

Ehrenberg-Bass Institute Working Paper:

*Understanding consumer behaviour in evolving subscription markets
- lessons from sports season tickets research*

This working paper, dated 27 June 2023, is forthcoming in the Journal of Service Management.

Authors:

Professor Heath McDonald - RMIT University

Dr Steven Dunn - Ehrenberg-Bass Institute

Dr Dominik Schreyer - WHU Otto Beisheim School of Management

Professor Byron Sharp - Ehrenberg-Bass Institute



UNDERSTANDING CONSUMER BEHAVIOUR IN EVOLVING SUBSCRIPTION MARKETS – LESSONS FROM SPORTS SEASON TICKETS RESEARCH

Abstract

Purpose – To review literature on sports season ticket subscriptions to distil current knowledge and guide future research and practice.

Design/methodology/approach – A systematic literature review of research on sports season tickets, a long-established and innovative subscription category.

Findings – In-depth examination of 28 papers supported themes of drivers of satisfaction, churn and renewal causes, and product utilisation rates. Subscription markets typically involve many ‘solely loyal’ consumers, most purchasing one or two subscriptions in a category. From reduced barriers to entry and exit to ‘curated’ subscriptions, subscription marketing is changing very quickly. Sports marketers build relationships with subscribers using behavioural data, tier benefits to distinguish between casual and subscribing customers, and create recall and scarcity around key aspects of subscription to combat churn and increase utilisation.

Research limitations/implications – Scarce research on subscription marketing practices remains the primary limitation. Existing research suggests that strong connections between subscriber and organisation, heavy product utilisation, and/or strong barriers to switching drive customer satisfaction and retention.

Practical implications – Rapid expansion of subscription products should reduce ‘excess loyalty’; subscription models’ main benefit will be reoccurring revenue. Exceptions occur when consumers are heavily connected to the product or have little provider choice, so allocate their category buying exclusively. New subscription products face myriad challenges. Guidance on effective subscription marketing from sports marketing research and practice is outlined.

Originality/value – By combining research on market structure, marketing empirical generalisations and subscription marketing, this paper guides future research and practice.

Keywords: Subscription, Sport, Retention, Churn, No-show behaviour

Article Type: Research paper

1. Introduction

Subscription marketing is changing rapidly. Car companies (e.g., BMW, Tesla) have recently opted to make vehicle features like heated seats and steering modes available through monthly subscriptions. Through internet-based services, industries such as education (e.g., Coursera, Futurelearn), personal grooming (e.g., Dollar Shave Club) and home entertainment (e.g., Netflix, Paramount+) now use the subscription model. Traditional subscription products like gymnasiums have been able to move online, offering a greater variety of subscription services (e.g., Apple fitness, Sweat, Noom, Peloton). Software companies like Salesforce and Adobe have built huge revenues off the back of subscription models like SoaS (software as a service). ‘Curated’ subscriptions, which involve customers receiving a regular selection of goods from a retailer selected for them based on past preferences (see Andonova *et al.*, 2021), are also becoming more common (e.g., Birchbox, Bokksu). Even traditional supermarket goods have adopted subscription models (e.g., Nespresso). To date, the small amount of extant research into subscription markets has found they are characterised by consumer behaviour that is different from that seen in non-subscription markets (Sharp *et al.*, 2002). Our question is, will the broadening of subscription products we are currently seeing impact upon the way they are consumed, potentially reducing these differences?

In simple terms, subscriptions require consumers to commit to purchasing a particular product for a fixed period (Sharp *et al.*, 2002). Subscription products are most common in fields like utilities (e.g., energy, water) and insurance, where suppliers were often limited or had geographic monopolies. However, there is a long history of subscription products in a variety of contexts, ranging from grain and water subscriptions around the turn of the 18th century, to the classical composer George Handel marketing his works by subscription (Hunter and Mason, 1999).

Non-subscription products, often labelled ‘repertoire’ (used hereafter) or ‘transactional’ products, are much more common and include fast moving consumer goods and most consumer durables. Consumers buy these products in discrete transactions with no ongoing commitments, although they may exhibit behavioural and attitudinal loyalty to one or more brands in a product category. Subscription products differ from repertoire products in three main ways. First, subscription products are bought infrequently, often annually. Second, consumers have much smaller repertoires in subscription markets and are often solely loyal to one provider. Third, subscriptions usually involve being formally contracted to a specific provider for the period of purchase (e.g., annual insurance policies) (McDonald *et al.*, 2013).

As subscription models develop and innovate, consumer behaviour may also change. To date, industry actions have outpaced academic research on the impact of new subscription model applications. While insights can be drawn from a range of past research in subscription markets, we argue that the sports market has seen the most variation and innovation in subscription products. This paper examines research conducted on subscription products in the sports market, with the aim of identifying the likely consumer response to the innovation occurring in subscription markets more generally. Further, we look to the work in sports to identify actions that have proven effective in managing subscribers in situations where there is strong competition and easy access to the product.

We begin by reviewing the knowledge on the differences in observed consumer behaviour between subscription and repertoire markets in general. This work establishes a baseline for us to project how changes in subscription offerings might affect consumer behaviour.

2. Behavioural differences in subscription markets

For the most part, aggregate consumer behaviour has been shown to follow regular and predictable patterns across a wide range of products and markets (Ehrenberg, 1988; Ehrenberg *et al.*, 2004; Sharp *et al.*, 2012). However, subscription markets are a notable exception. The characteristics of subscription products (e.g., formal contracts, fixed term) affect the way consumers choose between products and divide their purchases across the range of options.

In repertoire markets, most buyers split their purchases across several competing brands to fulfill their category needs (Sharp *et al.*, 2002). Fast-moving consumer goods categories (e.g., canned soup, shampoo, breakfast cereal) are standard repertoire markets, in which consumers have a repertoire of brands they purchase over the course of year (Banelis *et al.*, 2013). Repertoire buying means that the buyers of any given brand will, on average, more often purchase other brands (Ehrenberg *et al.*, 2002).

Split loyalty to multiple brands in repertoire markets has been called ‘polygamous loyalty’ (Dowling and Uncles, 1997; Sharp *et al.*, 2002). Consumers are polygamously loyal to brands within their own personal repertoires and purchase from them at a relatively constant rate over the short to medium term (Driesener and Rungie, 2022). Having a repertoire helps simplify the otherwise high cognitive load task of choosing from many alternatives (Banelis *et al.*, 2013; Ehrenberg *et al.*, 2004). Polygamous loyalty further allows consumers to satisfy their desires for ongoing variety without having to evaluate all brands (Ehrenberg *et al.*, 2004). Loyalty, as a result, is best viewed as a convenient option for consumers who are busy cognitive misers (Sharp *et al.*, 2012), not as an expression of deep commitment or strong emotional attachment (Ehrenberg *et al.*, 2002; Sharp, 2013).

Because of the nature of subscription markets, subscription market behaviour differs from repertoire market behaviour on two key metrics. Firstly, preferred brands in subscription markets tend to satisfy a much higher percentage of consumers’ category needs. For example, if you have a membership to a fitness/health club, it is likely that much of your exercise is done there. Second, there will be a higher number of solely loyal customers for each brand in a subscription market. Solely loyal buyers are present in repertoire markets, but usually they are very light category buyers. That is, people that only buy the category once a year are always solely loyal in that year because they only bought one brand. Sharp (2013) reports an average sole loyalty rate of 11% across three categories of repertoire products. In subscription markets we see a much higher number of solely loyal buyers, historically upwards of 70% (Sharp and Wright, 1999). This higher loyalty is a direct consequence of the nature of subscription products, for which buyers have much smaller repertoires. Most people, for example, have only one cell phone contract at any one time, so they will be solely loyal to their contracted provider. With greater competition in most subscription markets, and more markets developing subscription-based products, this sole loyal buyer level may be contracting as a proportion of all subscription buyers.

