## Running Head: CONSUMER BEHAVIOUR IN NEW SPORT LEAGUES

TITLE: Consumer Behaviour towards a New League and Teams: Television Audiences as a Measure of Market Acceptance

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#### Abstract

**Research question:** Research into new sport teams has maintained a narrow focus on season ticket holders. This is redressed in this study by determining whether immediate preferences towards new local teams can be observed in the broader viewing behaviour of the general population within local markets. The consumption of new sport teams is then tracked longitudinally to understand the influence of consumer novelty on market behaviour. **Research methods:** The study analysed television ratings data of a new Australian cricket league. The period of analysis spanned five seasons from 2013/2014 through to 2017/2018. Data analysis included independent samples *t* tests and hierarchical linear modelling.

**Results and findings:** Each local market exhibited an immediate preference for their local team. Local viewing preference for local teams did not grow over time, with the relative audience of local and non-local team fixtures increasing proportionally over the period. The league appears to be towards the end of its novelty phase, evidenced by a stabilisation in viewing commitment yet retraction in base audience size between season three and five. **Implications:** The ability of new teams to solicit immediate local viewing preferences within the general population confirms the salience of geography as a foundational component of team identity. New teams should strategically consider their alignment to a suburban, city, state, or regional identity. That preference towards local teams did not increase within local markets reflects a critical theoretic distinction from more identified fan segments in which connection to team is thought to typically grow over time.

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# Consumer Behaviour towards a New League and Teams: Television Audiences as a Measure of Market Acceptance

Since the inception of the T20 cricket in 2003, the format has evolved from an experimental novelty to a substantial part of the international cricket calendar. In the process, it has driven the revitalisation of a sport that had shown signs of stagnation (Kitchin, 2008). This revitalisation has centered on harnessing T20 cricket as a new sport product targeted towards new and weakly attached fans (Paton & Cooke, 2011). T20 leagues, therefore, provide an ideal setting to research sport consumer behaviour towards new sport products, given they involve the formation of many new teams at such a commercial scale to allow for the exploration of the broader market response to their creation.

The Big Bash League (BBL), the focus of this article, was introduced to Australia's crowded sport marketplace in 2011/2012. Significantly, the league's early strategic shift to national free-to-air (FTA) television coverage affords an opportunity to extend current understanding of consumer behaviour in relation to new and relatively embryonic sport products to examine two theoretical problems. Consumer connections and identification with new teams have been studied extensively over the last 20 years (James, Kolbe, & Trail, 2002; Katz & Heere, 2016; Lock, Darcy, & Taylor, 2009; Lock, Taylor, & Darcy, 2011; Lock, Taylor, Funk, & Darcy, 2012; Lock, Funk, Doyle, & McDonald, 2014). This work, however, has typically explored the behaviour of *season ticket holders* (STH) or regular attendees, to draw conclusions about "consumers" of new teams, broadly. While this cohort represents a logical focus of analysis given their direct consumption; they are only a small segment of a new team's consumers. As noted by Tainsky and Jasielec (2014): "the singular focus on attendance limits our understanding of fandom given the breadth of consumption choices" (p. 94). To advance previous work, we use television ratings data to develop understanding of

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market consumption towards relatively new leagues and teams. In doing so, we respond to Kunkel, Funk, & King's (2014) call to address a deficiency in league-level research.

The combination of the BBL context and market-level methodological approach allows for the examination of two theoretical problems. First, we draw on research that investigates the influences external groups and communities (Delia, 2015; Heere & James, 2007; Lock & Funk, 2016; Roccas & Brewer, 2002) to examine the extent to which existing group memberships create consumption biases in television viewership markets. This provides a basis to discern whether initial consumption of recent teams is related to identification with a community or city. In doing so, we retest previous findings from crosssectional studies that suggest the community in which a team is situated plays a powerful role in the consumer identity development process (e.g., Heere, Walker, Yoshida, Ko, Jordan, & James, 2011; Kolbe & James, 2000; Lock et al., 2011). In replacing the previous T20 competition (2005-2011), which was aligned to traditional state-based structures, with the new city-based franchises, Cricket Australia (CA) realigned the cues it provided about the group identities surrounding BBL teams. It did so by distancing the BBL from cricket's traditional identity (Cricket Australia, 2011) and sought to emphasise each team's geographic identity to target new consumers. As such, the BBL offers a prime context to examine whether geographic identity creates biases in market-level viewership patterns for new teams.

