model

The alternative research models were evaluated on several criteria: (a) model fit; (b) model parsimony; (c) proportion of explained variation in customer satisfaction; and (d) theoretical grounds. The purpose of the evaluation was to identify the superior model. The Non-Expectations Model outperformed the Expectations Model on each of the criteria.

Additional evidence of the superiority of the Non-Expectations Model was provided in Section 7.3.4. The section included an examination of the direct and indirect effects constituting the Expectations Model. The variables found to contribute the least to customer satisfaction were in fact the two customer expectations variables. The effect of on-court expectations on customer satisfaction was very weak (+ .012) and non-significant (t value = 1.664). Similarly, the off-court expectations effect was also very weak (+ .056) although it was significant (t value = 2.105).

The Non-Expectations Model is therefore posited as the superior model of customer satisfaction with the season ticket service of professional sport clubs. Issues concerning the implications of these findings will be discussed in Chapter 8.

7.6 Summary

This chapter commenced with the testing of two alternative research models. First, the Expectations Model was tested. The initial analysis revealed the model was probably misspecified. Seven post hoc modifications were made to the model and it was then re-tested. The respecified model demonstrated a reasonable level of model fit.

The second model to be tested was the Non-Expectations Model. Similar to the analysis of its alternative, the initial analysis indicated the model was probably misspecified. Five post hoc modifications were made to the model and it was subsequently re-tested. Again, like its alternative, the respecified model demonstrated a reasonable level of model fit.

Following the SEM analysis of the alternative models and their respecified versions, the process of identifying the superior research model was outlined. The models were compared on statistical and theoretical criteria. On each of the criteria the Non-Expectations Model was identified as the superior representation of the process of customer satisfaction with the season ticket service of professional sport clubs.

A discussion of the results presented in this chapter will follow in the next chapter. The managerial implications and theoretical contributions of this thesis will also be outlined in Chapter 8.

CHAPTER 8
DISCUSSION AND CONCLUSIONS

8.1 Introduction

The main results of this thesis were outlined in the previous chapter. The propositions first described in Chapter 4 were tested with structural modelling. Then, of the two alternative research models, the Non-Expectations Model was identified as the superior representation of the process of customer satisfaction with the season ticket service of professional sport clubs.

The purpose of this chapter is first to discuss the research results reported in Chapter 7 and then to outline the managerial implications of these results. The theoretical contributions and limitations of the thesis will also be presented. Finally, the chapter will conclude with consideration of future research directions.

8.2 Primary Research Purpose

The primary purpose of this thesis was to examine empirically and extend knowledge of the determinants of customer satisfaction of sport spectators. Specifically, the focus of the research was on customer satisfaction with the season ticket service of professional sport clubs.

The theoretical underpinnings of the research were located in the disconfirmation of expectations theory of customer satisfaction, social identity theory and sport marketing theory. The thesis also borrowed from services marketing theory. A key aspect of the thesis was the extension of the DEM of customer satisfaction to include the sport-specific variables of club identification and the win/lose phenomenon. Furthermore, a unique contribution of the research was the consideration of both the core (on-court) and peripheral (off-court) dimensions of the season ticket service.

The research purpose was achieved using both qualitative and quantitative approaches to assess the customer satisfaction of season ticket holders of Australian NBL clubs. The research instruments used in the two-stage main study measured the constructs of club identification (pre-season and post-season), expectations (on-court and off-court), perceived performance (on-court and off-court), disconfirmation (on-court and off-court), customer satisfaction and repeat purchase intention. The sport league provided measurement of the win/lose phenomenon. Structural modelling was used to test the propositions among the constructs as depicted by two alternative research models.

8.3 Summary and Discussion of Research Results

This section will discuss the empirical results presented in Chapter 7. First, the results pertaining to the identification of the superior research model will be discussed, followed by a discussion of the results pertaining to the research questions outlined in Chapter 1. Specifically, the relationship between each determining variable and customer satisfaction will be examined. Furthermore, the relationship between customer satisfaction and repeat purchase intention will also be examined. Finally, results addressing the different effects of the on-court and off-court service dimensions on customer satisfaction will be discussed.

8.3.1 Identification of the superior research model

Two alternative research models were developed and tested in this thesis: the Expectations Model and the Non-Expectations Model. The primary difference between the models is the inclusion or exclusion of the expectations construct.

The structural modelling in Chapter 7 identified the Non-Expectations Model as the superior representation of the process of customer satisfaction with the season ticket service. The Non-Expectations Model outperformed the Expectations Model on the statistical criteria of: (a) model fit; (b) model parsimony; and (c) proportion of explained variation in customer satisfaction. Furthermore, given the dynamic nature of

expectations and the two-stage design of the research, the Non-Expectations Model was also superior on theoretical grounds.

In addition to the Expectations Model's lesser performance against the aforementioned criteria, the total effects of the on-court and off-court expectations on customer satisfaction were the weakest of all the determining variables. Indeed, the total effect of on-court expectations was found to be non-significant.

The total effects results have mixed support in the literature. In the main, the effect of expectations on customer satisfaction is typically posited as weaker than the effects of perceived performance and disconfirmation. However, while this effect tends to be weakest, in most studies it is nevertheless significant (Churchill & Surprenant, 1982; Shaffer & Sherrell, 1997; Westbrook & Reilly, 1983).

Customer expectations are pivotal to the disconfirmation of expectations theory in which this thesis is grounded. However, the non-significant total effect of on-court expectations and the weak total effect of off-court expectations indicate that customer expectations, as operationalised in this thesis, are not as central to customer satisfaction with the season ticket service as they are to customer satisfaction with other products. Furthermore, the results indicate that the process of satisfaction as depicted by the DEM is not appropriate for the context of this research.

8.3.1.1 Explanation for non-significant and weak expectations effects

The non-significant and weak total effects of the expectations constructs may be explained by the: (a) lack of an on-court expectations effect on disconfirmation; (b) dynamic nature of expectations; and (c) accuracy of expectations recall. These explanations are interrelated.

Lack of an expectations effect on disconfirmation

Expectations have been shown to influence customer satisfaction both directly and indirectly (Bearden & Teel, 1983; Churchill & Surprenant, 1982; Shaffer & Sherrell, 1997; Westbrook & Reilly, 1983). A direct effect was not included in the thesis

propositions. Rather, two indirect effects, one mediated by perceived performance and the other mediated by disconfirmation, were proposed.

The only effects found to be significant and in the anticipated directions were the effects mediated by on-court and off-court perceived performance. The relationship between expectations and disconfirmation was found to be non-significant for both the on-court and off-court dimensions. Therefore, the total effects of on-court and off-court expectations on customer satisfaction were weaker than anticipated because there was no additive effect of a relationship between expectations and disconfirmation.

Dynamic nature of expectations

It is generally acknowledged that customer expectations are dynamic (Oliver, 1997; Oliver & Burke, 1999; Parasuraman et al., 1991; Walker, 1995). The numerous factors that determine expectations all have the potential to change the initial expectations a customer may hold of a given product. This is particularly the case in the context of this thesis given the eight months that separated the collection of the expectations data from the collection of the disconfirmation and customer satisfaction data. In brief, many factors (e.g., experience, expectations of others, service promises) could have changed season ticket holder expectations over the eight month period.

Accuracy of expectations recall

In addition to the changing nature of customer expectations Patterson (1993b) noted that initial expectations might not necessarily be recalled correctly due to memory loss. This appears highly plausible given the longitudinal nature of the season ticket service (i.e., approximately six months) and the design of this thesis (i.e., the two-stage measurement of research constructs). Furthermore, expectations may purposefully not be accurately recalled (Oliver, 1997; Oliver & Burke, 1999). This is the case with assimilation whereby customers do not wish to acknowledge a discrepancy between their initial expectations of product performance and their later evaluations of the product.

The dynamic nature of customer expectations combined with the degree of accuracy with which expectations are recalled assist in explaining why expectations did not influence disconfirmation. That is, the expectations season ticket holders referred to

during their assessment of disconfirmation were probably not the original ones they held prior to the season commencing. In the words of Oliver (1997), the expectations were *updated* or *revised* during the six month season ticket service consumption period. This helps explain why the total effects of the two expectations constructs on customer satisfaction were insubstantial.

In summary, the Expectations Model was the model less supported by the research results. This is evident in the performance of the model against a number of criteria, as well as the non-significant total effect of on-court expectations and the weak total effect of off-court expectations. However, it should be acknowledged that these results may be specific to this research situation. This is plausible given the substantial support for the expectations construct in the study of customer satisfaction determinants with a great variety of products, the longitudinal nature of the season-ticket service and the two-stage research design employed in this thesis.

8.3.2 Determinants of customer satisfaction

This section will discuss the empirical results pertaining to the research questions outlined in Chapter 1. The discussion will be conducted with reference to each of the research propositions depicted by the Non-Expectations Model, that is, the superior research model. Included in this section will be a discussion detailing whether the effects of each of the proposed customer satisfaction determinants were direct, indirect, or both.

8.3.2.1 What is the relationship between club identification and customer satisfaction?

The results support both direct and indirect relationships between club identification and customer satisfaction. Furthermore, of the six determinants constituting the Non-Expectations Model, the results support club identification as having the largest overall effect on customer satisfaction.

Club identification → customer satisfaction

The results indicate that the extent to which season ticket holders identify with their club positively influences the degree of customer satisfaction they experience with the season ticket service. That is, highly identified season ticket holders will experience more satisfaction than season ticket holders low in identification. Furthermore, the results indicate that club identification influences customer satisfaction irrespective of season ticket perceived performance and disconfirmation.

There is very little research (i.e., Madrigal, 1995) that specifically addresses the relationship between sport-specific group identification and customer satisfaction. However, there is considerable literature supporting some sort of relationship between the two constructs. The results confirming a direct relationship between club identification and customer satisfaction are in accord with pieces of this literature.

Previous research indicating the possibility of a direct relationship between club identification and customer satisfaction is of two types. First, there is the research that demonstrates relationships between club identification and a selection of constructs typically believed to be outcomes of customer satisfaction such as repeat purchase intention (Fisher & Wakefield, 1998; Wakefield, 1995; Wann & Branscombe, 1993). Although research of this nature does not actually include customer satisfaction as a specific variable of interest it is probable that customer satisfaction mediates the relationships supported in these studies.

The second type of research providing a degree of support for a direct relationship between club identification and customer satisfaction includes studies that demonstrate a sport-specific identification effect on spectator emotion (Wann et al., 1994) and spectator enjoyment (Wann & Schrader, 1997). In these studies customer emotion and enjoyment share some similarity with customer satisfaction.

The results supporting a direct relationship between club identification and customer satisfaction are also in accord with social identity theory. Social identity theory maintains that individuals are motivated to maintain a positive identity (Abrams & Hogg, 1988; Brown & Starkey, 2000; Turner, 1975). The results of the present research reveal that in the case of sport spectator satisfaction certain individuals may also be

motivated to be satisfied with the season ticket. Highly identified spectators are motivated to highly regard the season ticket, a symbolic representation of the club, as it is also representative of the individual, playing a role in their identity.

Club identification → perceived performance (on-court and off-court)
The results support an indirect relationship between club identification and customer satisfaction mediated by perceived performance. The result is the same for both the on-court and off-court dimensions of the season ticket service.

The results indicate that the extent to which season ticket holders identify with their club positively influences the way they perceive the club's on-court and off-court performance. That is, highly identified season ticket holders will evaluate performance more favourably than will season ticket holders low in identification.

There is considerable theoretical and empirical support for a direct relationship between club identification and on-court perceived performance. Dietz-Uhler and Murrell (1999) and also Wann and Dolan (1994b) found sport-specific group identification to influence spectator perceptions of team performance. That is, higher levels of sport-specific group identification contributed to more positive evaluations of playing performance. The results were found for evaluations of seasonal performance as well as for individual game performance. The results of this thesis are in accord with Dietz-Uhler and Murrell (1999) and Wann and Dolan (1994b).

The results of this thesis are also in accord with social identity theory in general. Social identity theory stipulates that individuals will evaluate their ingroup favourably (Hogg & Terry, 2000; Hogg et al., 1995; Turner, 1975, 1985). The club is part of the identified season ticket holder's ingroup. Furthermore, the season ticket, including its dimension of on-court performance is a symbolic representation of the club. A positive evaluation of on-court performance, is a positive evaluation of the club, which in turn represents a positive evaluation of self and a means by which to maintain a positive identity.

There is considerably less support for a direct relationship between club identification and off-court perceived performance, than for a direct relationship between club identification and on-court perceived performance. This is due to the dearth of research

addressing the relationship between sport-specific group identification and spectator sport service peripherals. Similar to findings on the relationship between club identification and customer satisfaction though, Fisher and Wakefield (1998), Wakefield (1995) and Wann and Branscombe (1993) provide partial support for this relationship. That is, perceived performance as well as customer satisfaction could have mediated the relationships detected in their studies between sport-specific group identification and the various support behaviours such as repeat purchase intention.

Substantially more theoretical support, as opposed to empirical support, exists for the relationship between club identification and off-court perceived performance. This support stems from social identity theory. Similar to the on-court dimension of season ticket performance, the off-court dimension can also be conceptualised as a symbolic representation of the club and therefore the identified spectator. In accord with social identity theory, season ticket holders who identify with the club will be motivated to evaluate favourably the club's off-court performance.

Club identification ➔ disconfirmation (on-court and off-court)

The results do not support an indirect relationship between club identification and customer satisfaction mediated by disconfirmation. This relationship was also not supported by the analysis of the Expectations Model. The results are the same for both the on-court and off-court dimensions of the season ticket service.