3. Methodology

3.1 Research question

Significant change is occurring in subscription product practice. Hence, our primary research question is, how do changes in subscription product practice affect consumer behaviour? We

seek to answer this question through the lens of the work conducted into predictable patterns of consumer behaviour that establishes a benchmark for expectations in both subscription and repertoire markets. To understand what the future of subscription product consumption might look like, we leverage the extant research in the field of sports consumer behaviour – an area of rapid change with a long history of co-existing subscription and repertoire products.

3.2 Context

Sports are a good focal point for a review of subscription market knowledge. There is a long history of subscription products in sports markets, such as cable television sports viewing (e.g., ESPN) and season ticket products for live attendance dating back to 1870 (Reese, 2013). Many of the subscription ‘innovations’ we are seeing today have long existed in sports. The sports season ticket market is also one of the most heavily researched subscription markets.

Subscription products have typically sat alongside single-purchase options in sports. Sports season tickets can be trialled as an individual ticket purchase in many cases, and broadcast events (e.g., UFC pay per view) can be bought individually or as an annual subscription. Increasingly, this blurring of the line between transactional and subscription product is becoming a feature of other subscription markets, in which efforts are made to increase ‘trialability’. Take for example, the online survey company SurveyMonkey, which offers a free trial version, a one-off payment for an advanced version and a subscription product for annual use. Taco Bell is also now offering a \$10 per month Taco Lover's Pass alongside regular transactional pricing.

While the sports context offers insights into how subscription innovations might be marketed in non-traditional markets, an argument is often made that the sports industry is unique, potentially limiting how well these insights generalise. Sports are typically considered to be high-involvement products, rich in personal identification (Lock and Heere, 2017). Sports enjoy public displays of allegiance and engagement and loyalty well beyond those seen in most markets (Jensen *et al.*, 2016). Whilst that might mean a sports subscription is a very considered purchase for some, many sports also enjoy wide coverage in news and other media, making their consumption difficult to avoid and swelling the numbers of ‘light’ users (Funk *et al.*, 2022).

Sports fans typically have to consume competing brands to consume their own (e.g., many contests involve two teams or players), many sports are seasonal, and some fans have multiple allegiances to teams across levels of a sport (e.g., minor and major league baseball) (McDonald *et al.*, 2022). Despite (or perhaps because of) these complexities, many consumers become heavily involved with sport products. Fisher and Wakefield's (1998) examination of sports fans typifies the somewhat paradoxical behaviours that can occur in relation to these products. They found evidence of poorly performing teams experiencing increased support and loyalty amongst their fans. This phenomenon may be explained by the notion that many of these products are hedonic (pleasurable) in nature, and their enjoyment comes in many ways in addition to simple consumption of a single preferred brand.

While these unique aspects of sports have implications for management and research, the evidence is that they do not lead people to consume sports products differently from most other consumer products. The small but growing body of research that has looked for the standard patterns of consumer behaviour described earlier, has supported their existence in a sports context. Scriven *et al.* (2015) analyzed national data on leisure choice in the United

Kingdom (UK), finding that people participated in an average of 12 different leisure activities across a year, and that this consumption followed the patterns seen in repertoire markets. Gruneklee *et al.* (2016) studied exercise and also found predictable patterns (e.g., walking was very popular and walkers walked more often than yoga participants did yoga). Dawes (2009) found the same patterns in the sportswear market, despite industry assertions of high degrees of product positioning and the self-expressive nature of sportswear. Looking specifically at sport fandom, Doyle *et al.* (2013) found that brand perceptions of fans of teams in two professional sports leagues followed repertoire market patterns, and Baker *et al.* (2016) found that live attendance did too. Trinh (2018) used Australian census data to examine if attendance at sporting events followed predictable empirical patterns, and found the results fitted well. Fujak *et al.* (2018)'s work on attendance at a wide range of Australian sports confirmed these results, showing that consumers attend sports matches within a repertoire purchase pattern and therefore treat sports teams as complementary products. All of this research suggests that sports markets operate in much the same way as other markets when considered in aggregate.

3.3 Method

We reviewed the extant sports season ticket holder (STH) consumer behaviour literature. The scope of the review focused on three key areas of sports STH consumer behaviour: STH satisfaction, STH renewal and churn, and STH game attendance and no-show behaviour (NSB). All three areas were chosen for deeper investigation given their relevance to other (non-sport) subscription models.

A systematic literature review was undertaken to ensure comprehensiveness, minimise researcher bias and enable future replication (Hulland and Houston, 2020). A systematic literature review is an evidence-based method for identifying and synthesizing research in a systematic, transparent, and reproducible manner (Tranfield *et al.*, 2003). The approach involves explicit and the pre-specified search criteria, which provides an effective means for identifying all empirical evidence in the area of interest (Snyder, 2019). Systematic literature reviews first came to prominence in healthcare in the 1970s and 1980s, but have more recently become a ubiquitous method across all fields of research (Munn *et al.*, 2018).

The first stage of the method consisted of searching four databases (Scopus, Web of Science, Emerald, Business Source Ultimate) for an exhaustive list of all relevant studies of STHs with respect to any of the three focus areas (satisfaction, renewal or attendance). The procedure involved searching all the databases for the term *season ticket holder** within titles, abstracts and keywords AND any of the terms *satisfaction* OR *churn* OR *renew** OR *tenure* OR *attend** OR *no show* within the full text of the same records. The search strategy identified 160 records (Table I), of which 94 were unique records and 64 were duplicates.

TAKE IN TABLE I AROUND HERE

The records were refined using exclusion criteria to remove conference papers (n=5) and records in languages other than English (n=2). Titles, abstracts and keywords of the remaining 87 records were reviewed to exclude any papers that did not report empirical studies (e.g., review papers, legal cases) (n=8), were not in a sports context (n=4) or did not address STH satisfaction, renewal or attendance (n=46). This resulted in 28 qualified records (Table II).

TAKE IN TABLE II AROUND HERE

The key empirical findings from all 28 records were then summarized, as shown in Tables I–V. These tables are organized around the three areas of investigation for the review – STH satisfaction, STH renewal and churn, and STH attendance and NSB. The authors then reviewed and synthesised these findings to extract key learnings from STH research that are transferable to other subscription markets.

4. Season ticket holder satisfaction

Customer satisfaction is a heavily researched topic, and for the most part, research in the sports field on STH satisfaction mirrors that broader body of work. Satisfaction is a driver of positive consumer behaviours, including repurchase and word of mouth, although empirical studies suggest it is only a weak driver of these outcomes in a sports fan context (e.g., Laverie and Arnett, 2000). In subscription markets, satisfaction tends to be a result of cumulative activities over the subscription period rather than a transaction-specific exchange (Bischof *et al.*, 2020). Garbarino and Johnson (1999) found that satisfaction played only a small role in the future intentions of theatre company subscribers; trust and overall commitment to the organisation seemed to be the stronger influence.