Second, the response of markets to new sport product launches is unclear. Consumers seek out new and different experiences in accordance with novelty seeking behaviour (Hirschman, 1980). According to some previous research, consumers of new sport leagues conform to this phenomenon (Mahony, Nakazawa, Funk, James, & Gladden, 2002). Conversely, some scholarship from within the marketing domain advances the antithesis: that new repeat-purchase consumer products quickly behave like established brands (Ehrenberg & Goodhardt, 2000; Trinh, Romaniuk, & Tanusondjaja, 2016). By analysing television audience data over the five seasons the league has been exposed to a national audience, we specifically explore two contrasting explanatory theories surrounding the consumer adoption of new sport products. This extends upon extant theory on the durability of interest in new teams.

### **Literature Review**

Television viewership has retained a relatively low status in the hierarchy of expressed fan consumption within traditional models of fan development (Tainsky & Jasielec, 2014). Correspondingly, while behavioural preferences towards local teams have been consistently observed in patterns of sport television consumption (Noll, 2007; Mills, Mondello, Tainsky, 2010; Tainsky & Jasielec, 2014), the implications of such a relationship upon team identification have been underdeveloped for two particular reasons. Firstly, the analysis of television viewership data has primarily occurred from an econometric perspective (Feddersen, & Rott, 2011; Tainsky, 2010; Tainksy & McEvoy, 2012). Such econometric studies of broadcast consumption have focused on overall determinants of demand (Artero, & Bandrés, 2018; Baimbridge, Cameron, & Dawson, 1996), more so than their managerial or marketing implications, with perhaps the exception of outcome uncertainty research (Alavy, Gaskell, Leach, & Szymanski, 2010; Buraimo & Simons, 2009; Forrest, Simmons, & Buraimo, 2005, 2008, 2015).

Secondly traditional models of sport consumption have placed repeat and consistent attendance at the end point of the consumption spectrum (Karg, McDonald and Leckie, 2019). As the authors note: "the bulk of existing work on sport fandom maintains a high importance on live attendance or physical participation as the ultimate expression of fandom" (p. 313). Correspondingly, media consumption has been considered an antecedent stage of fan development (Pritchard & Funk, 2006). Yet Karg and colleagues not only illustrate that "media-dominant" consumers outnumber "event dominant" tenfold, but that media consumption represents a channel preference rather than simply an antecedent fan behaviour. Scholarly understanding of media consumption from a fan development perspective therefore remains comparatively nascent (Karg et al., 2019).

Although it appears elementary that local teams generate larger local audiences, the potential significance to team identification has perhaps yet to be fully embraced. Tainksy and Jaiselec's (2014) confirmation of local team viewing preferences in relation to community identification epitomises the potential significance found within this simple observation: "While this is anything but a surprising result to researchers of sport, it is nonetheless meaningful to reflect on the role of local community in fandom, especially as our quantity of sport entertainment options grow" (p. 104). The influence of identity within broadcast viewership was also observed by Tainksy and Stodolska (2010): "It was more than the game itself that some fans tuned in to watch. As pictures of the city landscape, the stadium, and the crowd infuse telecasts in between plays and on either side of commercial breaks...these may add value to fans and potentially influence the decision of some fans to tune in" (p. 811). The links between television consumption and social identity are also apparent in individual sports, with Konjer, Meier and Wedeking (2017) finding that German audiences were 50% larger for matches featuring nationals. At present, however, we lack a theoretical perspective to make sense of why local audiences are more likely to consume teams situated within their community.

### **Social Identification and External Group Identities**

A major question facing consumer researchers and sport marketers is why consumers develop preferences for specific teams. Responses to this question are vast and clearly elucidate the importance of vicarious achievement (Cialdini, Borden, Thorne, & Walker, 1976; Trail et al., 2012), domain involvement (e.g., Fisher & Wakefield, 1997; Kahle, Kambara, & Rose, 1996; Lock et al., 2011; Funk, Mahony, & Ridinger, 2002), tradition and community (Delia & James, 2018; Heere, Walker, et al., 2011; Jones, 2000; Kolbe & James, 2000) and socialisation (Funk & James, 2001; James, 2001). Researchers have drawn on the social identity approach (Abrams & Hogg, 1990), to frame studies of each of the aforementioned factors. The central point of the social identity approach (i.e., social identity and self-categorization theories; cf. Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) is that groups are important frames of reference that enable individuals to make sense of their self in relation to other people and groups in society (Turner & Reynolds, 2008). Furthermore, when a group identity is salient (i.e., active) in a person's self-concept, it leads to thought and action that align with group norms (Reed, 2002). This underscores why consumer researchers have used the social identity approach to explain the biases fans demonstrate towards their own team or group, such as buying merchandise or attending games (Lock & Heere, 2017).