The relationship between club identification and disconfirmation has received minimal attention by researchers. Only two studies (Bhattacharya et al., 1995; Ferreira, 1996) addressing this nexus were located. Bhattacharya et al. (1995) uncovered a relationship between member identification with an art museum and disconfirmation. However, their study was correlational in nature and thus provided only partial support for the relationships proposed in this thesis. Ferreira (1996) used correlation analysis and regression analysis to detect a relationship between member identification with country clubs and disconfirmation. His research pointed to the ambiguity of the directionality of the relationship, as he acknowledged that the relationship could be bi-directional. Therefore, additional research to confirm the exact nature of the relationship between group identification and disconfirmation is required.

The results indicate that the extent to which season ticket holders identify with their club does not influence the extent to which their expectations of season ticket performance are disconfirmed. Highly identified spectators are no more likely than spectators low in club identification to believe the season ticket service performed better or worse than expected. A possible explanation for the results is the expertise levels of the season ticket holders of the research sample. Mullin (1985) claimed sport customers often consider themselves experts. Of the season ticket holders, 92.4 percent had held a ticket the previous season. In general, the sample was familiar with what type of on-court and off-court service their season ticket could provide.

Another explanation for the results not supporting a direct relationship between club identification and disconfirmation is the presence of indirect relationships between club identification and disconfirmation mediated by perceived performance. This means the results are artefacts of the effect of club identification on perceived performance. It is possible that these results arose from the degree of correlation among the disconfirmation and perceived performance constructs (see Appendix M). Tse and Wilton (1988) found similar levels of collinearity between perceived performance and disconfirmation in their study of customer satisfaction determinants.

Collinearity among independent variables can be problematic in structural modelling. A possible solution to high degrees of collinearity is the removal of one of the variables for which the high correlation exists (Kline, 1998). However, the importance of both the disconfirmation and perceived performance constructs to customer satisfaction is evident from the extent to which they both contribute to customer satisfaction (see Table 7.10 in Chapter 7). Furthermore, there is considerable theoretical support for maintaining each of these variables in a model of customer satisfaction determinants.

8.3.2.2 What is the relationship between the win/lose phenomenon and customer satisfaction?

The results support an indirect relationship between winning and customer satisfaction mediated by several other determinants. However, the results do not support a direct relationship between winning and satisfaction.

Win/lose → club identification

The results support an indirect relationship between winning and customer satisfaction mediated by club identification. The results indicate that the winning success of a club positively influences the extent to which season ticket holders identify with a club. Season ticket holders of a seasonally successful club will identify more strongly with their club than will season ticket holders of a seasonally unsuccessful club.

The results are in accord with several studies depicting winning as an important determinant of sport-specific group identification (Branscombe & Wann, 1991; Fisher & Wakefield, 1998; Wann, 1996; Wann et al., 1994; Wann et al., 1996). These studies measured winning in a variety of ways, including winning percentages (Branscombe & Wann, 1991) as measured in this thesis.

The results are also in accord with social identity theory. Social identity theorists such as Abrams and Hogg (1988), Brown and Starkey (2000) and Turner (1975) have proposed that individuals are motivated to maintain and protect a positive identity. Identifying with a successful group, such as a winning sport club, helps individuals achieve this objective. Individuals have a greater opportunity to achieve a positive identity by identifying with a successful sport club than with an unsuccessful one.

Win/lose → perceived performance (on-court and off-court)

The results support an indirect relationship between winning and customer satisfaction mediated by perceived performance. The result is the same for both the on-court and the off-court dimensions of the season ticket service.

The results indicate that the winning success of a club positively influences season ticket holder perceptions of performance. Season ticket holders of a seasonally successful club will evaluate performance more favourably than will season ticket holders of a seasonally unsuccessful club.

The results supporting a relationship between winning and on-court perceived performance are in accord with the literature (Dietz-Uhler & Murrell, 1999; Hirt et al., 1992; Lapidus & Schibrowsky, 1996). The study with the most similar results to this thesis is by Hirt et al. (1992). Even though their study focused on the game-specific

context of winning, not winning in a seasonal context, they identified that perceptions of on-court performance were most positive when the team won.

The relationship between winning and on-court perceived performance is intuitive. Playing performance obviously contributes to whether a club wins or loses its games and seasons. Therefore, it would be unusual for a season ticket holder's perceptions of on-court performance not to be coloured by the club's winning success.

Although not acknowledged in the literature, the influence of winning on perceptions of on-court performance can be explained with reference to halo effects. Lapidus and Schibrowsky (1996) used halo effects to explain satisfaction ratings with college basketball events and a variety of peripheral service aspects related to the events. In the context of this thesis, winning has the propensity to generate a halo effect and thus influence season ticket holder evaluations of performance.

There is considerably less support in the literature for a relationship between winning and off-court perceived performance than for the relationship between winning and on-court perceived performance. However, the results are in accord with Lapidus and Schibrowsky's (1996) work on halo effects and spectator satisfaction.

Lapidus and Schibrowsky (1996) did not investigate winning in their study. However, they did investigate a related construct, the quality of game performance. They found that the quality of a college basketball team's playing performance affected spectator satisfaction with an assortment of off-court service aspects, as well as with the event itself. They described the results of their study in terms of a halo effect.

Win/lose ➔ disconfirmation (on-court and off-court)

The results support an indirect relationship between winning and customer satisfaction mediated by disconfirmation. The result is the same for both the on-court and off-court dimensions of the season ticket service.

The results indicate that the winning success of a club positively influences the extent to which season ticket holder expectations of performance are disconfirmed. Season ticket holders of a seasonally successful club are more likely to believe the season ticket

service performs better than expected than are season ticket holders of a seasonally unsuccessful club.

Unlike the relationship between winning and perceived performance, the relationship between winning and disconfirmation has not previously been subjected to empirical study. However, similar to the relationship between winning and perceived performance, this relationship can be explained by halo effects. It is plausible that a club's seasonal winning success has the propensity to flavour season ticket holder evaluations of whether they received more or less than expected. The results of this study are therefore in accord with the work of Lapidus and Schibrowsky (1996) that supports the presence of halo effects in spectator evaluations of sport events.

Win/lose → customer satisfaction

The results do not support a direct relationship between winning and customer satisfaction. This relationship was not supported by the analysis of the Expectations Model either.

The lack of support for a direct relationship between winning and customer satisfaction combined with the support for an indirect relationship indicates the complexity of the way in which winning influences customer satisfaction. Unlike the relationship between winning and perceived performance and the relationship between winning and disconfirmation, a winning induced halo effect on satisfaction does not exist.

The results of this study indicate that several other variables, in combination with winning, contribute to customer satisfaction. That is, winning only influences customer satisfaction with the season ticket service through its influence on other variables. Winning is not sufficient in itself to influence the satisfaction of season ticket holders.

The nature of the relationship between winning and customer satisfaction is one of the more significant results of this study. A winning team is often posited as an important determinant of sport consumer behaviour. For example, a winning team has been considered necessary for the positive consumer behaviour of game attendance (Borland, 1987; Borland & Lye, 1992; Branvold et al., 1997; Cairns et al., 1986; Greenstein & Marcum, 1981; Knowles et al., 1992; Wann & Branscombe, 1990; Welch, 1994;

Whitney, 1988). These results confirm that sport clubs do have a degree of control over the satisfaction of their customers irrespective of whether the team wins or loses. The particularly important managerial implications of these results are discussed in Section 8.4.2.

8.3.2.3 What is the relationship between expectations and customer satisfaction?

The superior Non-Expectations Model did not depict the relationship between expectations and customer satisfaction. Therefore, results pertaining to this relationship are not discussed in the current section. However, the results were explored previously in the discussion of the superior research model in Section 8.3.1.

In summary, the results indicate that the relationship between expectations and customer satisfaction with the season ticket service is indirect and only mediated by perceived performance. The results do not support a relationship between expectations and customer satisfaction mediated by disconfirmation. Overall, the results indicate that the influence of customer expectations on customer satisfaction is insubstantial for both the on-court and off-court dimensions of the season ticket service.

8.3.2.4 What is the relationship between perceived performance and customer satisfaction?

The results support an indirect relationship between perceived performance and customer satisfaction mediated by disconfirmation. However, the results do not support a direct relationship between perceived performance and customer satisfaction. These findings apply to both the on-court and off-court dimensions of the season ticket service.

Perceived performance → disconfirmation (on-court and off-court)
The results indicate that season ticket holder perceptions of performance positively influence the extent to which season ticket holder expectations of performance are disconfirmed. Season ticket holders who evaluate performance favourably are more

likely to believe the season ticket performs better than expected than are season ticket holders who evaluate performance less favourably.

The results are in accord with the disconfirmation of expectations theory of customer satisfaction. Furthermore, the results are supported by many pieces of research examining the determinants of customer satisfaction for a wide diversity of products (Churchill & Surprenant, 1982; Jayanti & Jackson, 1991; Patterson, 1993b; Spreng et al., 1996; Spreng & Mackoy, 1996) and even for different product dimensions (Shaffer & Sherrell, 1997).

Perceived performance → customer satisfaction (on-court and off-court)
The results did not support a direct relationship between perceived performance and customer satisfaction. This relationship was also not supported by the analysis of the Expectations Model. The results are the same for both the on-court and off-court dimensions of the season ticket service.

The results indicate that perceptions of performance do not directly influence customer satisfaction with the season ticket. The results are only partly in accord with the literature. The original DEM does not support a direct effect of perceived performance on customer satisfaction. However, more recent applications as well as modifications of the DEM do support a direct perceived performance effect (Churchill & Surprenant, 1982; Jayanti & Jackson, 1991; Patterson, 1993b; Shaffer & Sherrell, 1997; Spreng & Olshavsky, 1993).

A possible explanation for the failure of the results to support the relationships as originally proposed is the extent of the correlation between the disconfirmation and perceived performance variables (see Appendix M). The issue of collinearity in structural modelling was described earlier in this section in the discussion of the relationship between club identification and disconfirmation. Collinearity of the perceived performance and disconfirmation variables indicates that they were perhaps measuring the same construct. Thus the decision to retain the disconfirmation → customer satisfaction relationship over the perceived performance → customer satisfaction relationship could almost have been arbitrary had it not been for the theoretical support for this choice.

8.3.2.5 What is the relationship between disconfirmation and customer satisfaction?

The results support a direct relationship between disconfirmation and customer satisfaction. The result is the same for both the on-court and off-court dimensions of the season ticket service. No indirect relationship between the variables was proposed.

Disconfirmation → customer satisfaction (on-court and off-court)
The results indicate that the extent to which season ticket holder expectations of performance are positively disconfirmed positively influences customer satisfaction with the season ticket service. That is, season ticket holders who believe the season ticket performs better than expected will experience more satisfaction than season ticket holders who believe the season ticket performs worse than expected.

The results are in accord with the disconfirmation of expectations theory of customer satisfaction, which historically posits disconfirmation as the key determinant of satisfaction. Similar to the relationship between perceived performance and disconfirmation, the results are also supported by many recent applications of the DEM in both its original and modified states, across a diversity of products (Bearden & Teel, 1983; Jayanti & Jackson, 1991; Oliver, 1980a, 1980b; Oliver & Burke, 1999; Swan & Trawick, 1981).

The results are also in accord with Madrigal's (1995) study of spectator satisfaction in so far that a relationship between disconfirmation and customer satisfaction was supported. However, Madrigal was concerned with an indirect relationship between the variables, not a direct relationship.

Customer satisfaction → repeat purchase intention
The results support a direct relationship between customer satisfaction and repeat purchase intention. No indirect relationship between the variables was proposed. The results indicate that the extent to which season ticket holders are satisfied with the season ticket service positively influences their intention to purchase another season ticket. That is, season ticket holders experiencing high levels of satisfaction are more likely to purchase another season ticket than are season ticket holders experiencing low levels of satisfaction.

The results are in accord with several studies which investigated the relationship between customer satisfaction and repeat purchase intention for a diversity of non-sport products (Gotlieb et al., 1994; LaBarbera & Mazursky, 1983; Mittal et al., 1998; Mooradian & Olver, 1997; Patterson et al., 1997). Furthermore, the results are also in accord with Wakefield and Blodgett (1994) and Wakefield et al. (1996) who investigated the relationship in the context of sport spectators.

Wakefield and Blodgett (1994) found that satisfaction with the sport servicescape influenced spectator repatronage intentions. Wakefield et al. (1996) identified that spectator pleasure, an emotional response sharing some similarity with customer satisfaction, influenced spectator repatronage intentions. The results of this thesis, combined with the results of Wakefield and Blodgett (1994) and Wakefield et al. (1996), adhere to Madrigal's (1995) belief that "a satisfactory experience resulting from attending sporting events would appear to be an important predictor of a fan's likelihood of attending future events" (p. 206).

8.3.2.6 Summary of customer satisfaction determinants

In summary, most of the relationships depicted by the Non-Expectations Model were supported by the results of the present research. The relationships that were not supported by the results were also not supported by the analysis of the Expectations Model.

Many of the relationships depicted by the superior Non-Expectations Model had received minimal or no prior empirical testing. Specifically, these relationships were those that included club identification and the win/lose phenomenon. The results strongly support the inclusion of these constructs in the study of customer satisfaction with the season ticket service of professional sport clubs. In doing so, the results support the notion that customer satisfaction is determined by many factors, including several not depicted in the DEM.

The results attest to the value of considering customer satisfaction determinants unique to the product under study. The inclusion of winning for example provided significant

insight into the process of season ticket satisfaction but would have little utility in the study of customer satisfaction determinants for most products, some exceptions perhaps being stockmarket and gambling services. The results also attest to the value of considering the variability of the customer satisfaction process. The process of satisfaction depicted by the DEM was not supported by this thesis. For example, relationships between expectations and disconfirmation were not found to be significant.