TAKE IN TABLE III AROUND HERE

These themes are reflected in the sports STH research, but three outcomes of the work on sports STH do not feature in the broader customer satisfaction literature (see Table III). Firstly, on-field performance, which in many ways is an overt and objective measure of the quality of the experience, was not a strong driver of satisfaction in all studies of sports STH. Subscribers in the sports context can handle wide variations in on-field performance and yet still renew. Even teams with long losing records have been able to maintain demand for season ticket products, but in line with Mittal and Kamakura's (2001) findings, different cohorts respond to the same level of satisfaction differently. McDonald (2010), for example, found that STHs who churned were on average still 'satisfied'. In the case of season tickets, however, newer subscribers were more volatile when faced with poor on-field performance. Karg *et al.* (2021a) found that attendance at winning games affected high-value ticket holders more than other groups. Overall, though, it is one factor in many. From a management perspective, this is largely good news, given that on-field performance is difficult to control compared to the more functional side of the season ticket product (e.g., seating comfort, timely ticket delivery, communications). The overall conclusion is that a season ticket experience can still be satisfying even if the team's or individual's performance on the field is not.

The second unique outcome of the sports STH research is the consistent finding of the importance of a strong connection between consumer and organisation – what has been called 'personal involvement' (McDonald *et al.*, 2013). For the sports manager, a key challenge is the conversion of single ticket buyers into subscribers, and ensuring that lapsed subscribers are still able to stay in touch with the occasional attendance (McDonald, 2010). This movement of fans from season ticket (the subscription product) to casual game entry (repertoire product) has to be managed carefully. Variations of season tickets have been developed to close the gap between full commitment and single game entry: a full season might comprise entry to 20 games, and 10 and five-game packages might be offered. To further combat drift from season ticket packages, many organizations have moved from using the term 'season ticket' to other expressions such as 'member' or 'patron'. A member is

given greater connection with the sports team through improved communications (e.g., advanced news stories), exclusive merchandise, and in some cases voting rights for club boards. Club officials often make a distinction between members and fans in their communications (Karg *et al.*, 2015).

Third, it is clear that overall satisfaction with a season ticket product is an accumulation of attitudes and evaluations over time. Unlike transactional products, for which each distinct consumption experience affects the next purchase decision, subscriptions decisions are less frequent. Previous research shows that the satisfaction of STHs is derived equally from factors at both the season start (speed of season ticket delivery) and end (number of wins in season) (McDonald *et al.*, 2013).

5. Renewal and churn prediction amongst sports STHs

Given that dissatisfaction has not been found to be a strong driver of non-renewal in sports STH research, the question arises as to what predicts churn. The formal contract nature of subscription markets and the often long periods of time between purchase decisions mean loyalty can be difficult to assess (Bhattacharya, 1988). There is both an attitudinal and behavioural component to loyalty; sports fans seem to switch their attitudinal loyalty rarely, but there is evidence that they can change their degree of engagement over time as their circumstances change (McDonald and Stavros, 2007). In many subscription markets (e.g., telecommunications), the presence of switching costs and attractive alternatives most heavily affects the decision to renew (Chuah *et al.*, 2017). In addition, ‘network externalities’, such as when telecommunications companies offer free services between customers of their service, can restrict movement. We see these networks in sports STH, with people often attending sports in family or social groups that are difficult to leave (Katz *et al.*, 2020).

Despite the loyalty of sports fans, non-renewal remains a fact in many leagues/teams season products, with reported rates over 20% (McDonald, 2010). Churn amongst sports STHs is increasingly being studied and modelled, and some stable findings are emerging. One of the earliest studies (McDonald and Stavros, 2007) remains one of the few to conduct exit surveys with lapsed sports STHs. The authors found that although most members joined to support the club financially, their non-renewal was driven by structural factors such as an inability to attend games due to family changes or other commitments. Again, satisfaction was not a key driver, with lapsed members being satisfied and likely to renew in future when circumstances changed. A much smaller number cited performance issues (either on field or related to member service) as the reason for non-renewal. Recognising that churn management requires both prediction and preventative action to be effective (Lemmens and Gupta, 2020), McDonald and Stavros (2007) found management actions to have largely superficial outcomes at that time. Table IV summarises the work to date.

TAKE IN TABLE IV AROUND HERE

Recent work has focused on churn prediction using surveys to measure attitudinal variables (e.g., identity, satisfaction) as the primary predictors of behaviours and relied on self-reported intentions to renew or subscribe (Funk *et al.*, 2022). Less common is work involving modelling of data stored in team databases to examine influences on actual behaviour (Karg *et al.*, 2021a; Katz *et al.*, 2020; McDonald *et al.*, 2014). Both approaches have limitations, but the combined results shed light on what drives STH renewal (and concurrently, churn).

One of the key findings from this recent work is the importance of tenure – years of subscription – in predicting renewal. This has been a common theme in the literature from Dawes (2009) through to Karg *et al.* (2021) and seen across multiple contexts (e.g., Bhattacharya, 1988). The rate of STH churn roughly halves with every consecutive year of membership through the first four years, then stabilised at an average of 6% (Funk *et al.*, 2022). The cumulative evaluations of the subscriber are thought to be behind this, with 3–4 years required to develop the experience, trust and habits needed to become a ‘committed’ STH. It is also interesting to note that sports fans often follow different teams across sports (e.g., NHL, NFL, NBA) or leagues (e.g., Premier League, Bundesliga) (McDonald *et al.*, 2010) and can hold multiple season tickets packages to different sports teams (Funk *et al.*, 2022). As such, there is some ‘switching’ across sports brands.

Another tract of research has focused on the social aspect of the STH experience and its role in renewal. Like many subscription products, sports are usually consumed socially, and the role of family and friends is critical in maintaining behaviours. Sports also allow opportunities to socialize and build a network with other fans (Doyle *et al.*, 2016) and the strength of fan-to-fan interactions have also been linked to increased loyalty (Katz *et al.*, 2018).

These issues are now being seen in newer subscription markets. Take, for example, subscription video on demand (SVOD) services such as Netflix, Apple TV +, Paramount+ or Disney+. The services themselves are moving towards lower barriers to exit with month contracts, 7-day trial periods and release of content through traditional channels (e.g., Amazon prime original movies having cinema runs). Industry studies suggest few consumers have one provider that covers their needs, instead subscribing to multiple services. A recent study in the UK found that while 76% of households had at least one subscription entertainment service; the average was 4.3 per household (Deloitte, 2021). Kantar suggests that 85% of United States households have at least one SVOD subscription, and the average is 4.7 (Sangari, 2022).

In addition, as SVOD providers seek to grow market share in what has become a quickly maturing market, the once-encouraged practice of sharing subscriptions is now being halted. Netflix initially did not discourage users from sharing password information on multi-screen subscriptions, and up to one third of users took advantage of this (Leichtman Research Group, 2022). Recently, it has been reported the company is trialling efforts to encourage conversion to paying subscriptions (Long, 2022). Sports have long grappled with this issue. In some markets, sports season tickets are openly shared and even on-sold on secondary ticket markets (e.g., Stubhub). Elsewhere, other season tickets sharing is discouraged through random identification checks and limiting resale to the official team channels only, but this is difficult to enforce. Prevailing logic is that sharing provides trial opportunities to grow sales the following season, with the lessons from electronic products being that giving full access to a premium version for a short period is more effective at conversion than giving ongoing access to a basic product (Koch and Benlian, 2017).

Clearly, with any subscription, the degree to which you make use the subscription is a factor in determining renewal. McDonald and Stavros (2007) found inability to get to games to be the major reason for non-renewal. Karg *et al.* (2021b) found that whilst the total number of games attended is correlated with non-renewal, the timing of the games attended also matters. Game attendance in the later part of the season, and attendance evenly spaced as opposed to

long intervals, were both related positively to renewal. The implication is that for subscription markets it is desirable to have customers consuming regularly throughout the subscription period and particularly as renewal time approaches. Reminders and incentives to consume (such as giveaways or ticket upgrades) are commonplace in sports markets for this reason. Given its importance, in the following section, the influences on ticket utilisation are examined.