The social identity approach has been used to explore why people support certain teams (e.g., Lock et al., 2011). However, the dominant standpoint used to explore why fans attend and identify with sport teams stems from research that typically investigates psychological constructs such as motivation and attitudes (e.g., Funk, Filo, Beaton, & Pritchard, 2009; Funk, Mahony, Nakazawa, & Hiriwaka, 2001; Trail & James, 2001; Wann, 1995). More recently, researchers have started to explore broader social and sociological factors that shape preferences for sport teams (e.g., Heere & James, 2007; Trail, Robinson, Dick, & Gillentine, 2003). A key contribution of this work is to show that sport teams are not solitary points of attachment (e.g., Trail et al., 2003) or identity (Heere & James, 2007). Instead, consumers tend to identify with a range of team features, which include its stadia, traditions, and players (Delia & James, 2018). Heere and James (2007) initiated the reinvigorated focus on other groups that influence team identification, critiquing the narrow focus of earlier work, arguing for research into the influences of associated communities (e.g., city, state, university) on consumption. For example, the city or state a person inhabits, the church or university to which he or she belongs are all – potentially (but not definitely) – sources of meaningful social identity. As such, sport teams can be both a direct source of group identity as well as a symbolic representation of other communities that shape team-related behaviours (Heere & James, 2007).

Researchers have demonstrated that associated groups and communities interrelate, overlap, and shape consumer behaviour (Delia, 2015; Delia & James, 2018; Heere, Walker, et al., 2011; Lock & Funk, 2016). There is quantitative and qualitative evidence that external groups have positive effects on team identification or related constructs (i.e., attachment, see Kolbe & James, 2001). Attachment to city and community has been found to be among the strongest influences on team attachment in varied case settings, including the Cleveland Browns (Kolbe & James 2000), Luton Town Football Club (Jones, 2000) and Seattle Sounders (Uhlman & Trail, 2012). Heere et al. (2011) found via a multidimensional quantitative survey that state and city identities had a positive relationship with university identification which, in turn, correlated with team identification. Lock et al. (2011) found that consumers in Australia displayed early preferences for a new team purely because it represented their home city.

While it is unsurprising that community identification is an important reason for identification with established teams and leagues, we know less about consumption of new teams in new competitions. Furthermore, the studies discussed drew on small samples of identified consumers. Therefore, we do not know (a) whether community identification shapes consumption at a broader market level, and (b) at the market level, if geographic identity shapes preference for new city franchises in new competitions. It has been shown that individuals can develop deep psychological connections with new sport products/teams before they have physically played a match (James et al., 2002; Kunkel, Doyle, Funk, Du, &

McDonald, 2016) and such connections should lead to a corresponding viewing preference. However, highly identified fans represent a fraction of the overall market.

At the market level, where most consumers may know little about a new team, external group identities such as identification with the community in which a person lives (cf. Delia & James, 2018; Kolbe & James, 2001; Heere et al., 2011; Lock et al., 2011) is potentially important to the process of identity formation. We do not argue that all inhabitants of a city see their home community as a meaningful description of self. However, where individuals do identify with the city in which they live, the social identity approach presents a framework to understand why it would lead to an increased likelihood of consuming a team that *extended or contributed to the city's identity* (cf. Tajfel, 1982). In contrast, if the market does not perceive a genuine connection between a new team and the identity of the city, there may be little reason to exhibit a viewing preference towards a local team compared to nonlocal teams.

Testing this proposition was feasible in the context of the BBL competition, given the league was designed and conceived through market research consultancy rather than community driven initiatives. Notably, consumers were unlikely to carry forward existing connections from the previous competition with respect to team performance. The previous KFC T20 league saw weak competitive balance in which two States won five of six tournaments. However these two States were each allocated two local franchises in the new competition, ensuring that previous success could not to be attributed to a particular new franchise. Furthermore, work by Sung, Mills and Mondello (2019) determined there to be little evidence that prior year performance is a strong indicator of current season viewership even among existing teams, although their finding related to different empirical context to that studied here. With such considerations in mind, we hypothesise that identification with

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the city in which a team is located will result in local viewers showing an immediate viewing preference for local teams, despite such teams having embryonic team identities.