One final consideration of this summary is to mention the way in which customer satisfaction with the season ticket service is determined by both the on-court and off-court dimensions of the service. Furthermore, the same relationships were found to be significant for both dimensions of the season ticket service. The process by which season ticket holder satisfaction arises from the on-court dimension of the service mirrors the process by which it arises from the off-court dimension. This result is discussed further in the next section, Section 8.3.3.

8.3.3 Customer satisfaction arising from on-court and off-court service dimensions

A central premise of this thesis is that both the core and peripheral dimensions of the season ticket service contribute to season ticket holder satisfaction. Hence the on-court as well as the off-court dimensions of expectations, perceptions of performance and disconfirmation were explored in this thesis. This section discusses the extent to which each of the on-court and off-court dimensions of perceived performance and disconfirmation, as modelled by the Non-Expectations Model, contributes to satisfaction with the season ticket service.

The total effects of the various determinants on customer satisfaction were displayed in Table 7.10 in the previous chapter. The total effect of on-court perceived performance (+ .139) on customer satisfaction was smaller than the total effect of off-court perceived performance (+ .286). Similarly, the total effect of on-court disconfirmation (+ .195) on customer satisfaction was less than the total effect of off-court disconfirmation (+ .477).

The results indicate that the off-court dimension of the season ticket service has a greater determining effect on season ticket holder satisfaction than does the on-court dimension. That is, the peripheral service aspects of the season ticket service (i.e., those pertaining to club management, opportunities for season ticket holder involvement, entertainment and seating and ticketing) outperform the core service aspect in contributing to the satisfaction of season ticket holders.

However, this result is confounded when winning, which is inextricably linked to the on-court perceived performance of a sport club, is accounted for (+ .345). In this situation the total effects indicate that the on-court dimension contributes more to customer satisfaction than does the off-court dimension.

The results discussed in this section are in line with the literature. First, the results demonstrating different dimension-based effects (i.e., on-court and off-court) are in accord with customer satisfaction researchers Shaffer and Sherrell (1997). Shaffer and Sherrell detected differences in the strengths of perceived performance and disconfirmation effects based on the dimension of the service investigated.

When the effect of winning is excluded, the results are also in line with services marketing theory, which typically posits the peripheral service dimension as having the greatest influence on customer satisfaction (Iacobucci et al., 1994a, 1994b; Jones & Sasser, 1995; Walker, 1995). Furthermore, the results are in accord with sport marketing literature. Tomlinson et al. (1995) and Kasky (1994) identified that the peripheral service component of spectator sport was more important to the spectator than the core component in terms of game attendance and perceived value respectively.

Iacobucci et al. (1994b) proposed three reasons why service peripherals are likely to contribute more to customer satisfaction than the service core. One of their reasons was that the core product offering is difficult to evaluate. However, this is not the case with the spectator sport service. According to Mullin (1985), many spectators consider themselves experts. Another reason proposed by Iacobucci et al. (1994b) is that there is little variability in the core product among competitors. However, this reason is also not applicable to the professional spectator sport service where there is considerable

variability in the core product. Indeed the variability in the game is in part due to competitors, as each club's competitors assist in producing the core service.

The third reason proposed by Iacobucci et al. (1994b) was that customers believe a high quality core offering is almost guaranteed. However, it can be argued that the great variability in a game of professional sport means that professional sport clubs cannot consistently provide a quality core service. Therefore, season ticket holders would not necessarily believe a good game was guaranteed. However, the items used in this thesis to depict the core dimension of the season ticket service are not aspects of play which are out of the ordinary or difficult to execute. Furthermore, these items exclude winning.

In brief, Iacobucci et al. (1994b) offered some explanation of the dominant effect of service peripherals on customer satisfaction with the season ticket service. That is, it is possible that season ticket holders expect a quality on-court performance, as operationalised in this thesis, to be almost guaranteed.

Another and more plausible explanation for the results discussed in this section is that, like sport marketers and managers, season ticket holders recognise the uncontrollability of the on-court performance of their club. The notion of controllability is central to attribution theory and its relevance to a greater understanding of customer satisfaction formation.

8.3.3.1 Attribution theory and different effects of on-court and off-court dimensions

Attributions were identified in Chapter 2 as one of the many possible determinants of customer satisfaction. Attribution theorists attempt to understand the factors involved in perceived causation (Harvey & Weary, 1984). For a review of attribution research in the context of consumer behaviour see Folkes (1988).

Attribution theory helps explain to what consumers attribute consumption outcomes. In the study of customer satisfaction, attribution theory focuses on the causes of negative and positive consumption outcomes, as perceived by the customer (Oliver, 1997).

Attribution theory maintains that when failures are viewed as controllable, blame is targeted at whoever or whatever had control (Oliver, 1997).

Professional sport clubs have substantial control over the peripheral aspects of the sport service (Mullin, 1985). However, these organisations have minimal control over the core service. If season ticket holders are cognisant of the different control clubs hold over the on-court and off-court dimensions of the season ticket service then attribution theory helps explain why the peripheral service dimension plays the greatest role in determining customer satisfaction. That is, the club should be able to provide a quality off-court service because it has control over service peripherals. However, the club is much less able to provide a quality on-court performance when the club's competitors are also responsible for its quality.

In summary, customer satisfaction with the season ticket service of professional sport clubs is influenced more by the off-court dimension of the service than by the on-court dimension. A possible explanation for this result pertains to spectator perceptions of the different degree of control the sport club has over the season ticket dimensions.

8.4 Managerial Implications

Important managerial implications arise from the findings of this thesis. The most significant implication is that the thesis highlights variables which have not previously been tested empirically that influence the customer satisfaction of sport spectators. This provides management with greater insight into prospective strategy development to ensure spectators experience high levels of customer satisfaction.

8.4.1 Customer satisfaction

To further understand the nature of customer satisfaction, its descriptive statistics were calculated (see Table 6.12 in Chapter 6). Reference to the descriptive statistics reflects that on average, season ticket holders were satisfied with their season ticket (mean = 5.670 and SD = 1.293).

Although the results indicate respondents were reasonably satisfied with the season ticket service, they were not *completely* satisfied. Jones and Sasser (1995) emphasised that in the main "complete customer satisfaction is the key to securing customer loyalty and generating superior long-term financial performance" (p. 89).

Additionally, the reported satisfaction level represents only an average of customer satisfaction ratings. The actual range of the satisfaction ratings is from 1.05 – 7.00. Furthermore, the standard deviation (1.293) also represents a substantial degree of differentiation from the mean. Therefore, even though in the main season ticket holders were reasonably satisfied with the season ticket service, some were not. Indeed further descriptive analysis identified that 62 (i.e., 10.7%) respondents reported being dissatisfied to some extent with their season ticket experience.

The less than optimal average satisfaction level and the proportion of dissatisfied season ticket holders have considerable implications for professional sport clubs. Customer satisfaction levels should be higher if the clubs are to reap as many of the positive business outcomes as possible associated with customer satisfaction (e.g., repeat purchasing, commitment, profitability).

Management needs to identify customers who are not completely satisfied in order to identify the cause of the less than optimal satisfaction or dissatisfaction and remedy it. Management can do this through complaint inducement mechanisms. Two strategies to encourage customer complaints described by Oliver (1997) and suitable for professional sport clubs are: (a) free to the customer communication channels such as toll free numbers and postage-paid feedback cards and (b) contacts instigated by the organisation, generally by telephone, asking customers if their season ticket service has been satisfactory.

Due to the longitudinal nature of the season ticket service, strategies to solicit complaints should be implemented periodically throughout the season as well as after the season has finished. This enables the clubs to identify service problems and amend service delivery as quickly as possible. Boshoff (1999) and Tax, Brown and Chandrashekaran (1998) emphasised the need for speedy service recovery.

The identification and successful handling of complaints has positive implications for the professional sport club and the satisfaction of season ticket holders. The work of Bitner, Booms and Tetrault (1990), for example, indicates that a well-handled complaint can alter the season ticket holder's evaluation of the product and the club in a positive way. In other words, successful complaint resolution can result in what Lapidus and Pinkerton (1995) referred to as *second-order satisfaction*. The customer who was initially dissatisfied with some aspect of the season ticket service can experience satisfaction with the remainder of the service.

8.4.2 Win/lose phenomenon

The data analysis confirmed winning as an important determinant of customer satisfaction. However, winning only influences customer satisfaction indirectly via other constructs which clubs have varying degrees of control over (i.e., club identification, perceived performance and disconfirmation).

Professional sport clubs have little ability to control the extent to which their team wins (Mullin, 1985). What control they do have is restricted to recruiting the best possible players and coaching staff. However, financial constraints will often stipulate that the club is unable to afford the most desired players and coaches. Furthermore, a number of mechanisms such as salary caps typically limit the one club from recruiting too many star players, as these players are generally the most expensive.

While sport clubs have minimal control over the winning success of their teams, the results of this thesis indicate they still have the capacity to influence the satisfaction of their customers. Sport clubs can minimise the effect of low winning percentages by increasing the extent to which their season ticket holders and other supporters identify with the club. This in turn will contribute to customers evaluating both the on-court and off-court performance of the club more favourably, which will contribute to greater levels of positive disconfirmation and therefore satisfaction.

8.4.3 Club identification

The data analysis confirmed club identification as an important determinant of customer satisfaction. Indeed club identification influences customer satisfaction to a greater extent than any other determinant investigated in the empirical research.

The managerial implications arising from this result are connected to the extent to which club identification influences customer satisfaction as well as the means by which it does so. Not only is there a direct relationship between club identification and customer satisfaction, there is also an indirect relationship. Thus high levels of club identification can be used advantageously to counteract poor winning percentages by influencing on-court and off-court perceived performance, on-court and off-court disconfirmation and, therefore, customer satisfaction.

Professional sport clubs have some control over the levels of club identification their customers experience. Management needs to implement strategies designed to increase club identification levels. Sutton et al. (1997, p. 20-21) suggested several strategies for increasing sport-specific group identification. Examples of these strategies relevant to this thesis include:

1. increasing team/player accessibility to the public (e.g., advertising and exposure relating to player appearances, autograph signing sessions and grassroots events, such as fan festivals, pep rallies and youth clinics);
2. increasing community involvement activities (e.g., charity work, social cause projects, involvement with literacy or reading programs at schools, drug education programs and programs designed to develop leadership abilities in youth);
3. reinforcing the club's history and tradition (e.g., games and events featuring retired team stars, creation of halls of fame, contests to select the all-time best team); and
4. creating opportunities for group affiliation and participation (e.g., fan clubs and newsletters, organising trips to away games).

Fisher and Wakefield (1998) studied determinants of sport-specific group identification, specifically domain involvement, perceived group performance and group member attractiveness. They also reported a number of ways to improve sport-specific group

identification. In addition to the strategies suggested by Sutton et al. (1997) and relevant to this thesis these activities include:

1. emphasising and communicating the skills, abilities or status of individual members (particularly when the team as a whole is performing poorly); and
2. creating (or acquiring) and promoting the popularity of a few superstars or celebrity fans (when the team is performing badly, superstars and celebrity fans make the club more attractive and therefore more worthy of identification).

Means to enhance sport-specific group identification levels are almost infinite, restricted only by management's creativity and knowledge of its customers. In addition to activities described in the literature, other activities that management should consider in order to increase the team identification, fan identification and consequently club identification levels of season ticket holders include:

1. providing season ticket holders with membership cards;
2. referring to season ticket holders as members instead of customers, season ticket holders, or both;
3. hosting social functions to reward season ticket holders and to show appreciation for their support;
4. promoting special features, distinctive features, or both about the club, including such things as its history, mission and positive fan characteristics;
5. sending season ticket holders a birthday card signed by their favourite player;
6. including season ticket holder profiles in their newsletters;
7. seeking season ticket holder feedback on club operations;
8. holding photograph sessions where season ticket holders can have photographs taken with the team or their favourite player(s);
9. providing season ticket holders with profiles of each team member and even coaches so that supporters feel that they really *know* their club; and
10. designing a range of licensed goods that features the club's name and logo, ensuring that product lines appeal to each of the various subgroups within the club's target market (e.g., both males and females, adults and children).

The strategies listed thus far should enhance a variety of sport-specific group identifications including club identification, team identification and fan identification.

Some strategies, such as sending season ticket holders a birthday card signed by their favourite player, should also enhance supporters' identification with individual players.

At this point it is important to note that under some circumstances there is the possibility that clubs may not always be well served by enhancing certain types of sport-specific group identification. This is particularly the case with team identification and individual player identification when the enhancement of club identification has been neglected. Clubs need to consider the possible negative consequences of supporters who identify more strongly with individual players and the team than they do with the actual club. Today's sport stars are often highly mobile, moving from one professional club to the next. High player mobility in the current professional sport environment results in fluid teams and therefore shifting identification targets. Clubs risk losing supporters if their strategies for sport-specific group identification enhancement overly focus on team and individual player identification.

So, whilst team identification and most probably identification with individual players contribute to club identification, clubs need to balance the types of their supporters' identifications. Clubs should still promote supporter identification with individual players and the team but this should be balanced against increasing identification with the club at large.

In summary, irrespective of the various types of sport-specific group identifications and the implications of the balance of these identifications, sport clubs need to emphasise the *we* factor (Sutton et al., 1997). Clubs need to communicate the fact that season ticket holders are just as much part of the club as are the players. Furthermore, activities designed to nurture and maintain club identification, including team identification and fan identification, must be conducted during both the playing season and the off-season. Social identifications are dynamic (Hogg et al., 1995). Club identification may decline during the off-season and thus reduce associated club supportive behaviours necessary to the success of the sport club such as repeat purchasing.

8.4.4 Expectations

The data analysis did not confirm expectations as an important determinant of customer satisfaction. The Non-Expectations Model and not the Expectations Model was selected as the superior representation of the customer satisfaction process.