6. No-shows and ticket utilisation

Although STHs typically pay a recurring fee for guaranteed stadium access to matches, most do not exercise this right fully and regularly miss matches (e.g., Karg *et al.*, 2021a). For most service providers, NSB is a problem, despite having already received payment for the service not used. NSB might lead to diminishing returns and operational inefficiencies, decreasing value for many stakeholders (e.g., broadcasters, spectators, sponsors). Further, because NSB is a well-known antecedent of future season ticket churn (e.g., McDonald, 2010), monitoring the club's no-show rate acts as an early warning system for prevention of churn (e.g., through interventions). The work to date in this field is summarised in Table V.

TAKE IN TABLE V AROUND HERE

Best understood as individuals who fail to show up for an appointment without prior notice (c.f., Schreyer, 2021), no-shows have been noted globally and across many industries. For instance, in the health care industry, patients miss, on average, roughly one in four appointments (c.f., Dantas *et al.*, 2018), exceeding this value significantly in some fields. Similarly, NSB has been documented in the education (e.g., McCluskey *et al.*, 2004), hospitality (e.g., Toh, 1986), and transport industry (e.g., Garrow and Koppelman, 2004), among others.

No-show behaviour in the sports industry is more prominent among STHs than among matchday ticket holders (e.g., Schreyer and Torgler, 2021), with the evidence suggesting STH no-show rates are in the lower double digits (e.g., Schreyer *et al.*, 2016). Only a few STHs seem to hold perfect attendance records (e.g., Karg *et al.*, 2021b), indicating that routine home-match access might be only one aspect among many motivating the season ticket purchase (c.f., Karg *et al.*, 2019).

Research on STH NSB suggests that factors relating to the product's anticipated quality, in particular, affect STH decision-making on matchday. For instance, as Schreyer and Torgler (2021) observed, Swiss STH NSB decreases for league matches featuring visiting teams with star-studded squads and lower geographical distance, implying geographical rivalry. Further, the anticipated match outcome might shape STH decision-making (e.g., Karg *et al.*, 2021b), although whether STHs prefer a dominant home team, and the effects of many other factors, including scheduling effects, are still unclear.

Those few authors analysing individual-level STH admission data from a club's stadium access system have typically found that STH NSB is likely to decrease with an increase in the season ticket price (e.g., Schreyer, 2019). The effect reverses once it has reached a relatively high turning point, indicating that the relationship is non-linear (e.g., Schreyer and Torgler, 2021). Similarly, though gender effects tend to be insignificant (e.g., Schreyer *et al.*, 2016), an STH's age (e.g., Amberger *et al.*, 2021) and the STH's travel distance (e.g., Schreyer *et al.*, 2018), are both likely to affect the individual's decision to attend. Again, the relationship is non-linear, indicating that relatively young/old STHs living in close/distant proximity to the stadium are

most likely to attend more frequently. Middle-aged people and those living at middle-range distances from arenas show the highest NSB. These findings suggest that STHs are not uniformly behaviourally loyal supporters, but a heterogeneous group of individuals differing both in terms of behaviour on match day and the underlying motivations to become an STH in the first place (c.f., Karg *et al.*, 2019).

While we have developed an initial understanding of the determinants of STH NSB, and continue to exploit more sophisticated research methods (e.g., Nguyen *et al.*, 2022), our knowledge of how to manage the increasingly important phenomenon is still in its infancy. That is, while most authors operating in disciplines such as health care management have already successfully exploited the use of reminders to reduce NSB to mitigate the effect of forgetfulness (e.g., Reti, 2003), it remains to be seen whether such measures can also help reduce STH NSB behaviour in sports (e.g., Schreyer *et al.*, 2020). Similarly, our understanding of the effectiveness of measures to treat the immediate cause of NSB (e.g., new payment methods, awareness campaigns, or systems of positive/negative incentives), or, in those exceptional cases where demand tends to exceed supply, exploit such predictable behaviour for benefit (e.g., by introducing strategic overbooking activities), is poor, and thus offers possibilities for future research. The same is certainly true for future empirical studies that combine elements from behavioural/observational and survey research, which might improve understanding of the as-yet underexplored psychological antecedents of NSB, including the concept of team identification (e.g., Schreyer, 2019).

7. Conclusion and future directions

Rapidly evolving subscription models are likely to change patterns of consumer behaviour. Whereas subscription markets have typically featured high levels of loyalty and consumers using small repertoires, that behaviour is altering. SVOD markets are just one example showing that consumers can have multiple subscriptions in a given category and switch consumption freely between them. Barriers to exit and entry are dropping, so practices like subscribing to an SVOD for a few months, then taking a break until content refreshes, are also being reported. In short, these subscription markets are operating like repertoire markets. This is primarily because the providers are unable to fulfil the full needs of consumers in the category. Happily, research into sports STH gives insights into successful management of subscriptions under these new conditions.

While customer satisfaction is a heavily researched area, the specific research on STH satisfaction identifies three nuanced characteristics of subscription markets. First, that subscription experiences accumulate over time to form overall evaluations. Effective subscription management requires paying attention to different stages of the customer experience over the course of the subscription (e.g., sign up, first renewal) and be prepared to make offers or stimulate engagement throughout. Recognizing that subscribers may also subscribe to competing products has led some sports organizations to find cross-promotion opportunities through common ownership or geographic relations with others. However, it must be acknowledged that customers with multiple subscriptions are in a stronger position to assess service quality and make comparisons.

Second, key aspects of the product can have variable outcomes (e.g., the sporting contest) but still satisfy customers overall if a good relationship is built and managed. For subscriptions in the curated box market, the evidence that sports STH can still be satisfied despite seeing their

team or player lose should give confidence that risks can be taken in the curation process, with some disappointments, provided the overall relationship is managed positively.

Third, the distinction between STHs and other fans is increasingly made clear by referring to ‘members’ of the team/club. Sports organisations are increasingly positioning season tickets as a way of belonging to the team or feeling a sense of ownership. Successful subscriptions appeal to both functional and emotional needs, and the sports STH approach of exclusive member content is now mimicked by many (Bischof *et al.*, 2020). Clearly, it is not possible for all products to generate deep involvement and identification like many sports clubs do, but it seems the subscriptions most likely to exhibit high loyalty and wallet share will be those that can. The others will simply be subscriptions used to attract recurring revenue, and their customer metrics are likely to reflect those of repertoire products.

Given claims about the intensity of involvement of sports STHs, it is surprising that churn remains a significant issue, but the evidence is that STH often churn at double-digit rates. Churn is related to tenure, however, and there is a clear lesson from the sports STH work that efforts to convert casual ticket buyers to subscribers must be met with consistent efforts to retain subscribers through at least their first three renewals. High service standards that reflect the level of knowledge companies have about the consumer are important. Further, the guidance is that managers looking to reduce churn should create barriers to exit by tiering benefits in a way that benefits subscribers. The decision to move from single tickets to subscription is typically driven by the consumer’s desire for a formal connection with the organisation, and sports teams provide that with special communication, access and recognition (McDonald *et al.*, 2013). Successful subscriptions appeal to both functional and emotional needs, and the sports STH approach of ‘exclusive member content’ is now mimicked by many (Bischof *et al.*, 2020).