 $H_1$ : Teams will have significantly higher television audiences in their home city than teams from other markets in the first season of free-to-air broadcast.

Extending upon this initial hypothesis, we consider whether the viewing preferences of fans towards their local team changes longitudinally. It would appear intuitive that new sport teams develop loyalty and preference among their fans over time (Funk & James, 2006; Mahony et al., 2002; Olson & Jacoby, 1971). Connection to a team may therefore grow iteratively through direct experiences, consistent with theories of escalating commitment (James et al., 2002; Mullin, Hardy, & Sutton, 1993). It is noteworthy that escalating identification is a behavioural manifestation of fandom (Lock et al., 2012). Previous research has confirmed that fans can exhibit psychological connections to teams in the absence of game experiences (James et al., 2002). These connections can often commence from a strong starting point and remain stable even during extended periods of poor performance (Lock, Funk, Doyle, & McDonald, 2014). However, these issues have not been explored at the market level or in different city-based markets. We therefore hypothesise that viewer preference towards local teams should increase over time, given that time allows such teams to develop their identity within their market.

 $H_2$ : Consumer preference towards local teams will increase over time.

### New Sport Leagues: Consumer Novelty or Stability?

Consumer preferences towards new products are said to be impacted by novelty seeking behaviour, reflecting an inherent human desire to seek out the new and different (Hirschman, 1980). The influence of novelty in the context of consumer behaviour has been extensively examined (Baumgartner & Steenkamp, 1996; Hansen, 1972; Manning, Bearden, & Madden, 1995; Sheth, Newman, & Gross, 1991). Sheth et al. (1991) argue that novelty is encapsulated in the *epistemic value* of a product: "the perceived utility acquired from an alternative's capacity to arouse curiosity, provide novelty, and/or satisfy a desire" (p. 162). As consumers strive to optimise their stimulation and arousal (Berlyne, 1960), the novelty effect results in a pattern of increased initial interest towards new products followed by a corresponding reduction due to inherent novelty seeking behaviour external to the product itself.

The impact of novelty upon new product consumption however remains contested in practice (Ehrenberg, Uncles, & Goodhart, 2004). Wright and Sharp (2001) found that new brands behaved like existing brands within 6 to 8 weeks of market entrance. Ehrenberg and Goodhart's (2000) study determined that new brands exhibit "normal" levels of consumer purchase rates virtually from inception. Similar findings were reported in other studies of consumer behaviour (Hoek, Kearns, & Wilkinson, 2003; Wellan & Ehrenberg, 1988). These findings are underpinned by the premise that buyers of new brands are still likely to be experienced buyers of the product category. Therefore, the event of buying a new brand is unlikely to be a radical departure from existing behaviour (Trinh, et al., 2016). Pertinent to this research, such predictable consumption patterns have been found to hold true in both television viewing behaviours (Barwise & Ehrenberg, 1988) and the broader leisure context (Scriven, Yábar, Clemente, & Bennett, 2015).

In the sport context, there has been limited exploration of consumer novelty (Park, Mahoney, & Kim, 2011). One notable exception is the superstar athlete effect (Shapiro, DeSchriver, & Rascher, 2017; Jewell, 2017). Shapiro et al. (2017) determined that the novelty effect of David Beckham's signing to Major League Soccer (MLS) was largely confined to the first of six seasons. More broadly, Mahony et al. (2002) noted that many consumers view new leagues as a novelty in early years, allowing for exploratory interest and experimental consumption. However, once this novelty period fades, more sophisticated marketing strategies are necessary in order to maintain—and hopefully grow—the fan-team relationship. This line of reasoning appears to be supported by some, albeit limited, empirical case studies. The establishment of the first professional soccer league in Japan in 1993 (J-League) was followed, in its third year, with an average attendance of 19,679—a number that has not been exceeded since (Nakazawa, Mahony, Funk, & Hirakawa, 1999). Boosted by hosting the 1994 FIFA World Cup, America's National Professional Soccer League experienced a similar trend of immediate interest followed by a period of subdued interest thereafter (Collins, 2006).