The inferiority of the Expectations Model accompanied by insubstantial total effects of both the on-court and off-court dimensions of expectations indicates that expectations (i.e., pre-consumption expectations) do not play as great a role in the determination of customer satisfaction with the sport spectator service as they do for other services. This may be because season ticket expectations held prior to the season commencing were not the same expectations held towards the end of the season.

Despite expectations having little influence on customer satisfaction in the present research, it is important to remember that disconfirmation does arise from a comparison of expectations to perceived performance. Even though this study provides evidence for season ticket holders not comparing perceived performance to pre-season expectations, the use of some form of expectations is inherent in any measure of disconfirmation. That is, disconfirmation may not have arisen from pre-season expectations but from some other revised or updated set of expectations as discussed by Oliver (1997). Therefore, the results do not completely discount expectations as a customer satisfaction determinant as they are captured to some extent by the disconfirmation construct.

The implication for professional sport clubs arising from these results is that it is not sufficient to measure only what spectators want prior to or just at the beginning of a sport season. Expectations do change (Oliver, 1997; Parasuraman et al., 1991; Walker, 1995). Therefore, sport clubs should measure expectations at several points of time across a sport season. Periodical expectations measurement will provide management with a more accurate representation of what customers want. This in turn will present management with an enhanced opportunity to respond to the changing desires of customers and consequently provide them with an improved ability to satisfy customers.

8.4.5 Perceived performance

The data analysis confirmed perceived performance as an important determinant of customer satisfaction. The relationship between perceived performance and customer satisfaction was mediated by disconfirmation. Season ticket holders must evaluate performance as high as possible for high levels of positive disconfirmation and therefore high levels of customer satisfaction to eventuate.

The managerial implication arising from this result is that clubs need not only perform at the highest possible level but they also need to promote good performances and downplay poor performances. As previously noted, clubs have little control over on-court performance. However, clubs have considerable control over off-court performance.

The limited strategies available to professional sport clubs to improve winning and therefore on-court performance were mentioned previously in Section 8.4.2. Considerably more strategies are available to management to improve off-court performance. A selection of strategies relating to the dimensions of Professional Management, Involvement, Entertainment, and Seating and Ticketing include:

1. identifying and meeting staff training requirements;
2. recruiting the right staff;
3. conducting necessary market research;
4. surveying season ticket holders;
5. printing regular newsletters;
6. maintaining an up to date internet site;
7. developing a program of social functions for season ticket holders;
8. developing a seasonal entertainment program of diverse, high quality acts;
9. giving season ticket holders priority over ticketing and seating purchases; and
10. introducing a loyalty program.

In addition to having considerable control over off-court performance, clubs also have a degree of control over how season ticket holders *perceive* performance. Hoffman and Bateson (1997) noted that service perception is highly variable and that it is influenced

by many of the determinants that dictate expectations, which are in turn largely influenced by the service organisation.

Strategies to improve season ticket holder perceptions of on-court performance and off-court performance can be game-specific or otherwise. These strategies could include:

1. game commentary emphasising the difficulty of certain skills executed, personal records expected to be broken, and the teamwork being demonstrated; and
2. a variety of communication media (i.e., newsletters, the internet, email) detailing the club's achievements such as the: (a) signing of new players; (b) development of a new database enabling better record keeping and season ticket holder servicing; and (c) signing of important sponsors.

In brief, customers need to be reminded of club achievements. Positive aspects of club performance need to be *talked up* whereas less favourable aspects of club performance need to be *talked down*.

8.4.6 Disconfirmation

The data analysis confirmed disconfirmation as an important determinant of customer satisfaction. The results demonstrated that perceived performance and winning both influence season ticket holder disconfirmation. While winning is not controllable, perceived performance is to a certain degree. Therefore, the managerial implications of these results relate to those listed for perceived performance. Management needs to focus on improving actual performance as well as influencing the way season ticket holders perceive performance. Again, the strategy of informing people about the positive things the club does and downplaying the negatives will help achieve higher levels of positive disconfirmation.

Additional management implications relate to the expectations captured by the disconfirmation construct. Management needs to be aware of the extent and type of season ticket holder expectations. Management must also be aware of the role it plays in shaping customer expectations as many determinants of expectations are under the direct control of the organisation (Hoffman & Bateson, 1997).

Expectations therefore need to be *managed* (Clow et al., 1997; Kurtz & Clow, 1992-1993). In the main, expectations are managed via communication with existing as well as potential customers. Communications must centre on what the organisation can realistically provide rather than focus on what it would like to provide. In other words, management should not overpromise. Specific means of communication suitable for expectations management in professional sport clubs include:

1. newsletters and direct mail to pre-existing and current season ticket holders as well as to casual ticket purchasers;
2. the internet; and
3. print and electronic advertising.

The strategy of expectations management via clear and accurate communication of what sport clubs can realistically deliver is relevant to this thesis. In combination with improvements in actual service performance, this strategy will enable sport clubs to better meet and even exceed customer expectations, thus generating higher levels of customer satisfaction.

8.4.7 Repeat purchase intention

The data analysis confirmed repeat purchase intention as an important outcome of customer satisfaction. This result highlighted the importance of satisfying customers in order to attract repeat custom. Professional sport clubs should regularly monitor spectator satisfaction levels and understand those factors that influence customer satisfaction (i.e., winning, club identification, expectations, perceived performance and disconfirmation).

Another managerial implication arising from the results pertains to the dynamic nature of customer satisfaction (Oliver, 1981; Richins & Bloch, 1991; Tse, Nicosia & Wilton, 1990). Professional sport clubs need to take advantage of the relationship between customer satisfaction and repeat purchase intention by promoting the forthcoming season's tickets soon after, or even prior to, the current season finishing. This is because the influence of immediate post-purchase satisfaction is likely to change over

time (Mazursky & Geva, 1989) and could lead to decreased purchase intentions and behaviour.

8.4.8 On-court and off-court dimensions of the season ticket service

The data analysis confirmed that customer satisfaction arises from both the on-court and off-court dimensions of the season ticket service. The degree to which on-court and off-court service dimensions contributed to customer satisfaction was dependent upon whether the win/lose phenomenon was considered as part of the on-court service. Irrespective of which dimension influences customer satisfaction the most, however, the results emphasised the importance of peak performance in both dimensions.

While professional sport clubs cannot control on-court performance, the off-court performance of the organisation can be controlled. Furthermore, sport clubs can influence customer perceptions of both on-court and off-court performance. Strategies to enhance the on-court and off-court service dimensions were described previously in Section 8.4.5 and Section 8.4.6.

8.4.9 Summary of managerial implications

This research highlights the roles that winning, club identification, perceived performance, disconfirmation and to a lesser extent expectations play in the satisfaction and subsequently repeat purchase intentions of season ticket customers of professional sport clubs. Of particular interest were the roles played by the win/lose phenomenon and club identification.

A professional sport club can exert only minimal control over the extent to which its team wins throughout a given season. However, the same club has considerable influence over the extent to which season ticket holders identify with it. Strategies to foster and protect club identification levels are essential given the positive influence they have on several other determinants of customer satisfaction. These strategies are

also essential given that club identification has the largest effect on customer satisfaction of all determinants investigated in this thesis.

In addition to strategies that focus on the club identification of season ticket holders are strategies that address the perceived as well as actual performance of the club. Strategies that influence season ticket holder perceptions of on-court performance are particularly important when actual performance, including winning percentage, is poor. Furthermore, strategies that address improving off-court performance are essential given that it is the dimension of service peripherals over which clubs have the greatest control. Moreover, it is the service peripherals that contribute most to the satisfaction of season ticket holders.

8.5 Contributions of the Thesis

This thesis makes several substantial contributions to the study of customer satisfaction, in particular the study of sport customer satisfaction. Limited research addresses the satisfaction of sport customers, including satisfaction with the spectator sport service. Even less research examines the determinants of this satisfaction. Moreover, no research has addressed the satisfaction of spectators of professional sport clubs. Likewise, no research has addressed satisfaction with the season ticket service. Therefore, there are many gaps in the knowledge of sport customer satisfaction. This thesis addressed several of these gaps by investigating the determinants of customer satisfaction with the season ticket service of professional sport clubs.

The specific contributions of this thesis pertain to the: (a) development of a sport customer satisfaction model; (b) extension and testing of the DEM in a sport context; (c) inclusion of club identification and the win/lose phenomenon as customer satisfaction determinants; (d) consideration of customer satisfaction arising from the core and peripheral dimensions of the season ticket service; and (e) consideration of three distinct types of sport-specific group identification.

8.5.1 Development of a sport customer satisfaction model

Two alternative research models of determinants of customer satisfaction with the season ticket service of professional sport clubs were developed and tested in this thesis. The main contribution of the thesis was the subsequent selection of one of the models as the superior representation of the process of season ticket holder satisfaction. The Non-Expectations Model was chosen as the superior model. The model comprised variables and relationships that had not previously been simultaneously tested.

8.5.2 Extension and test of the DEM in a sport context

This thesis was the first research to utilise the DEM in the context of sport. The alternative research models of this thesis were both grounded in disconfirmation of expectations theory. The selection of the Non-Expectations Model as the superior research model is based on the exclusion of pre-consumption expectations and therefore the DEM in studies of customer satisfaction determinants under certain conditions. These conditions are when: (a) the product under study is longitudinal in nature and (b) a two-stage methodology measuring expectations separately to perceived performance and disconfirmation is employed. Thus the results contribute not only to the emerging field of sport customer satisfaction research but also to the widely established field of customer satisfaction research in general.

8.5.3 Inclusion of club identification and the win/lose phenomenon as customer satisfaction determinants

A key contribution of this study was the inclusion of club identification and the win/lose phenomenon as important determinants of sport spectator satisfaction. With the exception of Madrigal (1995) sport-specific group identification, of which club identification is but one kind, has received minimal attention in the customer satisfaction literature. Furthermore, the win/lose phenomenon has not previously been investigated in the context of sport customer satisfaction.

Specific contributions arising from the inclusion of club identification and the win/lose phenomenon in this thesis include evidence of:

1. the considerable role the win/lose phenomenon plays in customer satisfaction formation for sport spectators including the influence it has on several other customer satisfaction determinants;
2. a winning induced halo effect; and
3. the significant role club identification plays in customer satisfaction formation for sport spectators including its influence on several other customer satisfaction determinants.

The inclusion of club identification as a customer satisfaction determinant made an important contribution to the study of sport customer satisfaction. However, it also made an important contribution to the study of customer satisfaction in general. Club identification is a type of group identification. Fisher and Wakefield (1998) conjectured that group identification has a role to play in customer satisfaction, particularly with powerful brands. This thesis provides empirical support confirming their supposition.

8.5.4 Consideration of customer satisfaction arising from the core and peripheral dimensions of the season ticket service

Another key contribution of this thesis is its consideration of both the core and peripheral components of the season ticket service. With the exception of Oliver and Burke (1999) and Shaffer and Sherrell (1997), very little empirical work has focused on satisfaction arising from different product dimensions. Furthermore, in the context of sport, no research has simultaneously investigated these dimensions and the way in which they influence customer satisfaction. The contributions arising from the inclusion of both the core and peripheral service dimensions include:

1. identification of the need to consider both dimensions of the service in order to better understand the satisfaction of sport customers; and
2. identification of the need to provide high quality off-court service because the service peripherals contribute the most to sport spectator customer satisfaction when the win/lose phenomenon is not accounted for.

8.5.5 Consideration of three distinct types of sport-specific group identification

Prior to the present research sport-specific group identification was conceptualised as a unidimensional construct and typically referred to in terms of fan identification, team identification and spectator identification. These terms were frequently used interchangeably.

In this thesis, team identification and fan identification were conceptualised as two separate but related dimensions of club identification. The final contribution of this thesis relates to its use of these three types of sport-specific group identification. Specifically, the thesis provides theoretical as well as empirical evidence that sport customers can and do identify with a variety of groups within the context of sport. That is, there is more than one type of sport-specific group identification.

8.6 Limitations of the Thesis

A number of limitations of this thesis exist. One limitation of the thesis is the generalisability of the results. The research was conducted among a specific cohort of sport spectators, namely season ticket holders, and for a specific product, namely the season ticket service. It is not known whether customer satisfaction with the spectator sport service will differ for single event ticket holders. Furthermore, the research was conducted among season ticket holders from a single sport, namely basketball. It is unknown whether the findings from this research can be generalised to spectators of other sports. This is because of the heterogeneity of sport consumers (Fullerton & Dodge, 1995; Quick, 2000; Stotlar, 1995) and the unique characteristics of various professional sports (Zhang et al., 1998).

Another limitation of this thesis pertaining to the research sample is that most of the season ticket holders had held a season ticket the previous season. Only 7.6 percent of the respondents were first-time season ticket holders. Different relationships may have been supported and negated by the results if the sample had comprised a greater proportion of first-time season ticket holders.

The final limitation of the research is that, with the exception of customer satisfaction, repeat purchase intention and winning, the measured constructs have undergone minimal prior investigation. The club identification, expectations, perceived performance and disconfirmation scales were each developed and thus tested for the first time in the pilot study. However, as indicated by numerous researchers (e.g., Churchill, 1979; Clark & Watson, 1995; Gerbing & Anderson, 1988; Peter, 1981; Smith & McCarthy, 1995), the development of valid and reliable measures is a lengthy and iterative process typically requiring several stages of data collection, analysis and refinement. Thus further empirical examination and refining of the measures utilised in thesis is recommended.

8.7 Future Research Directions

Suggestions for future research directions arising from this thesis are influenced by the limitations of the research, as well as by the dearth of sport-specific customer satisfaction research in general.

Recognising the limitations of the research, future studies undertaken with different cohorts of season ticket holders would contribute much not only to the understanding of the relationships investigated in this thesis but also to the understanding of differences among season ticket holders. Different season ticket holders to be included in future studies could include those from different sports and different countries, as well as first-time season ticket holders.