Our review of work on ticket utilization and non-utilization also yielded insights relevant to modern subscription marketing. Perhaps most surprising is the high level of no-show occurrences even amongst holders of sports season tickets – products which are expensive and considered to reflect high involvement. There is a clear link between utilisation and life stage in sports STH products, highlighting the importance being able to adapt your offering to consumers varying needs over time. Offering packages that include children and cater for those who can’t physically attend events are two obvious adaptations. The research highlights the importance of reminders and making events exciting, such as building local rivalries in sports contests (Schreyer and Torgler, 2021). For example, there are now several yoga wear subscription services, some of which offer unique and exclusive patterns for short periods to add novelty and interest.

Recognising the social value of these products and encouraging it drives retention. Hence, many sports teams run chat forums or social gatherings, and Disney+ now has a ‘Groupwatch’ mode. Other findings are too recent to have had practical impact, but the knowledge that stable utilisation of a product, with an emphasis on use near renewal time (Karg *et al.*, 2021b), seems easily translatable to most subscription products.

The changes in subscription markets provide the most compelling directions for future research. First, as subscription products become easier to enter and exit (i.e., shorter contract periods, lower upfront costs), the likelihood is that consumers will move increasingly to treating them as repertoire products. As more (low-involvement) products move into subscription mode, and traditional subscription products are disrupted (e.g., Metromile – pay

per mile car insurance), will we see the differences between subscription and repertoire markets evaporate? Already we see strong evidence of multiple subscriptions being held in markets like SVOD; empirical work should be undertaken to determine the impact of this on churn rates and service evaluations in solely loyal customers. Other markets could be expected to follow, and tracking this change could tell us much about how consumers make choices. Similarly, as subscription products become increasingly trailable through free and freemium versions and multi-channel delivery, does the subscription model itself face extinction? If consumers can switch in and out without real barriers, subscriptions may no longer mean what they did, moving their focus to discrete interactions instead of long-term assessments of overall satisfaction. The sports STH market, with many variations on subscription products and evolving methods to both convert and retain subscribers, remains a vibrant context for research into these questions around the future of subscription markets.

References

- Allan, G. and Roy, G. (2008), "Does television crowd out spectators? New evidence from the Scottish Premier League", *Journal of Sports Economics*, Vol. 9 No. 6, pp.592-605.
- Amberger, C., Scholz, P. and Schreyer, D. (2021), "Season ticket holder no-show behavior in the Czech Republic", *SSRN Electronic Journal* (3928596), <https://doi.org/10.2139/ssrn.3928596>
- Andonova, Y., Anaza, N.A. and Bennett, D.H. (2021), "Riding the subscription box wave: Understanding the landscape, challenges, and critical success factors of the subscription box industry", *Business Horizons*, Vol 64 No. 5, pp.631-646.
- Baker, B.J., McDonald, H. and Funk, D.C. (2016), "The uniqueness of sport: Testing against marketing's empirical laws", *Sport Management Review*, Vol. 19 No. 4, pp.378-390.
- Banelis, M., Riebe, E. and Rungie, C. (2013), "Empirical evidence of repertoire size", *Australasian Marketing Journal*, Vol 21 No. 1, pp.59-65.
- Bhattacharya, C. B. (1998), "When customers are members: Customer retention in paid membership contexts", *Journal of the Academy of Marketing Science*, Vol. 26 No. 1, pp.31-44.
- Bischof, S.F., Boettger, T.M. and Rudolph, T., (2020), "Curated subscription commerce: A theoretical conceptualization", *Journal of Retailing and Consumer Services*, Vol. 54, p.101822.
- Bormann, C.A. and Stone, M.H. (2001), "The effects of eliminating alcohol in a college stadium: The Folsom Field beer ban", *Journal of American College Health*, Vol. 50 No. 2, pp.81-88.
- Brown, M., Misko, D. and Lee, D. (2009), "Membership retention in professional sports organisations", *International Journal of Sport Management and Marketing*, Vol. 6 No. 1, pp.52-67.
- Chuah, S.H.W., Marimuthu, M., Kandampully, J. and Bilgihan, A. (2017), "What drives Gen Y loyalty? Understanding the mediated moderating roles of switching costs and alternative attractiveness in the value-satisfaction-loyalty chain", *Journal of Retailing and Consumer Services*, Vol. 36, pp.124-136.
- Dantas, L.F., Fleck, J.L., Oliveira, F.L.C. and Hamacher, S. (2018), "No-shows in appointment scheduling – a systematic literature review", *Health Policy*, Vol. 122 No. 4, pp.412–421. <https://doi.org/10.1016/j.healthpol.2018.02.002>

- Dawes, J. (2009), “The effect of service price increases on customer retention: The moderating role of customer tenure and relationship breadth”, *Journal of Service Research*, Vol. 11 No. 3, pp.232-245.
- Deloitte (2021), “Media Consumer Survey 2021” available at <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/technology-media-telecommunications/au-tmt-media-consumer-survey-2021-051022.pdf>, (accessed 15 May 2023)
- Dowling, G.R. and Uncles, M. (1997), “Do customer loyalty programs really work?” *Sloan Management Review*, Vol. 38 No. 4, pp.71-82.
- Doyle, J.P., Filo, K., McDonald, H. and Funk, D. C. (2013), “Exploring sport brand double jeopardy: The link between team market share and attitudinal loyalty”, *Sport Management Review*, Vol. 16 No. 3, pp.286–297.
- Doyle, J.P., Filo, K., Lock, D., Funk, D.C. and McDonald, H. (2016), “Exploring PERMA in spectator sport: Applying positive psychology to examine the individual-level benefits of sport consumption”, *Sport Management Review*, Vol. 19 No. 5, pp.506-519.
- Driesener, C. and Rungie, C. (2022), “The Dirichlet model in marketing”, *Journal of Consumer Behaviour*, Vol. 21 No. 1, pp. 7-18. doi:<https://doi.org/10.1002/cb.1975>
- Ehrenberg, A. (1988), *Repeat-buying: Facts, Theory and Applications*, London, Oxford University Press.
- Ehrenberg, A., Uncles, M.D. and Goodhardt, G. J. (2004), “Understanding brand performance measures: using dirichlet benchmarks”, *Journal of Business Research*, Vol. 57 No. 12, pp.1307-1325. doi:10.1016/j.jbusres.2002.11.001
- Ehrenberg, A.S.C., Barnard, N., Kennedy, R.,and Bloom, H. (2002), “Brand advertising as creative publicity”, *Journal of Advertising Research*, Vol. 42 No. 4, pp.7-18. doi:10.2501/JAR-42-4-7-18
- Finch, D.J., Abeza, G., O'Reilly, N., Nadeau, J., Levallet, N., Legg, D. and Foster, B. (2022), "Season ticket holder segmentation in professional sports: An application of the sports relationship marketing model", *International Journal of Sports Marketing and Sponsorship*, Vol. 23 No. 1, pp.110-131.
- Fisher, R. and Wakefield, K. (1998), “Factors leading to group identification: A field study of winners and losers”, *Psychology and Marketing*, Vol. 15 No. 1, pp.23-40.
- Fujak, H., Frawley, S., McDonald, H. and Bush, S. (2018), “Are sport consumers unique? Consumer behavior within crowded sport markets”, *Journal of Sport Management*, Vol. 32 No. 4, pp.362-375.
- Funk, D., Alexandris, K. and McDonald, H. (2022), *Sport Consumer Behaviour: Marketing strategies*, Second Edition, Routledge, New York, N.Y.
- Garbarino, E. and Johnson, M.S. (1999), “The different roles of satisfaction, trust, and commitment in customer relationships”, *Journal of Marketing*, Vol. 63 No. 2, pp.70-87.
- Garrow, L.A. and Koppelman, F.S. (2004), “Predicting air travelers’ no-show and standby behavior using passenger and directional itinerary information”, *Journal of Air Transport Management*, Vol. 10 No. 6, pp.401–411.