Given recent studies have begun to confirm that sport markets conform to consistent consumer behaviour patterns predicted by empirical generalisations (Baker, McDonald, & Funk, 2016; Author, 2018), it would appear plausible that the BBL competition would not experience the effects of consumer novelty. Correspondingly, it is proposed that:

 $H_3$ : BBL television viewership exhibits longitudinally stable patterns of consumption.

The literature reviewed demonstrates three substantial gaps that exist in the underlying research on new sport teams and leagues. Firstly, due to the focus on attendees (and often STH) as the target population within much of the new team research, there is an opportunity to analyse market-level data to develop understanding of consumer behaviour towards new teams and leagues on a broader level. In contrast to existing STH research, this study evaluates behavioural preferences among television viewers, who represent a melting pot of low loyalty, high loyalty and even non-fans. Secondly, despite the nascence of a new team's identity, there has been limited empirical testing of the extent that external group identities influence consumer television preferences specifically in the context of new teams. Thirdly, there appears a lack of consensus as to the effect of novelty on fan interest within new leagues. While some empirical examples suggest a novelty effect (Mahony et al., 2002), findings in marketing are equivocal (Ehrenberg et al., 2004). We seek to provide a test of consumer television preferences to add to current knowledge of the novelty effect in relation to new sport teams.

### **Method and Empirical Specifications**

## **Research Context**

The BBL was launched in 2011 in response to declining levels of fan interest and engagement toward cricket, particularly among young people and families (Paton & Cooke, 2011). A pre-cursor to the BBL was the KFC Twenty20 Big Bash, which CA operated for six seasons prior. Notably, this league was state-based, featuring six pre-existing teams that competed at the highest level of Australian domestic cricket since 1892/1893. The launch of the BBL sought to reposition the short form of cricket with new names, colours and mascots representing an entry point for non-traditional fans and children to cricket in Australia (Cricket Australia, 2015).

The period of analysis spanned five BBL seasons from 2013/2014 through to 2017/2018. These constitute Seasons 3 through 7 of the BBL tournament in which all BBL matches were broadcast on FTA television throughout Australia (Cricket Australia, 2015). Prior to this, the first two seasons of the BBL as well as the prior competition were telecast on pay television, which has a subscription rate across Australia of around 30%, with sport channel subscribers only a sub-group therein (OzTAM, 2013). Two considerations preclude Season 1 and 2 and the prior competition from inclusion within this study's analysis. First, subscription television ratings are reported as a national aggregate, unable to be dissected to individual regions as desired by Hypothesis 1 and 2. Secondly, given the desire to measure market response at a broader consumer level, the national and free distribution channel utilised in Seasons 3 to 7 provided an appropriate mechanism which precluded Seasons 1 and 2. Reference to market responses to these relatively new BBL teams is therefore within the context of this new national distribution channel, which commenced from the third season of

the competition. Season 1 within the results and discussion henceforth refers to the first season of FTA coverage.

### **Data Source and Type**

The study utilised television ratings data collected by research agency OzTAM, the industry-standard aggregator of television ratings data across Australia's major metropolitan cities. OzTAM adopts a measurement methodology equivalent to the North American Nielsen system, which underpins much of television viewer scholarship (Sung et al., 2019; Tainsky, 2010). The organisation has a sample of approximately 3,150 households comprised of 8,280 individuals, distributed across the five capital cities of mainland Australia (OzTAM, 2015, 2016). Seven of eight BBL teams reside within these five capital metropolitan cities, with the exception being the Hurricanes who are based in the regional capital city of Hobart.

A brief description of the metrics utilised within this analysis is provided here. First, the "average" audience provides a measure of the size of the average audience during the entirety of a program, accounting for any peaks and troughs within the telecast. Second, "reach" captures "the number of unique viewers who have seen at least one minute of an event or time band across its total duration" (OzTAM, 2010, p. 3). This figure can be used as a proxy for the maximum possible audience. Lastly, "viewer duration" measures the average amount of the telecast minutes watched per viewer, measuring audience commitment to the telecast. This provides insight into whether an audience is composed of a small concentration of loyal viewers or many light viewers who watch only a portion of the program.

## **Data Analysis**

Analysis was limited to regular season fixtures, to allow for more valid longitudinal comparisons (i.e., finals matches did not include all teams and, more importantly, create abnormal peaks of interest within related geographical regions). In order to perform the analysis required of this study, transformations were performed on the raw ratings data.