The managerial implications provided some interesting diagnostics of the process of customer satisfaction in the context of this thesis. Given the centrality of customer satisfaction to many positive business outcomes for the professional sport club, future research that aims to better understand the nature of sport customer satisfaction would be beneficial. Of particular benefit would be research that addresses the determinants of club identification as it had the largest effect on customer satisfaction. Furthermore, investigation of club identification as an outcome of customer satisfaction would also be helpful. The work of Bhattacharya et al. (1995) and Ferreira (1996), for example,

indicated that club identification can operate as both an outcome and an antecedent of customer satisfaction.

Also of benefit would be the examination of how season ticket holder expectations change over a sport season and the identification of which expectations play the largest role in satisfaction formation. Replication of this study using post-season recollections of expectations would also be useful to determine the best time to measure expectations.

In addition to investigating spectator satisfaction with the season ticket service, the model could be used to investigate satisfaction with specific events. In this context the win/lose phenomenon would relate to the specific game as opposed to the entire season. In a game-specific context the importance of the game could also be accounted for. That is, any differences in the process of satisfaction between relatively unimportant games such as pre-season games and extremely important games such as grand finals could be compared. The importance of the product to the customer (i.e., product involvement) is widely known to influence the customer satisfaction process (Churchill & Surprenant, 1982; Patterson & Spreng, 1998; Shaffer & Sherrell, 1997).

Recognising the general dearth of sport-specific customer satisfaction research, studies that investigate the satisfaction of other customers of professional sport clubs are recommended. These studies could include the satisfaction of sponsors, staff and the media. Although this thesis maintains that season ticket holders are among the most important customers of professional sport clubs, the success of the clubs would not be forthcoming without successful relations with many other customers.

Finally, this research investigated only several potential determinants of customer satisfaction with the season ticket service of professional sport clubs. There are many more customer satisfaction determinants yet to be investigated within the context of sport. These include customer attributions, for example, which provided some insight in this thesis as to why the off-court dimension of the season ticket service had a greater influence on customer satisfaction than did the on-court dimension. An understanding of customer satisfaction determinants is crucial to an improved ability for professional sport clubs to satisfy customers. Therefore, further research is required to identify additional determinants of spectator satisfaction.

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APPENDICES

APPENDIX A – OFF-COURT EXPECTATIONS FACTOR ANALYSIS RESULTS (LOADINGS ACROSS ALL FACTORS)

Items	F1	F2	F3	F4
Maintain a positive image	.807	-.005	-.005	.002
Employ courteous and professional staff	.757	-.005	-.002	-.004
Have clear and accurate scoreboard information	.663	-.009	.005	.004
Promote a family-friendly atmosphere	.477	-.003	-.229	-.002
Be professionally marketed and managed	.474	-.190	.006	.006
Deliver what they promise	.326	-.116	-.006	.261
Provide convenient and secure parking and/or be accessible by public transport	.190	-.188	-.006	.147
Organise social opportunities for fans	-.007	-.836	-.009	-.002
Provide opportunities to meet and mingle with players	-.004	-.800	-.004	.003
Keep me up to date on club matters	.306	-.543	.010	.007
Make me feel like part of the club	.101	-.469	-.010	.201
Provide quality merchandise	.220	-.447	-.210	-.003
Provide quality entertainment	-.004	-.340	-.679	-.002
Provide a variety of entertainment	.003	-.324	-.660	-.010
Create an exciting atmosphere	.237	-.005	-.577	.120
Provide a visually appealing stadium	.307	-.008	-.467	.157
Provide me with one of the best seats in the stadium	.008	-.005	-.009	.706
Give me benefits non-season ticket holders don't get	-.001	-.007	-.005	.592
Give me priority access to play-off tickets	.160	-.007	.004	.565
Maintain a comfortable stadium	.297	.009	-.157	.498
Give long-term season ticket holders better seats than new season ticket holders	-.003	-.007	.139	.461
Allow me to choose my own seat	-.010	.007	-.253	.453
Be fan focused and not sponsor focused	.001	-.286	-.128	.300
% of variance explained	33.40	8.82	7.00	6.07

Note. Items with < .4 communalities excluded from the analysis.

APPENDIX B – CLUB IDENTIFICATION FACTOR ANALYSIS RESULTS (LOADINGS ACROSS BOTH FACTORS)

Items	F1	F2
The (club name) failures feel like my failures	.835	.170
Being a (club name) fan is an important part of who I am	.798	-.008
The (club name) successes feel like my successes	.739	-.126
I almost think of myself as part of the (club name)	.737	-116
It's important for me to feel like part of the (club name)	.619	-.261
I am a (club name) fan	-.007	-.891
I enjoy being a fan of the (club name)	-.004	-.870
Supporting the (club name) is important to me	.220	-.698
One of the things I'd tell others about myself is that I'm a fan of the (club name)	.179	-.620
% of variance explained	59.34	14.23

Note. Items with < .4 communalities excluded from the analysis.

APPENDIX C – PRE-SEASON RESEARCH INSTRUMENT

School of Leisure & Tourism Studies
University of Technology, Sydney

UTS
University of Technology, Sydney

And

The <Club Name>

Basketball Season-Tickets:
A Study of Season-Ticket Holders' Expectations

Please complete your questionnaire by **Friday, 1st October** then return it in the enclosed envelope to:

Linda Van Leeuwen
School of Leisure & Tourism Studies
University of Technology, Sydney
PO Box 222
Lindfield NSW 2070

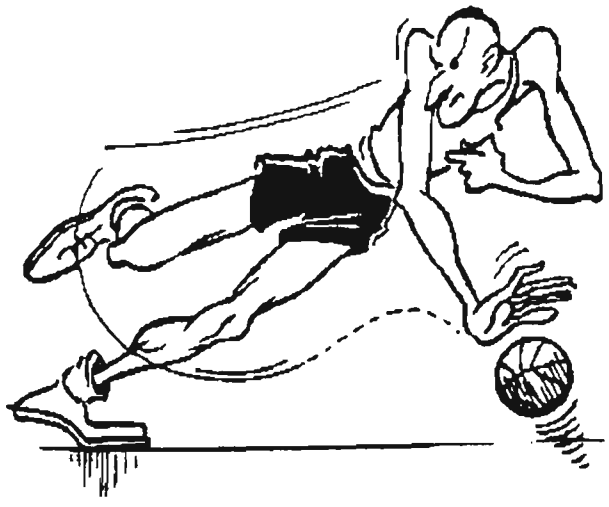
Section One: You and the <Club Name> .....

This section assesses the extent to which you IDENTIFY with the <Club Name>.

1.1 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which you disagree or agree with each statement. Please circle one number for each statement listed (1 = Strongly Disagree and 7 = Strongly Agree).

Identification Item	Strongly Disagree						Strongly Agree
1. One of the things I'd tell others about myself is that I'm a fan of the <Club Name>	1	2	3	4	5	6	7
2. The <Club Name's> successes (will) feel like my successes	1	2	3	4	5	6	7
3. Supporting the <Club Name> is important to me	1	2	3	4	5	6	7
4. Being a <Club Name> fan is an important part of who I am	1	2	3	4	5	6	7
5. I enjoy being a fan of the <Club Name>	1	2	3	4	5	6	7
6. I almost think of myself as part of the <Club Name>	1	2	3	4	5	6	7
7. The <Club Name's> failures (will) feel like my failures	1	2	3	4	5	6	7
8. I am a <Club Name> fan	1	2	3	4	5	6	7
9. It's important for me to feel like part of the <Club Name>	1	2	3	4	5	6	7

Section Two: Importance of Winning .....



This section assesses the extent to which you believe WINNING is important.

2.1 Using the 'Importance' rating scale below, please indicate how important each of these 'End of Season Outcomes' is to YOU. Please circle <u>one</u> number for each outcome (1 = Little Importance and 7 = Extreme Importance).

End of Season Outcome	Little Importance						Extreme Importance
1. The team wins more games during the season than they lose	1	2	3	4	5	6	7
2. The team wins the grand final	1	2	3	4	5	6	7
3. The team beats its arch rival on the ladder	1	2	3	4	5	6	7
4. The team makes the play-offs	1	2	3	4	5	6	7
5. The team does not come last at the end of the season	1	2	3	4	5	6	7
6. The team makes it to the grand final	1	2	3	4	5	6	7

The next question is also about WINNING!

2.2 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which YOU disagree or agree with each statement. Please circle <u>one</u> number for each statement listed (1 = Strongly <u>Dis</u>agree and 7 = Strongly Agree).

Winning Item	Strongly Disagree						Strongly Agree
1. Winning is very important to me	1	2	3	4	5	6	7
2. When it comes to sport, winning is what matters most	1	2	3	4	5	6	7
3. I don't mind losing	1	2	3	4	5	6	7
4. Sport is all about winning	1	2	3	4	5	6	7
5. I'm not a very competitive person	1	2	3	4	5	6	7

Section Three: Expectations of 'On-Court' Performance .....

This section is about what you expect as a season-ticket holder with regard to how the team performs when they're ON THE COURT.

3.1 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which you disagree or agree with each statement. Please circle one number for each statement listed (1 = Strongly Disagree and 7 = Strongly Agree).

I expect the <Club Name> will	**Strongly Disagree**						**Strongly Agree**
1. Demonstrate excellent skill levels	1	2	3	4	5	6	7
2. Perform consistently	1	2	3	4	5	6	7
3. Play as a team	1	2	3	4	5	6	7
4. Put in maximum effort	1	2	3	4	5	6	7
5. Show camaraderie on the court	1	2	3	4	5	6	7
6. Keep their cool under pressure	1	2	3	4	5	6	7
7. Be competitive	1	2	3	4	5	6	7

The next three questions are about your OVERALL expectations of how the team performs when they're on the court.

3.2 Using the NEW rating scale below, please indicate where your opinion 'falls' between the two alternative responses. (Circle only one number per question.)

1. Would you say that OVERALL you expect .....

Average 'on-court' performance	1 2 3 4 5 6 7	Fantastic 'on-court' performance

2. Would you say that OVERALL you have .....

Moderate 'on-court' expectations	1 2 3 4 5 6 7	High 'on-court' expectations

3. Would you say that OVERALL you expect .....

Reasonable value for money	1 2 3 4 5 6 7	Great value for money

Section Four: Expectations of 'Off-Court' Performance .....

This section is about what you expect as a season-ticket holder with regards to a number of aspects OTHER THAN the <Club Name's> playing performance.

4.1 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which you disagree or agree with each statement. Please circle one number for each statement listed (1 = Strongly Disagree and 7 = Strongly Agree).

I expect the <Club Name> will	**Strongly Disagree**						**Strongly Agree**
1. Provide me with one of the best seats in the stadium	1	2	3	4	5	6	7
2. Maintain a comfortable stadium	1	2	3	4	5	6	7
3. Provide a variety of entertainment	1	2	3	4	5	6	7
4. Promote a family-friendly atmosphere	1	2	3	4	5	6	7
5. Be professionally marketed and managed	1	2	3	4	5	6	7
6. Keep me up to date on Club matters	1	2	3	4	5	6	7
7. Give me priority access to play-off tickets	1	2	3	4	5	6	7
8. Provide a visually appealing stadium	1	2	3	4	5	6	7
9. Make me feel like part of the Club	1	2	3	4	5	6	7
10. Have clear and accurate scoreboard information	1	2	3	4	5	6	7
11. Maintain a positive image	1	2	3	4	5	6	7
12. Create an exciting atmosphere	1	2	3	4	5	6	7
13. Allow me to choose my own seat	1	2	3	4	5	6	7
14. Give me benefits that non season-ticket holders don't get	1	2	3	4	5	6	7
15. Give me the opportunity to meet and mingle with players	1	2	3	4	5	6	7
16. Organise social opportunities and functions for fans	1	2	3	4	5	6	7
17. Provide quality entertainment	1	2	3	4	5	6	7
18. Employ courteous and professional staff	1	2	3	4	5	6	7
19. Deliver what it promises	1	2	3	4	5	6	7
20. Seek season-ticket holder feedback	1	2	3	4	5	6	7
21. Employ entertainers who will motivate the crowd	1	2	3	4	5	6	7
22. Organise travel opportunities for fans to attend away games	1	2	3	4	5	6	7
23. Give long term season-ticket holders better seats than new season-ticket holders	1	2	3	4	5	6	7
24. Have fun competitions and prizes for season-ticket holders	1	2	3	4	5	6	7

The next three questions are about your OVERALL expectations of the <Club Name's> OFF-COURT performance.

4.2 Using the rating scale below, please indicate where your opinion 'falls' between the two alternative responses. (Circle only <u>one</u> number per question.)

1. Would you say that OVERALL you expect .....

Average 'off-court' performance	1 2 3 4 5 6 7	Fantastic 'off-court' performance

2. Would you say that OVERALL you have .....

Moderate 'off-court' expectations	1 2 3 4 5 6 7	High 'off-court' expectations

3. Would you say that OVERALL you expect .....

Reasonable value for money	1 2 3 4 5 6 7	Great value for money

Section Five: You and Your Season-Ticket .....

This section asks some very basic questions about YOU and your SEASON-TICKET.

5.1 Please circle the number that corresponds best with your answer. Where applicable, please write a short response.

1. Is this the first season that you've held a season-ticket with the <Club Name>?

1. No
2. Yes – SKIP TO QUESTION 3

2. Including this season, what is the TOTAL number of years that you have held a season-ticket with the <Club Name>? _____ years.