- Gruneklee, N., Rundle-Thiele, S. and Kubacki, K. (2016), "What can social marketing learn from Dirichlet theory patterns in a physical activity context?", *Marketing Intelligence and Planning*, Vol. 34 No. 1, pp.41-60.
- Hulland, J. and Houston, M.B. (2020), "Why systematic review papers and meta-analyses matter: An introduction to the special issue on generalizations in marketing", *Journal of the Academy of Marketing Science*, Vol. 48, pp.351-359.
- Hunter, D. and Mason, R.M. (1999), "Supporting Handel through subscription to publications: The lists of Rodelinda and Faramondo compared", *Notes*, Vol. 56 No. 1, pp.27-93.
- Jensen, J.A., Turner, B.A., James, J., McEvoy, C., Seifried, C., Delia, E., Greenwell, T.C., Ross, S. and Walsh, P. (2016), "Forty years of BIRGing: New perspectives on Cialdini's seminal studies", *Journal of Sport Management*, Vol. 30 No. 2, pp.149-161.
- Karg, A., McDonald, H. and Leckie, C. (2019), "Channel preferences among sport consumers: Profiling media-dominant consumers", *Journal of Sport Management*, Vol. 33 No. 4, pp.303-316.
- Karg, A., McDonald, H. and Schoenberg, G. (2015), "The immediate impact of coach succession events on season ticket holder attitudes", *Sport Marketing Quarterly*, Vol. 24 No. 1, pp.30-42.
- Karg, A., Nguyen, J. and McDonald, H. (2021a), "Understanding season ticket holder attendance decisions", *Journal of Sport Management*, Vol. 35 No. 3, pp.239-253.
- Karg, A., Tamaddoni, A., McDonald, H. and Ewing, M. (2021b), "Predicting season ticket holder retention using rich behavioral data", *Journal of Sport Management*, Vol. 35 No. 5, pp.426-439.
- Katz, M., Heere, B. and Melton, E. N. (2020), "Predicting fan behavior through egocentric network analysis: Examining season-ticket holder renewal", *Journal of Sport Management*, Vol. 34 No. 3, pp.217-228.
- Katz, M., Ward, R.M. and Heere, B. (2018), "Explaining attendance through the brand community triad: Integrating network theory and team identification", *Sport Management Review*, Vol. 21 No. 2, pp.176–188. doi: 10.1016/j.smr.2017.06.004
- Koch, O.F. and Benlian, A. (2017), "The effect of free sampling strategies on freemium conversion rates", *Electronic Markets*, Vol. 27, No. 1, pp.67-76.
- Laverie, D.A. and Arnett, D.B. (2000), "Factors affecting fan attendance: The influence of identity salience and satisfaction", *Journal of Leisure Research*, Vol. 32 No. 2, pp.225-246.
- Lee, M.A., Kunkel, T., Funk, D.C., Karg, A. and McDonald, H. (2020), "Built to last: Relationship quality management for season ticket holders", *European Sport Management Quarterly*, Vol. 20 No. 3, pp.364-384.
- Lemmens, A. and Gupta, S. (2020), "Managing churn to maximize profits", *Marketing Science*, Vol. 39 No. 5, pp.956-973.
- Leichtman Research Group (2022), "33% with Netflix share the service", <https://www.leichtmanresearch.com/33-with-netflix-share-the-service/> (accessed March 29th 2022).

- Lewis, M., Wang, Y. and Wu, C. (2019), "Season ticket buyer value and secondary market options", *Marketing Science*, Vol. 38 No. 6, pp.973-993.
- Lock, D. and Heere, B. (2017), "Identity crisis: A theoretical analysis of 'team identification' research", *European Sport Management Quarterly*, Vol. 17 No. 4, pp.413-435.
- Long, C. (2022), "Paying to share Netflix outside your household", <https://about.netflix.com/en/news/paying-to-share-netflix-outside-your-household> (accessed 17th March 2022)
- McCluskey, C.P., Bynum, T.S. and Patchin, J. W. (2004), "Reducing chronic absenteeism: An assessment of an early truancy initiative", *Crime and Delinquency*, Vol. 50 No. 2, pp.214–234. <https://www.doi.org/10.1177/0011128703258942>
- McDonald, H. (2010), "The factors influencing churn rates among season ticket holders: An empirical analysis", *Journal of Sport Management*, Vol. 24 No. 6, pp.676–701. <https://doi.org/10.1123/jsm.24.6.676>
- McDonald, H., Biscaia, R., Yoshida, M., Doyle, J. and Conduit, J. (2022), "Customer engagement in sport: An updated review and research agenda", *Journal of Sport Management*, Vol. 36 No. 3, pp.289-304.
- McDonald, H., Karg, A. J. and Leckie, C. (2014), "Predicting which season ticket holders will renew and which will not. *European Sport Management Quarterly*, 14(5), 503-520.
- McDonald, H., Karg, A. J., and Lock, D. (2010). Leveraging fans' global football allegiances to build domestic league support", *Asia Pacific Journal of Marketing and Logistics*, Vol. 22 No. 1, pp.67-89.
- McDonald, H., Karg, A. and Vocino, A. (2013), "Measuring season ticket holder satisfaction: Rational scale development and longitudinal validation", *Sport Management Review*, Vol. 16 No. 1, pp.41-53.
- McDonald, H., Leckie, C., Karg, A. and Zubcevic-Basic, N. (2018), "Female season ticket holders: How their satisfaction is derived differently from males", *European Sport Management Quarterly*, Vol. 18 No. 2, pp.156-174.
- McDonald, H. and Shaw, R. (2005), "Satisfaction as a predictor of football club members' intentions", *International Journal of Sports Marketing and Sponsorship*, Vol. 7 No. 1, pp.75-81.
- McDonald, H. and Sherry, E. (2010), "Evaluating sport club board performance: A customer perspective", *Journal of Sport Management*, Vol. 24 No. 5, pp.524-543.
- McDonald, H. and Stavros, C. (2007), "A defection analysis of lapsed season ticket holders: A consumer and organizational study", *Sport Marketing Quarterly*, Vol. 16, pp.218-229.
- Mittal, V. and Kamakura, W. A. (2001), "Satisfaction, repurchase intent, and repurchase behavior: Investigating the moderating effect of customer characteristics", *Journal of Marketing Research*, Vol. 38 No. 1, pp.131-142.
- Munn, Z., Stern, C., Aromataris, E., Lockwood, C. and Jordan, Z. (2018), "What kind of systematic review should I conduct? A proposed typology and guidance for systematic reviewers in the medical and health sciences", *BMC Medical Research Methodology*, Vol. 18 No. 1, p.5.