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Broadcasters divide standard T20 cricket telecasts into two distinct sessions; however, in keeping with the goals of this research the sessions were combined to reflect the overall match audience. This was calculated as follows: Session duration (SD) was divided by total match duration (MD) to calculate the contribution of each innings to the total broadcast. This share percentage was then applied against each session's average audience (AUD) to create a valid weighted average viewership for the entirety of the match (WAV). This formula is illustrated in Equation 1.

$$(SD1/MD \times AUD1) + (SD2/MD \times AUD2) = WAV$$
(1)

## Model

Independent samples *t* tests were performed to ascertain whether fans' behavioural team preference could be observed as a measure in the ratings from Season 1. A hierarchical linear model (HLM) was then fitted to test the latent strength of behavioural preference among BBL television audiences over time across regions. HLM is appropriate because local audiences are nested within regions, with the method overcoming limitations of conventional regression in such circumstances surrounding correlated error terms and biased estimates of parameter standard errors (Raudenbush & Bryk, 2002). HLM resolves these problems through the use of interdependent regression equations estimated simultaneously and has previously been embraced in a sport context to evaluate players within teams (Koschmann, 2019; Todd, Crook, & Barilla, 2005), health by government quality (Wicker & Downward, 2017) and volunteering engagement (Wicker & Hallman, 2013).

A review of previous broadcast demand studies (Caruso, Addesa, & Domizio, 2019; Scelles, 2017; Tainsky, 2010; Tainsky & McEvoy, 2012, Tainsky & Jasielec, 2014) formed the starting basis upon which to consider variables for inclusion in the model. Following this review the specific characteristics of the BBL competition were considered, resulting in the exclusion of several typical audience determinant variables. In relation to team quality, although it is common to utilise wages as a proxy for star quality (Bond & Addesa, 2019; Buraimo & Simmons, 2015; Scelles, 2017), the BBL operates within a salary cap system. In relation to local market characteristics, studies have also considered team age/tenure as a measure of local market embeddedness (Tainsky, 2010), but the BBL remains a nascent with equally new teams. In respect to competition structure, the BBL does not have divisions or conferences, nor does the competition operate long enough (6 weeks) to require calendar variables (Tainksy & McEvoy, 2012). Variables capturing the simultaneous game broadcasts, or time of day variables, have also been considered for leagues with a larger number of teams and fixtures (Buraimo & Simmons, 2015; Tainksy & McEvoy, 2012). However, no BBL games were broadcast concurrently and 157 of 168 matches were broadcast within an evening timeslot.

Within the final model, the level one dependent variable HOMESHARE measures the average viewing audience as a proportion of the total local population within the market. Each market holds a varied population size, and therefore utilising the share of the population standardises audience viewing preferences across the five regions of interest. This ensures that the null model, required to validate the need for a hierarchical approach (Garson, 2013), tests for true differences rather than detecting absolute differences between regions in population size. Given this standardisation results in the reporting of small numerals, the estimates of the model are reported to four decimal places for improved reader interpretation.

The categorical variable REGION is the sole level two variable which captures the five regions (Sydney, Melbourne, Brisbane, Adelaide and Perth) in which the remaining level one variables are nested. UNCERTAINTY is the absolute difference in home versus away win probability derived from the bookmakers' odds, after applying grand mean centering to improve the interpretability of coefficients and reduce potential multicollinearity (Garson, 2013). Bookmaker odds were adjusted for overround (bookmakers' margin) utilising the

Power method (Clarke, Kovalchik, & Ingram, 2017). INTENSITY is an ordinal variable that identifies the number of competing teams within the broadcast capable of reaching the finals at the point of broadcast as a further measure of game quality. In relation to scheduling, WEEKPART is a dichotomous variable that identifies whether the fixture was played on a weekday evening (0 =Monday through Thursday) or weekend (1 = Friday through Sunday). Given the season is played over the Christmas and New Year period, PUBLIC

HOLIDAY identifies fixtures played on New Years Day and Boxing Day (=1). Finally, level one variable SEASON has five levels (2013/2014, 2014/2015, 2015/2016, 2016/2017, 2017/2018) while HOME GAME is a dichotomous variable indicating the presence (=1) or absence (=0) of a home team within the telecast.

### Results

 $H_1$ : Teams will have significantly higher television audiences in their home city than teams from other markets in the first season of free-to-air broadcast.