3. Do you consider yourself a fan of the <Club Name>?

1. No – SKIP TO QUESTION 5
2. Yes

4. Including this season, for how many years have you been a fan of the <Club Name>?

_____ **years**

5. Does your season-ticket include other people, or is it just for you?

1. Includes other people
2. Just for me – SKIP TO QUESTION 7

6. Who else does your season-ticket include? (Please circle only one answer)

1. Family (includes partners/husbands/wives/children)
2. Friends
3. Business associates
4. A combination of all, or some, of the above

7. What is your gender?

1. Female
2. Male

8. How old are you?

1. 18 to 24 years
2. 25 to 34 years
3. 35 to 44 years
4. 45 to 54 years
5. 55 to 64 years
6. Over 64 years

Your comments on this survey and/or your season-ticket will be appreciated .....

Thank you for your help.

Please complete your questionnaire by Friday 1st October and return it in the enclosed reply paid envelope to:

Ms Linda Van Leeuwen
School of Leisure & Tourism Studies
University of Technology, Sydney
PO Box 222
Lindfield NSW 2070

If you would like further information on this research please contact me:
Ph: (02) 9514 5412
Email: linda.van.leeuwen@uts.edu.au

APPENDIX D – PRE-SEASON COVER LETTER

PO Box 222
Lindfield NSW 2070
Australia

Tel. +61 2 9514 5116
Fax +61 2 9514 5195

University of Technology, Sydney

Ph: (02) 9514 5412
Email: linda.van.leeuwen@uts.edu.au

Re: <Club Name> Customer Satisfaction Research

Dear Season-Ticket Holder,

I am a doctoral candidate in the School of Leisure & Tourism at the University of Technology, Sydney. I am working with the **<Club Name>** and every other club in the NBL on a research project that investigates the satisfaction of NBL season-ticket holders.

The purpose of the research is to:

- Identify what people expect from their club (pre-season survey)
- Identify how well people thought their club met their expectations (post-season survey)

The research is important and it would be greatly appreciated if you could participate. The research involves two separate questionnaires. The first questionnaire is enclosed and the second one will be forwarded to you at the end of the season. If you would like to be involved, please complete the questionnaire by **Friday 1st October** and return it as soon as possible. It should only take about 15 minutes to fill in. Could you please complete the questionnaire by yourself.

Individual responses will be kept confidential. The code number at the top of the questionnaire is simply to identify who returned the forms so that I know who I should send the second one to at the end of the season. Your involvement in this research is completely voluntary. If you do not wish to participate, please disregard the enclosed questionnaire.

If you have any questions about the research, please do not hesitate to contact me. You may also contact my supervisor, Dr Shayne Quick by phone on (02) 9514 5115 or by email at shayne.quick@uts.edu.au.

Yours sincerely,

Linda Van Leeuwen
Principal Researcher

17 August 1999

NB This study has been approved by the UTS Human Research Ethics Committee. If you have any complaints or reservations about your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer, Ms Susanna Davis (ph: 02 9514 1279). Any complaint you make will be treated in confidence and investigated fully and you will be informed of its outcome.

APPENDIX E – PRE-SEASON REMINDER POSTCARD

Last week a questionnaire seeking to identify and measure basketball season-ticket holders' expectations was mailed to you.

If you have already completed and returned the questionnaire, please accept my sincere thanks. If not, can you please do so by **Friday 1st October**. I am especially grateful for your help, as your response is essential to the success of this study. Furthermore, your response will help me provide your Club with some information that will enable them to better meet your needs.

If you did not receive a questionnaire, or if it was misplaced, please phone me on (02) 9514 5412 or email me at linda.van.leeuwen@uts.edu.au and I will happily forward another one to you.

Kind regards

Linda Van Leeuwen
Principal Researcher

APPENDIX F – POST-SEASON RESEARCH INSTRUMENT

School of Leisure, Sport & Tourism
University of Technology, Sydney

UTS
University of Technology, Sydney

And

The <Club Name>

Basketball Season-Tickets:
A Study of Season-Ticket Holders' Satisfaction

Please complete your questionnaire by Friday, 12th May then return it in the enclosed envelope to:

Ms Linda Van Leeuwen
School of Leisure, Sport & Tourism
University of Technology, Sydney
PO Box 222
Lindfield NSW 2070

Section One: You and the <Club Name>

This section assesses the extent to which you **IDENTIFY** with the <Club Name>.

1.1 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which you disagree or agree with each statement. Please circle one number for each statement listed (1 = Strongly Disagree and 7 = Strongly Agree).

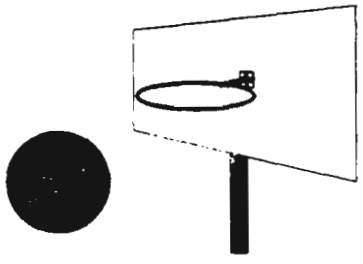
Identification Item	Strongly Disagree						Strongly Agree
1. One of the things I'd tell others about myself is that I'm a fan of the <Club Name>	1	2	3	4	5	6	7
2. The <Club Name's> successes feel like my successes	1	2	3	4	5	6	7
3. Supporting the <Club Name> is important to me	1	2	3	4	5	6	7
4. Being a <Club Name> fan is an important part of who I am	1	2	3	4	5	6	7
5. I enjoy being a fan of the <Club Name>	1	2	3	4	5	6	7
6. I almost think of myself as part of the <Club Name>	1	2	3	4	5	6	7
7. The <Club Name's> failures feel like my failures	1	2	3	4	5	6	7
8. I am a <Club Name> fan	1	2	3	4	5	6	7
9. It's important for me to feel like part of the <Club Name>	1	2	3	4	5	6	7

Section Two: Importance of Winning

This section assesses the extent to which you believe **WINNING** is important.

2.1 Using the 'Importance' rating scale below, please indicate how important each of these 'End of Season Outcomes' is to you. Please circle one number for each outcome (1 = Little Importance and 7 = Extreme Importance).

End of Season Outcome	Little Importance						Extreme Importance
1. The team wins more games during the season than they lose	1	2	3	4	5	6	7
2. The team wins the grand final	1	2	3	4	5	6	7
3. The team beats its arch rival on the ladder	1	2	3	4	5	6	7
4. The team makes the play-offs	1	2	3	4	5	6	7
5. The team does not come last at the end of the season	1	2	3	4	5	6	7
6. The team makes it to the grand final	1	2	3	4	5	6	7



2.2 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which you disagree or agree with each statement. Please circle one number for each statement listed (1 = Strongly Disagree and 7 = Strongly Agree).

Winning Item	Strongly Disagree						Strongly Agree
1. Winning is very important to me	1	2	3	4	5	6	7
2. When it comes to sport, winning is what matters most	1	2	3	4	5	6	7
3. I don't mind losing	1	2	3	4	5	6	7
4. Sport is all about winning	1	2	3	4	5	6	7
5. I'm not a very competitive person	1	2	3	4	5	6	7

Section Three: 'On-Court' Performance

This section is about how well you thought the <Club Name> **PERFORMED** when they were **ON** the court.

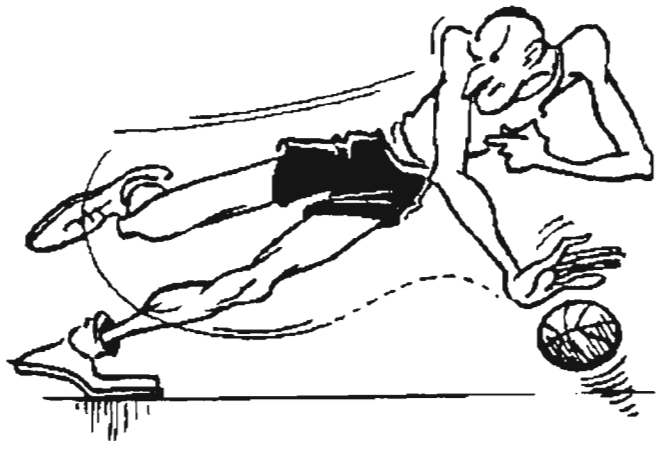
3.1 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which you disagree or agree with each statement. Please circle one number for each statement listed (1 = Strongly Disagree and 7 = Strongly Agree).

The <Club Name>	**Strongly Disagree**						**Strongly Agree**
1. Demonstrated excellent skill levels	1	2	3	4	5	6	7
2. Performed consistently	1	2	3	4	5	6	7
3. Played as a team	1	2	3	4	5	6	7
4. Put in maximum effort	1	2	3	4	5	6	7
5. Showed camaraderie on the court	1	2	3	4	5	6	7
6. Kept their cool under pressure	1	2	3	4	5	6	7
7. Were competitive	1	2	3	4	5	6	7

3.2 **OVERALL**, how would you rate the **ON-COURT PERFORMANCE** of the <Club Name>? (Please circle one number to indicate where your rating 'falls' between the two alternate responses.)

OVERALL the <Club Name's> On-Court performance was .....

Poor	1	2	3	4	5	6	7	**Fantastic**



Section Four: Comparison of Performance and Expectations (On-Court)

This section is about whether the <Club Name> delivered the level of **ON-COURT** performance you had **EXPECTED**.

4.1 How close did each aspect of the <Club Name's> On-Court performance **COMPARE** to what you had **EXPECTED**? (Please circle one number.)

For example, if their performance on a particular aspect far exceeded your pre-season expectations then you would circle '7'. Alternatively, if they performed much worse than you expected, then circle '1'. If however, they performed as you expected then circle '4' etc.

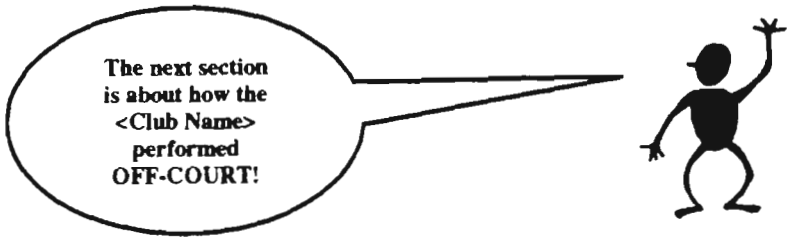
	Much worse than expected			**About what I expected**			**Much better than expected**
1. Demonstrating excellent skill levels	1	2	3	4	5	6	7
2. Performing consistently	1	2	3	4	5	6	7
3. Playing as a team	1	2	3	4	5	6	7
4. Putting in maximum effort	1	2	3	4	5	6	7
5. Showing camaraderie on the court	1	2	3	4	5	6	7
6. Keeping their cool under pressure	1	2	3	4	5	6	7
7. Being competitive	1	2	3	4	5	6	7

4.2 **OVERALL**, how close did the <Club Name's> **ON-COURT PERFORMANCE** compare to what you had **EXPECTED**? (Please circle one number.)

OVERALL the <Club Name's> On-Court performance was .....

Much worse than expected			**About what I expected**			**Much better than expected**
1	2	3	4	5	6	7

(That was the FINAL question about the Club's ON-COURT performance.)



Section Five: 'Off-Court' Performance

This section is about how well you thought the <Club Name> **PERFORMED** when they were **OFF** the court. That is, your thoughts regarding the Club's performance in areas **EXCLUDING** playing.

5.1 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which you disagree or agree with each statement. Please circle one number for each statement listed (1 = Strongly Disagree and 7 = Strongly Agree).

The <Club Name>	**Strongly Disagree**						**Strongly Agree**
1. Provided me with one of the best seats in the stadium	1	2	3	4	5	6	7
2. Maintained a comfortable stadium	1	2	3	4	5	6	7
3. Provided a variety of entertainment	1	2	3	4	5	6	7
4. Promoted a family-friendly atmosphere	1	2	3	4	5	6	7
5. Were professionally marketed and managed	1	2	3	4	5	6	7
6. Kept me up to date on Club matters	1	2	3	4	5	6	7
7. Gave me priority access to play-off tickets	1	2	3	4	5	6	7
8. Provided a visually appealing stadium	1	2	3	4	5	6	7
9. Made me feel like part of the Club	1	2	3	4	5	6	7
10. Had clear and accurate scoreboard information	1	2	3	4	5	6	7
11. Maintained a positive image	1	2	3	4	5	6	7
12. Created an exciting atmosphere	1	2	3	4	5	6	7
13. Allowed me to choose my own seat	1	2	3	4	5	6	7
14. Gave me benefits that non season-ticket holders didn't get	1	2	3	4	5	6	7
15. Gave me the opportunity to meet and mingle with players	1	2	3	4	5	6	7
16. Organised social opportunities and functions for fans	1	2	3	4	5	6	7
17. Provided quality entertainment	1	2	3	4	5	6	7
18. Employed courteous and professional staff	1	2	3	4	5	6	7
19. Delivered what it promised	1	2	3	4	5	6	7
20. Sought season-ticket holder feedback	1	2	3	4	5	6	7
21. Employed entertainers who motivated the crowd	1	2	3	4	5	6	7
22. Organised travel opportunities for fans to attend away games	1	2	3	4	5	6	7
23. Gave long term season-ticket holders better seats than new season-ticket holders	1	2	3	4	5	6	7
24. Had fun competitions and prizes for season-ticket holders	1	2	3	4	5	6	7

5.2 **OVERALL**, how would you rate the **OFF-COURT PERFORMANCE** of the <Club Name>? (Please circle <u>one</u> number to indicate where your rating 'falls' between the two alternate responses.)

OVERALL the <Club Name's> Off-Court performance was .....

Poor	1	2	3	4	5	6	7	**Fantastic**

Section 6: Comparison of Performance and Expectations (Off-Court)

This section is about whether the <Club Name> delivered the level of **OFF-COURT** performance you had **EXPECTED**.

6.1 How close did each aspect of the <Club Name's> Off-Court performance **COMPARE** to what you had **EXPECTED**? (Please circle <u>one</u> number.)

For example, if their performance on a particular aspect far exceeded your pre-season expectations then you would circle '7'. Alternatively, if they performed much worse than you expected, then circle '1'. If however, they performed as you expected then circle '4' etc.