- Nguyen, J.K., Karg, A., Valadkhani, A. and McDonald, H. (2022), "Predicting individual event attendance with machine learning: A 'step-forward' approach", *Applied Economics*, Vol. 54 No. 27, pp.3138-3153.
- Rayne, D., Pervan, S., McDonald, H. and Leckie, C. (2021), "Examining corporate social responsibility awareness: An unaided recall measure", *Journal of Consumer Behaviour*, Vol. 20 No. 5, pp.1129-1139.
- Reese, J.T. (Ed.) (2013), *Ticket Operations and Sales Management in Sport*, Fitness Information Technology, West Virginia.
- Reti, S. (2003), Improving outpatient department efficiency: A randomized controlled trial comparing hospital and general-practice telephone reminders. *The New Zealand Medical Journal*, Vol. 116 No. 1175. PMID: 12838354.
- Sangari, N. (2022), "85% of US households have a video subscription service", <https://www.kantar.com/north-america/inspiration/technology/85-per-cent-of-us-households-have-a-video-subscription-service> (accessed 14 March 2022)
- Schreyer, D. (2019), "Football spectator no-show behaviour in the German Bundesliga", *Applied Economics*, Vol. 51 No. 45, pp.4882–4901. <https://doi.org/10.1080/00036846.2019.1602709>
- Schreyer, D. (2021), "No-shows", Pedersen, P.M. (Ed.), *Encyclopedia of Sport Management*, Edward Elgar Publishing, Cheltenham, UK, pp.331-333.
- Schreyer, D., Schmidt, S.L. and Torgler, B. (2016), „Against all odds? Exploring the role of game outcome uncertainty in season ticket holders’ stadium attendance demand”, *Journal of Economic Psychology*, Vol. 56, pp.192-217. <https://doi.org/10.1016/j.joep.2016.07.006>
- Schreyer, D., Schmidt, S.L. and Torgler, B. (2018), "Predicting season ticket holder loyalty using geographical information", *Applied Economics Letters*, Vol. 25 No. 4, pp.272-277. <https://doi.org/10.1080/13504851.2017.1316822>
- Schreyer, D., Schmidt, S.L. and Torgler, B. (2020), "Using reminders with different reward opportunities to reduce no-show behavior: Empirical evidence from a large-scale field experiment in professional sports", *SSRN Electronic Journal* (3703040). <https://doi.org/10.2139/ssrn.3703040>
- Schreyer, D., and Torgler, B. (2021), "Predicting season ticket holder no-show behaviour: More nuanced evidence from Switzerland", *Applied Economics*, Vol. 53 No. 48, pp.5549–5566. <https://doi.org/10.1080/00036846.2021.1925081>
- Scriven, J., Yabar, D.P.B., Clemente, M. and Bennett, D. (2015), "The competitive landscape for leisure: Why wide appeal matters", *International Journal of Market Research*, Vol. 57 No. 2, pp.277-298.
- Sharp, B. (2013), *Marketing: Theory, Evidence, Practice*, Oxford University Press, South Melbourne.
- Sharp, B. and Wright, M. (1999), "There are two types of repeat purchase markets", *28th European Marketing Academy Conference* (Vol. 400), Humboldt University, Berlin.
- Sharp, B., Wright, M. and Goodhardt, G. (2002), "Purchase loyalty is polarised into either repertoire or subscription patterns", *Australasian Marketing Journal*, Vol. 10 No. 3, pp.7–20.

- Sharp, B., Wright, M., Dawes, J., Driesener, C., Meyer-Waarden, L., Stocchi, L. and Stern, P. (2012), "It's a Dirichlet world: Modeling individuals' loyalties reveals how brands compete, grow, and decline", *Journal of Advertising Research*, Vol. 52 No. 2, pp.203-213.
- Shaw, R.N. and McDonald, H. (2006), "Season-ticket holder satisfaction and sponsor-related behaviour: Evidence of a positive relationship", *International Journal of Sports Marketing and Sponsorship*, Vol. 7 No. 4, pp.23-30.
- Snyder, H. (2019), "Literature review as a research methodology: An overview and guidelines", *Journal of Business Research*, Vol. 104, pp.333-339. doi:<https://doi.org/10.1016/j.jbusres.2019.07.039>
- Tapp, A. (2004), "The loyalty of football fans – We'll support you evermore?", *Journal of Database Marketing and Customer Strategy Management*, Vol. 11 No. 3, pp.203-215.
- Tranfield, D., Denyer, D. and Smart, P. (2003), "Towards a methodology for developing evidence-informed management knowledge by means of systematic review", *British Journal of Management*, Vol. 14 No. 3, pp.207-222. doi:<https://doi.org/10.1111/1467-8551.00375>
- Trinh, G.T. (2018), "The attendance at sporting events: A generalized theory and its implications", *International Journal of Market Research*, Vol. 60 No. 3, pp.232-237.
- Toh, R.S. (1986), "Coping with no-shows, late cancellations and oversales: American hotels out-do the airlines", *International Journal of Hospitality Management*, Vol. 5 No. 3, pp.121–125. [https://doi.org/10.1016/0278-4319\(86\)90004-6](https://doi.org/10.1016/0278-4319(86)90004-6)
- Won, D. and Lee, C. (2022), "What influences season ticket holders' satisfaction and renewal intention? The role of season ticket service quality", *Managing Sport and Leisure*. doi:[10.1080/23750472.2022.2072372](https://doi.org/10.1080/23750472.2022.2072372)
- Zboja, J.J., Laird, M.D. and Bouchet, A. (2016), "The moderating role of consumer entitlement on the relationship of value with customer satisfaction", *Journal of Consumer Behaviour*, Vol. 15 No. 3, pp.216-224.

Table I: Records identified across databases

Databases	Records identified
Scopus	60
Business Source Ultimate	48
Web of Science	40
Emerald	12
Total	160

Table II: Qualified records by season ticket holder topic

Topic	Qualified records
STH satisfaction	12
STH renewal/churn	14
STH attendance/no-show	9
Total	28

Table III: STH satisfaction

Citation	Research context	Key research contributions/findings
(Karg <i>et al.</i> , 2019)	Three Australian Football League (AFL) teams	Segments STHs based on consumption preferences, comparing media-dominant and event-dominant groups. The groups had similar levels of overall satisfaction but differed in terms of drivers of this satisfaction. Services and home ground components were more important for event-dominant STHs, while membership arrangements, communication, personal involvement and club administration were more important drivers of satisfaction for media-dominant STHs. On-field performance had a similar impact across STH groups.
(Karg <i>et al.</i> , 2015)	Two AFL teams	Increased STH overall satisfaction when a new coach was announced, but no effect on satisfaction when a coach was removed.
(McDonald, 2010)	Two AFL teams	STH satisfaction was associated with renewal, but the satisfaction of lapsed STHs was only slightly less than that of renewing STHs. Overall, lapsed buyers were still satisfied. Higher rates of renewal were associated with attending more games and longer tenure. However, there were no meaningful differences in satisfaction across STH segments based on attendance and tenure. Key drivers of STH satisfaction were ticketing arrangements, service to members and personal involvement. On-field performance was not a main factor driving satisfaction.
(McDonald <i>et al.</i> , 2013)	Australian A-League football (soccer) club	The longitudinal study developed a 19-item scales of STH satisfaction and five key constructs of service to members, personal involvement, club administration conduct, on-field performance, and characteristics of the club's home ground.
(McDonald <i>et al.</i> , 2018)	Twelve AFL teams	Male and female STHs differed in the relative importance of different factors as antecedents for overall satisfaction. Service to members and team administration were greater for female STHs, whereas on-field performance and personal involvement were greater for male STHs. No difference was found in the influence of team administration across genders. The patterns were broadly consistent across the 12 teams in the study.
(McDonald and Shaw, 2005)	Eight AFL teams	The components with the biggest contribution towards STH satisfaction were ticketing, service to members, communication, and the home ground. More moderate contributions came from on-field performance and club administration. Overall satisfaction was moderately positively correlated with likelihood of renewing membership and only weakly associated with increasing membership level. Satisfaction has strong correlations with perceptions of the membership being good value and the price paid being fair.