	Much worse than expected			**About what I expected**			**Much better than expected**
1. Providing me with one of the best seats in the stadium	1	2	3	4	5	6	7
2. Maintaining a comfortable stadium	1	2	3	4	5	6	7
3. Providing a variety of entertainment	1	2	3	4	5	6	7
4. Promoting a family-friendly atmosphere	1	2	3	4	5	6	7
5. Being professionally marketed and managed	1	2	3	4	5	6	7
6. Keeping me up to date on Club matters	1	2	3	4	5	6	7
7. Giving me priority access to play-off tickets	1	2	3	4	5	6	7
8. Providing a visually appealing stadium	1	2	3	4	5	6	7
9. Making me feel like part of the Club	1	2	3	4	5	6	7
10. Having clear and accurate scoreboard information	1	2	3	4	5	6	7

Question 6.1 continues on the following page ➔

	Much worse than expected					About what I expected	Much better than expected
11. Maintaining a positive image	1	2	3	4	5	6	7
12. Creating an exciting atmosphere	1	2	3	4	5	6	7
13. Allowing me to choose my own seat	1	2	3	4	5	6	7
14. Giving me benefits that non season-ticket holders don't get	1	2	3	4	5	6	7
15. Giving me the opportunity to meet and mingle with players	1	2	3	4	5	6	7
16. Organising social opportunities and functions for fans	1	2	3	4	5	6	7
17. Providing quality entertainment	1	2	3	4	5	6	7
18. Employing courteous and professional staff	1	2	3	4	5	6	7
19. Delivering what it promises	1	2	3	4	5	6	7
20. Seeking season-ticket holder feedback	1	2	3	4	5	6	7
21. Employing entertainers who will motivate the crowd	1	2	3	4	5	6	7
22. Organising travel opportunities for fans to attend away games	1	2	3	4	5	6	7
23. Giving long term season-ticket holders better seats than new season-ticket holders	1	2	3	4	5	6	7
24. Having fun competitions and prizes for season-ticket holders	1	2	3	4	5	6	7

6.2 **OVERALL**, how close did the <Club Name's> **OFF-COURT PERFORMANCE** compare to what you had **EXPECTED**? (Please circle one number.)

OVERALL the <Club Name's> Off-Court performance was .....

Much worse than expected			About what I expected			Much better than expected
1	2	3	4	5	6	7

(That was the FINAL question about the Club's OFF-COURT performance.)

Section Seven: Satisfaction with the Season-Ticket

This section is about your **SATISFACTION** with your 1999/2000 <Club Name> season-ticket.

7.1 Using the 'Strongly Disagree – Strongly Agree' rating scale below, please indicate the extent to which you disagree or agree with each statement. Please circle one number for each statement listed (1 = Strongly Disagree and 7 = Strongly Agree).

	Strongly Disagree						**Strongly Agree**
1. I am very satisfied with my decision to buy a season-ticket	1	2	3	4	5	6	7
2. If I had to do it all over again, I would still have bought a season-ticket	1	2	3	4	5	6	7
3. My decision to buy a season-ticket was a good one	1	2	3	4	5	6	7

7.2 Taking everything into consideration, how do you feel about your 1999/2000 season-ticket with the <Club Name>? (Please circle one number for each of the following options.)

7.2.1	**Very dissatisfied**	1	2	3	4	5	6	7	**Very satisfied**
7.2.2	**Very displeased**	1	2	3	4	5	6	7	**Very pleased**
7.2.3	**Very disgusted**	1	2	3	4	5	6	7	**Very delighted**
7.2.4	**A poor experience**	1	2	3	4	5	6	7	**A great experience**

7.3 If in question 7.2.1 you were generally **DISSATISFIED** with your season-ticket, what are your main reasons for this dissatisfaction? (Please be as specific as you can.)

7.4 If in question 7.2.1 you were very **SATISFIED** with your <Club Name> season-ticket, would you please give specific reasons for your satisfaction.

7.5 Would you **RECOMMEND** to any of your friends, family, or acquaintances that they purchase a season-ticket with the <Club Name>? (Please circle one number.)

Definitely not	1	2	3	4	5	6	7	**Definitely yes**

Section Eight: Intent to buy another Season-Ticket

This **FINAL** section is about your **INTENTIONS** of buying another season-ticket with the <Club Name>.

8.1 Will you buy another season-ticket from the <Club Name>? (Please circle one number for each of the following options.)

8.1.1	**Unlikely**	1	2	3	4	5	6	7	**Likely**
8.1.2	**Impossible**	1	2	3	4	5	6	7	**Very Possible**
8.1.3	**Not probable**	1	2	3	4	5	6	7	**Very probable**
8.1.4	**Uncertain**	1	2	3	4	5	6	7	**Certain**

8.2 If in question 8.1.1 you were generally **UNLIKELY** to buy another season-ticket with the <Club Name>, please list your main reasons for this. Please be as specific as you can.

Any further comments on the Club or your season-ticket will be appreciated

Thank you for your help.

Please complete your questionnaire by **Friday 12th May** and return it in the enclosed reply paid envelope to:

Ms Linda Van Leeuwen
School of Leisure, Sport & Tourism Studies
University of Technology, Sydney
PO Box 222
Lindfield NSW 20

If you would like further information on this research please contact me:
Ph: (02) 9514 5412
Email: linda.van.leeuwen@uts.edu.au

APPENDIX G – POST-SEASON COVER LETTER

PO Box 222
Lindfield NSW 2070
Australia

Tel. +61 2 9514 5116
Fax +61 2 9514 5195

University of Technology, Sydney

Ph: (02) 9514 5412
Email: linda.van.leeuwen@uts.edu.au

Re: <Club Name> Customer Satisfaction Research

Dear Season-Ticket Holder,

Prior to the 1999/2000 basketball season I sent you a questionnaire about your expectations as a season-ticket holder of the <Club Name>. Thank you very much for responding. You may recall that the letter accompanying your questionnaire discussed the need for a second and final questionnaire to be completed at the end of the season.

Whereas the pre-season questionnaire was concerned with your **expectations** of the season-ticket service, the enclosed questionnaire is mainly concerned with the **extent to which your expectations were met**. For example, did the <Club Name> perform consistently? Also, did the <Club Name> provide you with quality entertainment? The enclosed questionnaire is also concerned with your satisfaction with your season-ticket as well as how strongly identified you are with the Club.

The questionnaire may seem similar to the one you previously responded to. *However, I assure you that it is different and all of its questions are very important.* Once again, your involvement in this research is completely voluntary. However, it would be a great help to the <Club Name> and to me, if you could participate. If you would like to be involved, please complete and return the enclosed questionnaire by **Friday, 12th May**. This should take about 15 minutes of your time. Also, would you please complete the questionnaire by yourself.

Individual responses will remain confidential. The code number at the top of the questionnaire is so that I can match up your post-season answers with your pre-season answers. The code number will be destroyed once the research has been completed.

If you have any questions about the research, please do not hesitate to contact me. My contact details are on the top right hand corner of this letter. Alternatively, you may contact my supervisor, Dr Shayne Quick on ph: 02 9514 5115; or by email: shayne.quick@uts.edu.au.

Yours sincerely,

Linda Van Leeuwen
Principal Researcher

17 April 2000

NB This study has been approved by the UTS Human Research Ethics Committee. If you have any complaints or reservations about your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer, Ms Susanna Davis (ph: 02 9514 1279). Any complaint you make will be treated in confidence and investigated fully and you will be informed of its outcome.

APPENDIX H – POST-SEASON REMINDER POSTCARD

Last week a questionnaire seeking to understand and measure basketball season-ticket holders' customer satisfaction was mailed to you.

If you have already completed and returned the questionnaire, please accept my sincere thanks. If not, can you please do so by **Friday 12th May**. I am especially grateful for your help, as your response is essential to the success of this study. Furthermore, your response will help me provide your Club with information that will enable them to better meet your needs.

If you did not receive a questionnaire, or if it was misplaced, please phone me on (02) 9514 5412 or email me at linda.van.leeuwen@uts.edu.au and I will happily forward another one to you.

Kind regards

Linda Van Leeuwen
Principal Researcher

APPENDIX I – WIN/LOSE MEASURE

Club	Winning %	Rescaled winning %
Perth Wildcats	77.78	4.67
Adelaide 36ERS	74.19	4.45
Townsville Crocodiles	74.19	4.45
Victoria Titans	66.67	4.00
Melbourne Tigers	48.39	2.90
West Sydney Razorbacks	41.94	2.52
Sydney Kings	39.29	2.36
Wollongong Hawks	39.29	2.36
Canberra Cannons	39.29	2.36
Brisbane Bullets	25.00	1.50
Cairns Taipans	7.14	1.09

Note. Table includes winning percentage and rescaled winning percentage for the Cairns Taipans. However, season ticket holders from this club did not participate in the research.

APPENDIX J – EXAMPLE OF PRELIS COMMAND FILE (CUSTOMER SATISFACTION)

```
!prelis for customer satisfaction
da ni=7 no=577
ra fi=C:\SEM\satisfa.dat
ou cm=C:\SEM\satis.cm ac=c:\SEM\satis.ac
```

APPENDIX K – EXAMPLE OF LISREL COMMAND FILE (CUSTOMER SATISFACTION)

```
!one factor congeneric measurement model for customer satisfaction
da ni=7 no=577 ma=cm
cm fi=C:\SEM\satis.cm
ac fi=C:\SEM\satis.ac
la
satis1 satis2 satis3 satis4 satis5 satis6 satis7
se
satis1 satis2 satis3 satis4 satis5 satis6 /
mo nx=6 nk=1 lx=fr ph=st td=sy,fi
fr td(1 1) td(2 2) td(3 3) td(4 4) td(5 5) td(6 6)
lk
satisfaction
pd
ou al nd=3
```

APPENDIX L – CORRELATION MATRIX FOR EXPECTATIONS MODEL

Construct	1	2	3	4	5	6	7	8	9	10
Club ID (Pre)										
1. Team ID	1.00									
2. Fan ID	.554**	1.00								
Expectations										
3. Pro-play	.183**	.302**	1.00							
4. Pro-mgt	.087*	.268**	.445**	1.00						
5. Involvement	.449**	.401**	.303**	.522**	1.00					
6. Entertain	.231**	.245**	.176**	.422**	.430**	1.00				
7. Seat & Tick	.216**	.190**	.259**	.366**	.426**	.225**	1.00			
Performance										
8. Pro-play	.080	.252**	.138**	.121**	.094*	.060	-.051	1.00		
9. Pro-mgt	.114**	.285**	.122**	.202**	.149**	.106*	-.045	.556**	1.00	
10. Involvement	.190**	.240**	.097*	.185**	.183**	.058**	.050	.297**	.683**	1.00
11. Entertain	.126**	.182**	.036	.164**	.144**	.108**	.002	.262**	.615**	.519**
12. Seat & Tick	.192**	.181**	.095*	.075	.122**	.056	-.120**	.152**	.351**	.405**
Disconfirmation										
13. Pro-play	.126**	.220**	.102*	.119**	.111**	.118**	-.015	.782**	.515**	.276**
14. Pro-mgt	.102*	.159**	.053	.140**	.092**	.113**	-.007	.411**	.751**	.581**
15. Involvement	.141**	.113**	.036	.104*	.130**	.058	.767	.186**	.508**	.767**
16. Entertain	.095*	.077	-.012	.070	.071	.108**	.387	.182**	.452**	.387**
17. Seat & Tick	.116**	.107*	.066	.063	.092*	.051	-.003	.125**	.351**	.439**
18. Satisfaction	.194**	.388**	.159**	.126**	.143**	.072	.014	.546**	.626**	.464**
19. Intention	.135**	.285**	.144**	.069	.141**	.059	.036	.322**	.366**	.284**
20. Winning	-.013	.124**	.055	.052	.005	.038	-.082*	.730**	.377**	.094*

** Pearson r correlation is significant at the 0.01 level (2 tailed)
* Pearson r correlation is significant at the 0.05 level (2 tailed)

Table continues ...

Construct	11	12	13	14	15	16	17	18	19	20
Club ID (Pre)										
1. Team ID										
2. Fan ID										
Expectations										
3. Pro-play										
4. Pro-mgt										
5. Involvement										
6. Entertain										
7. Seat & Tick										
Performance										
8. Pro-play										
9. Pro-mgt										
10. Involvement										
11. Entertain	1.00									
12. Seat & Tick	.245**	1.00								
Disconfirmation										
13. Pro-play	.272**	.137**	1.00							
14. Pro-mgt	.502**	.288**	.525**	1.00						
15. Involvement	.384**	.289**	.245**	.683**	1.00					
16. Entertain	.806**	.159**	.245**	.549**	.433**	1.00				
17. Seat & Tick	.264**	.642**	.162**	.476**	.523**	.326**	1.00			
18. Satisfaction	.370**	.390**	.490**	.513**	.349**	.287**	.342**	1.00		
19. Intention	.210**	.270**	.234**	.316**	.214**	.173**	.203**	.644**	1.00	
20. Winning	.111**	-.014	.681**	.310**	.039	.073	-.002	.419**	.261**	1.00

** Pearson r correlation is significant at the 0.01 level (2 tailed)
* Pearson r correlation is significant at the 0.05 level (2 tailed)

APPENDIX M – CORRELATION MATRIX FOR NON-EXPECTATIONS MODEL

Construct	1	2	3	4	5	6	7	8	9	10
Club ID (Post)										
1. Team ID	1.00**									
2. Fan ID	.608**	1.00								
Performance										
3. Pro-play	.276**	.436**	1.00							
4. Pro-mgt	.275**	.421**	.556**	1.00						
5. Involvement	.264**	.318**	.297**	.683**	1.00					
6. Entertain	.226**	.263**	.262**	.615**	.519**	1.00				
7. Seat & Tick	.225**	.207**	.152**	.351**	.405**	.245**	1.00			
Disconfirmation										
8. Pro-play	.245**	.333**	.782**	.515**	.276**	.272**	-.137**	1.00		
9. Pro-mgt	.232**	.288**	.411**	.751**	.581**	.502**	.288**	.525**	1.00	
10. Involvement	.184**	.176**	.186**	.508**	.767**	.384**	.289**	.245**	.683**	1.00
11. Entertain	.173**	.141**	.182**	.452**	.387**	.806**	.159**	.245**	.549**	.433**
12. Seat & Tick	.166**	.124**	.125**	.351**	.439**	.264**	.642**	.162**	.476**	.523**
13. Satisfaction	.336**	.509**	.546**	.626**	.464**	.370**	.390**	.490**	.513**	.349**
14. Intention	.263**	.393**	.322**	.366**	.284**	.210**	.270**	.234**	.316**	.214**
15. Winning	.160**	.254**	.730**	.377**	.094*	.111**	-.014	.681**	.310**	.039

** Pearson r correlation is significant at the 0.01 level (2 tailed)

* Pearson r correlation is significant at the 0.05 level (2 tailed)

Table continues ...