(McDonald and Sherry, 2010)	Thirteen AFL teams and an Australian A-League football (soccer) club	Across all clubs, the impact of STH inclusions on satisfaction was greater than the impacts from either board performance or on-field performance.
(McDonald and Stavros, 2007)	Four AFL clubs and one National Rugby League (NRL) club	No significant differences in overall satisfaction between lapsed and renewing members. Satisfaction has a significant but weak relationship with likelihood of lapsed members rejoining in the future.
(Rayne <i>et al.</i> , 2021)	Three AFL teams	STH satisfaction was positively associated with charity partner brand recall.
(Shaw and McDonald, 2006)	Six AFL clubs	STH satisfaction had a weak positive relationship with a favorable orientation towards products and brands from team sponsors.
(Won and Lee, 2022)	Major League Baseball team	STH satisfaction was positively associated with season ticket service quality, interaction quality, entertainment quality, fan identification and gender (female). Satisfaction was also associated with renewal intention.
(Zboja <i>et al.</i> , 2016)	National Hockey League (NHL) franchise	STHs' perceptions of value and service quality had positive effects on satisfaction. The relationship between value and satisfaction was moderated by consumer entitlement, in which the value and satisfaction association was greater among STHs with low consumer entitlement.

Table IV: STH renewal and churn

Citation	Research context	Key research contributions/findings
(Bormann and Stone, 2001)	University of Colorado at Boulder Football (1996–1997)	No relationship identified between STH attitudes towards an alcohol ban and likelihood of renewing tickets. Money was the main reason provided for not renewing (ticket prices, annual donation, or value).
(Brown <i>et al.</i> , 2009)	One AFL team	STHs’ intention to renew is influenced by perceptions of team performance and sportscape features. Advertising recall frequency also has positive relationship with renewal intention. Fan identification and presence of star players not related to renewal intentions.
(Karg <i>et al.</i> , 2019)	Three AFL teams	The study segments STHs based on consumption preferences, with a focus on comparing media-dominant and event-dominant groups. There was no difference in intention to renew season tickets between these groups, but the event-dominant group had a greater average tenure (years as member).
(Karg <i>et al.</i> , 2015)	Two AFL teams	STH intention to renew increased when a new coach, but not the removal of a coach, was announced.
(Karg <i>et al.</i> , 2021b)	Professional Australian Sports team (2014-2016)	STH retention was most positively related to tenure (total and consecutive years), team performance (games won when attending) and attendance (total number of games attended and timing consistency). Lower churn rates were measured for higher price/quality season ticket packages (e.g., reserved seats, access to more games). For the higher-tier STHs, team performance and attendance were better predictors of churn.
(Katz <i>et al.</i> , 2020)	United States college football team	STHs that attended games with a larger and more heterogenous networks were more likely to renew their tickets. STHs’ renewal intention or past attendance had no statistically significant effects on observed ticket renewal.
(Lee <i>et al.</i> , 2020)	Professional Australian Football team	Relationship quality has a significant positive effect on intention to remain an STH. Satisfaction, trust, commitment and reciprocity are dimensions of relationship quality.
(Lewis <i>et al.</i> , 2019)	Major League Baseball team (2011-2016)	Higher rates of season ticket renewal among higher-quality seat tiers. STH attendance rates and dollars recouped on secondary markets have positive associations with ticket renewal.
(McDonald, 2010)	Two AFL teams	Higher retention rates are found among STHs who attend more games and have had their membership for more years. STHs in their first year are the mostly likely to churn, then this decreases with years of membership. Satisfaction is only slightly higher among STHs that renew than those that lapse.

(McDonald <i>et al.</i> , 2014)	Five AFL teams	Purchase probabilities (self-reported) provide very good estimates of aggregate renewal rates. When they were combined with relationship tenure and ticket utilization (attendance), prediction of STHs most likely to churn improved.
(McDonald and Shaw, 2005)	Eight AFL teams	Overall satisfaction was only moderately positively correlated with likelihood of renewing membership. Overall satisfaction had a very weak positive correlation with likelihood of increasing membership level.
(McDonald and Stavros, 2007)	Four AFL clubs and one National Rugby League (NRL) club	The main self-reported reasons for lapsed memberships were related to lifestyle restraints on attendance (e.g., changes in family structure, other commitments). No significant differences in overall satisfaction or expectation between lapsed and renewing members were detected.
(Tapp, 2004)	Premier League football club (1996-2000)	Compared to current STHs, lapsed STHs were more likely to self-report as leading a complicated life and having a child under the age of 5. Lapsed STHs did not differ in their satisfaction with the team or preference for winning vs entertaining matches. Higher rates of renewal were found among older STHs.
(Won and Lee, 2022)	Major League Baseball team	STHs' intention to renew was positively associated with factors such as STH satisfaction, season ticket service quality, interaction quality, fan identification and tenure.

Table V: Season Ticket No-Shows/Attendance

Citation	Research context	Key research contributions/findings
(Allan and Roy, 2008)	Scottish Premier League Soccer Matches (2002–2003)	No significant effects of live television broadcast, scheduling, form or prospect of winning on STH game attendance. Lower STH attendance among games between Rangers and Celtic (Old Firm Clubs), potentially due to security concerns.
(Finch <i>et al.</i> , 2022)	North American professional sports club	No-show rates vary across STH segments, based on the sports relationship marketing model.
(Karg <i>et al.</i> , 2021a)	One AFL team	Higher probability of attendance for STH who were older, female and paid higher prices for their tickets. Tenure follows a U shape, with lower attendance with mid-range tenure. Attendance at consecutive games was uncommon. Team form, likelihood of winning and outcome uncertainty are positively associated with attendance. However, these effects are lower among longer-tenured STHs and those that paid mid-range prices. Game scheduling, rainfall and television broadcast also influenced game attendance.
(Lewis <i>et al.</i> , 2019)	Major League Baseball Team (2011–2016)	STHs in higher-quality seat tiers are more likely to attend games and less likely to list seats for resale.
(Nguyen <i>et al.</i> , 2022)	Australian professional football (AFL) club	Machine learning approaches such as XGBoost and support vector machine (SVM) improve predictions of individual attendance.
(Schreyer, 2019)	German Bundesliga (2014–2018)	No-show behavior is more common among STHs than holders of game day or free tickets. Higher rates of game attendance among STHs with higher-priced tickets, who attend alone, are within closer geographical distances, have stronger team identification and/or are rather young or rather old. No significant effects of relationship status, gender, tenure or tickets being in a standing area.
(Schreyer <i>et al.</i> , 2016)	German Bundesliga football club (2012–2013)	Higher STH game attendance associated with game outcome uncertainty, but this varies across groups. The effects of game outcome uncertainty are greater among STH with comparatively higher coordination costs to attend (e.g., geographical distance, holding several tickets, and younger age).
(Schreyer <i>et al.</i> , 2018)	German Bundesliga football club (2012–2013)	Game attendance follows a U-shaped relationship with geographical distance, with higher attendance among STHs in close or distant proximity to the stadium. Higher game attendance is also associated with higher-priced tickets, seats closer to the field and STHs with fewer tickets.

<p>(Schreyer and Torgler, 2021)</p>	<p>FC Basel in the Swiss Super League (2013–2016)</p>	<p>Significantly higher no-show rates for season tickets than match day tickets.</p> <p>STH no-show habits are a strong predictor of game attendance. The probability of game attendance decreases with the number of previous games not attended and distance from stadium. Differences are also due to season ticket types, with lower attendance in standing and family sections of the stadium and for free or relatively expensive tickets. No significant effects of gender. There is an inverted U-shaped relationship with age, with higher attendance for younger and older STHs.</p>
-------------------------------------	---	--