Construct	11	12	13	14	15
Club ID (Post)					
16. Team ID					
17. Fan ID					
Performance					
18. Pro-play					
19. Pro-mgt					
20. Involvement					
21. Entertain					
22. Seat & Tick					
Disconfirmation					
23. Pro-play					
24. Pro-mgt					
25. Involvement					
26. Entertain	1.00				
27. Seat & Tick	.326**	1.00			
28. Satisfaction	.287**	.342**	1.00		
29. Intention	.173**	.203**	.644**	1.00	
30. Winning	.073	-.002	.419**	.261**	1.00

** Pearson r correlation is significant at the 0.01 level (2 tailed)
* Pearson r correlation is significant at the 0.05 level (2 tailed)

APPENDIX N – EXAMPLE OF MAXIMAL RELIABILITY CALCULATION (CUSTOMER SATISFACTION)

Werts et al.(1978) showed that the reliability of a weighted composite (r_c) can be determined by the following formula:

$$r_c = \omega(\hat{\Sigma} - \Theta_\delta)\omega' / \omega\hat{\Sigma}\omega'$$

Where:

- ω is the row vector of factor score regression weights
- $\hat{\Sigma}$ is the fitted matrix of covariances among the research variables
- Θ_δ is the matrix of variances and covariances among the measurement error terms
- ω' is the transpose of a row vector of factor score regression weights

The maximal reliability of each composite scale was calculated in EXCEL (2000). See Table N1 where:

- W is the row vector of factor score regression weights (LISREL output)
- WT is the transpose of W
- E is the fitted covariance matrix (LISREL output)
- TD is the theta delta matrix (LISREL output)
- D is the difference between E and TD
- WD is the product of W and D
- WDWT is the product of WD and WT
- WE is the product of W and E
- WEWT is the product of WE and WT
- REL (i.e., the reliability of the composite) is the quotient of WDWT (i.e., the numerator) and WEWT (i.e., the denominator)

Table N1 Example of Maximal Reliability Calculation in EXCEL (2000)

Calculation variables	Values					
W	0.13	0.12	0.57	0.14	0.05	0.04
WT	0.13					
	0.12					
	0.57					
	0.14					
	0.05					
	0.04					
E	1	0.91	0.95	0.83	0.82	0.78
	0.91	1	0.95	0.77	0.77	0.75
	0.95	0.95	1	0.82	0.83	0.79
	0.83	0.77	0.82	1	0.88	0.84
	0.82	0.77	0.83	0.88	1	0.84
	0.78	0.75	0.79	0.84	0.84	1
TD	0.05	0	0	0	0	0
	0	0.06	0	0	0	0
	0	0	0.01	0	0	0
	0	0	0	0.05	0	0
	0	0	0	0	0.15	0
	0	0	0	0	0	0.19
D	0.95	0.91	0.95	0.83	0.82	0.78
	0.91	0.94	0.95	0.77	0.77	0.75
	0.95	0.95	0.99	0.82	0.83	0.79
	0.83	0.77	0.82	0.95	0.88	0.84
	0.82	0.77	0.83	0.88	0.85	0.84
	0.78	0.75	0.79	0.84	0.84	0.81
WD	0.9626	0.9489	0.9897	0.8783	0.8714	0.8337
WDWT	1.003015					
WE	0.9691	0.9561	0.9954	0.8853	0.8789	0.8413
WEWT	1.009632					
REL	0.993446					

APPENDIX O – EXAMPLE OF REGRESSION COEFFICIENT AND ERROR VARIANCE CALCULATION (CUSTOMER SATISFACTION)

O.1 Regression Coefficient

Munck (1979) showed that a regression coefficient (λ) is given by the formula:

$$\lambda = \sigma(x)\sqrt{r_c}$$

Where:

- $\sigma(x)$ is the standard deviation of the composite
- $\sqrt{r_c}$ is the square root of the composite reliability

Customer Satisfaction Example

- $\sigma(x)$ is 1.293
- $\sqrt{r_c}$ is $\sqrt{.993}$
- λ is 1.293 x .996 = 1.288

O.2 Measurement Error Variance

Alternatively, Munck (1979) showed that a measurement error variance (θ) is given by the formula:

$$\theta = \sigma^2(x)(1-r_c)$$

Where:

- $\sigma^2(x)$ is the variance of the composite
- $(1-r_c)$ is 1 minus the composite reliability

Customer Satisfaction Example

- $\sigma^2(x)$ is 1.672 (SD^2)
- $(1-r_c)$ is .007 (1 - .993)
- θ is 1.672 x .007 = .012

APPENDIX P – LISREL COMMAND FILE FOR ORIGINAL EXPECTATIONS MODEL (FIGURE 7.1)

```
!expectations structural model – original specification
da ni=20 no=577 ma=cm
cm fi=c:\semc\allcomp.cm
la
prfid prtid onexp onperf ondisc atme inve proe seae atmp invp prop seap atmd invd prod
sead sat int win
mo ny=19 ne=9 nx=1 ly=fu,fi te=fu,fi lx=fu,fi td=fu,fi be=fu,fi, ps=sy,fi ga=fu,fi
ph=sy,fi
le
preid onexp onperf ondisc ofexp ofperf ofdisc sat int
va 1 ly(1 1)
va 1 ly(6 5)
va 1 ly( 10 6)
va 1 ly(14 7)
fr ly(2 1)
fr ly(7 5) ly(8 5) ly(9 5) ly(11 6) ly(12 6) ly(13 6) ly(15 7) ly(16 7) ly(17 7)
va .590 ly(3 2)
va .026 te(3 3)
va 1.363 ly(4 3)
va  .081 te(4 4)
va 1.128 ly(5 4)
va .083 te(5 5)
va 1.288 ly(18 8)
va .011 te(18 18)
va 1.248 ly(19 9)
va .007 te(19 19)
fr te(1 1) te(2 2)  te(6 6) te(7 7) te(8 8) te(9 9) te(10 10) te(11 11) te(12 12) te(13 13)
te(14 14) te(15 15) te(16 16) te(17 17) te(14 10) te(15 11) te(16 12) te(17 13)
va 0 td(1 1)
fr be(2 1)  be(3 1) be(4 1) be(5 1) be(6 1) be(7 1) be(8 1) be(3 2)  be(4 2) be(4 3)
fr be(8 3) be(8 4) be(6 5) be(7 5) be(7 6)  be(8 6) be(8 7) be(9 8)
fr ga(3 1) ga(4 1)  ga(6 1) ga(7 1)  ga(8 1)
fr ps(1 1) ps(2 2)  ps(3 3) ps(4 4) ps(5 5) ps(6 6) ps(7 7) ps(8 8) ps(9 9)
fr ps(5 2) ps(6 3) ps(7 4)
pd
ou al nd=3 ad=off it=100
```

APPENDIX Q – LISREL COMMAND FILE FOR RESPECIFIED EXPECTATIONS MODEL (FIGURE 7.3)

```
!expectations structural model - respecified
da ni=20 no=577 ma=cm
cm fi=c:\semc\allcompe.cm
la
prfid prtid onexp onperf ondisc atme inve proe seae atmp invp prop seap atmd invd prod
sead sat int win
mo ny=19 ne=9 nx=1 ly=fu,fi te=fu,fi lx=fu,fi td=fu,fi be=fu,fi, ps=sy,fi ga=fu,fi
ph=sy,fi
le
preid onexp onperf ondisc ofexp ofperf ofdisc sat int
va 1 ly(1 1)
va 1 ly(6 5)
va 1 ly( 10 6)
va 1 ly(14 7)
fr ly(2 1) ly(7 5) ly(8 5) ly(9 5) ly(11 6) ly(12 6) ly(13 6) ly(15 7) ly(16 7) ly(17 7)
va .590 ly(3 2)
va .026 te(3 3)
va 1.363 ly(4 3)
va  .081 te(4 4)
va 1.128 ly(5 4)
va .083 te(5 5)
va 1.288 ly(18 8)
va .011 te(18 18)
va 1.248 ly(19 9)
va .007 te(19 19)
fr te(1 1) te(2 2)  te(6 6) te(7 7) te(8 8) te(9 9) te(10 10) te(11 11) te(12 12)  te(13 13)
fr te(14 14) te(15 15) te(16 16) te(17 17)
fr be(2 1)  be(3 1)  be(5 1) be(6 1)  be(8 1) be (3 2) be(4 3) be (8 4) be(6 5) be(7 6)
fr be(8 7) be(9 8)
fr ga(3 1) ga(4 1)  ga(6 1) ga(7 1)
va 0 td(1 1)
fr ps(1 1) ps(2 2)  ps(3 3) ps(4 4) ps(5 5) ps(6 6) ps(7 7) ps(8 8) ps(9 9)
fr ps(5 2) ps(6 3) ps(7 4)
fr te(14 10) te(15 11) te(16 12) te(17 13)
pd
ou al nd=3 ad=off it=500
```

APPENDIX R – LISREL COMMAND FILE FOR ORIGINAL NON-EXPECTATIONS MODEL (FIGURE 7.2)

```
!non-expectations structural model – original specification
da ni=15 no=577 ma=cm
cm fi=c:\semc\allcomp.cm
la
pofid potid onperf ondisc atmp invp prop seap atmd invd prod sead sat int win
mo ny=14 ne=7 nx=1 ly=fu,fi te=fu,fi lx=fu,fi td=fu,fi be=fu,fi, ps=sy,fi ga=fu,fi
ph=sy,fi
le
poid onperf ondisc ofperf ofdisc sat int
va 1 ly(1 1)
va 1 ly(5 4)
va 1 ly( 9 5)
fr ly(2 1)
fr ly(6 4) ly(7 4) ly(8 4) ly(10 5) ly(11 5) ly(12 5)
va 1.363 ly(3 2)
va .081 te(3 3)
va 1.128 ly(4 3)
va  .083 te(4 4)
va 1.288 ly(13 6)
va .011 te(13 13)
va 1.248 ly(14 7)
va .007 te(14 14)
fr te(1 1) te(2 2)  te(5 5) te(6 6) te(7 7) te(8 8) te(9 9) te(10 10) te(11 11) te(12 12)
fr te(9 5) te(10 6) te(11 7) te(12 8)
va 0 td(1 1)
fr be(2 1) be(3 1) be(4 1) be(5 1) be(6 1) be(3 2)  be(6 2) be(6 3) be(5 4)  be(6 4)
fr be(6 5) be(7 6)
fr  ga(1 1) ga(2 1) ga(3 1) ga(4 1) ga(5 1) ga(6 1)
fr ps(1 1) ps(2 2)  ps(3 3) ps(4 4) ps(5 5) ps(6 6) ps(7 7) ps(4 2) ps(5 3)
pd
ou al nd=3 ad=off it=100
```

APPENDIX S – LISREL COMMAND FILE FOR RESPECIFIED NON-EXPECTATIONS MODEL (FIGURE 7.4)

```
!non-expectations structural model - respecified
da ni=15 no=577 ma=cm
cm fi=c:\semc\allcompn.cm
la
pofid potid onperf ondisc atmp invp prop seap atmd invd prod sead sat int win
mo ny=14 ne=7 nx=1 ly=fu,fi te=fu,fi lx=fu,fi td=fu,fi be=fu,fi, ps=sy,fi ga=fu,fi
ph=sy,fi
le
poid onperf ondisc ofperf ofdisc sat int
va 1 ly(1 1)
va 1 ly(5 4)
va 1 ly( 9 5)
fr ly(2 1)
fr ly(6 4) ly(7 4) ly(8 4) ly(10 5) ly(11 5) ly(12 5)
va 1.363 ly(3 2)
va .081 te(3 3)
va 1.128 ly(4 3)
va  .083 te(4 4)
va 1.288 ly(13 6)
va .011 te(13 13)
va 1.248 ly(14 7)
va .007 te(14 14)
fr te(1 1) te(2 2)  te(5 5) te(6 6) te(7 7) te(8 8) te(9 9) te(10 10) te(11 11) te(12 12)
fr te(9 5) te(10 6) te(11 7) te(12 8)
va 0 td(1 1)
fr be(2 1) be(4 1) be(6 1) be(3 2) be(6 3) be(5 4) be(6 5) be(7 6)
fr  ga(1 1) ga(2 1) ga(3 1) ga(4 1) ga(5 1)
fr ps(1 1) ps(2 2)  ps(3 3) ps(4 4) ps(5 5) ps(6 6) ps(7 7) ps(4 2) ps(5 3)
pd
ou al nd=3 ad=off it=100
```