Table 1 displays the descriptive and inferential statistics required to address Hypothesis 1. Despite small sample sizes within each of the five *t* tests (N = 32), each region had a statistically significant difference between the mean audience of matches that feature a local team compared to matches not involving a local team. All local markets therefore appear to have developed a preference towards their local team(s) near immediately upon broadcast on FTA television.

The performance of the Perth and Brisbane markets is particularly notable. Perth appeared to exhibit the largest immediate preference towards its local team, corresponding with the average audience for the Perth Scorchers being 76% larger than for matches not involving their team. Cohen's effect size (d = 2.18) suggests a high practical significance to this difference. Although failing to win the competition in the first two seasons, the Perth Scorchers were the most successful BBL team leading into Season 1, given that they reached

and hosted the final in the first two seasons. Brisbane recorded the second largest effect size (d = 1.28), generating audiences for home matches involving the Brisbane Heat that were 43% larger than matches that did not feature the local team. Although the Brisbane Heat did not qualify for the finals in the inaugural BBL season, they were the premiers of the second season prior to Season 1 of FTA coverage. The statistical significance of each audience for local teams across the five markets provides strong support for Hypothesis 1.

*Local Share*, as presented in Table 1, provides an alternative measure of team support. The figure is calculated as the average audience size for local team matches relative to total viewing universe of the local region. This allows for the standardisation of audience size to account for the varying population of each region. Upon this basis, Adelaide viewership appears particularly strong, with approximately 5.5% of the Adelaide population watching each Strikers match. Conversely, the aforementioned performance of the Brisbane Heat appears less impressive, with 3.5% of the Brisbane population watching each Heat match. The Brisbane case, therefore, provides a juxtaposition, as the market is among the most comparatively loyal to their team, but the least embracive of the new league overall.

## INSERT TABLE 1 ABOUT HERE

 $H_2$ : Consumer preference towards local teams will increase over time.

The null model was tested to determine the appropriateness of the HLM method, resulting in an intraclass correlation (ICC) of 38%. The ICC indicates that approximately a third of the variance in each game's local viewership could be attributed to between-region differences, with the remaining 62% attributable within regions (between single broadcasts). This confirms the need for a multilevel approach, while variances within region still necessitate elaboration through a full model. The descriptive statistics of the variables used within the random coefficients HLM are therefore detailed below in Table 2.

## **INSERT TABLE 2 ABOUT HERE**

Based on the null model, the full model was constructed with the addition of six level one variables. The interaction between *Season* and *HomeGame* was also included, being central to testing whether behavioural preference has developed in BBL audiences over time. A significant interaction effect would support Hypothesis 2, by showing that the size of a local audience for home team matches is contingent on season, thus inferring that the degree of home team support has changed over time. An insignificant interaction between the independent variables would suggest that local interest in watching home team matches has not changed over time when accounting for changes in overall interest in watching BBL and controlling for other audience determinants. The results of the analysis are presented in Table 3.

To address Hypothesis 2, Table 3 presents a HLM for dependent variable HOMESHARE, nested within REGION. The results of the final model illuminate the structure of BBL viewership. Overall BBL viewership increased significantly by season over the period (SEASON = 0.0014, t(792) = 4.70, p < .001), indicating a longitudinal growth in viewer interest over time. Consistent with the findings of Hypothesis 1, the model also revealed a significant preference for telecasts featuring the local team (HOMEGAME = 0.0126, t(792) = 9.12, p < .001). The model however, also yields some perhaps surprising results. Notably, audiences decreased for telecasts scheduled for public holidays (PUBLICHOLIDAY= -0.0027, t(792) = -1.96, p = .05). Additionally, audiences exhibited a significant preference for telecasts held on weekdays over weekends (WEEKPART = -0.0034, t(792) = -4.62, p < .001).

Audiences exhibited a resilience towards fixtures of diminished outcome uncertainty, shown to be non-significant in the model (UNCERTAINTY = -0.0057, *t* (792)=-1.32, *p* = .188). This result perhaps reflects the narrow range of uncertainty odds associated with the BBL competition, due to the equalising nature of short-form cricket. Only 2% of fixtures

exhibiting a win probability imbalance greater than 30% (i.e, 65%-35%). Viewers however, were attracted to fixtures that included teams which remained in finals contention (INTENSITY= 0.0018, t(792) = 2.34, p = .019), confirming some importance around match quality. To address Hypothesis 2, the interaction between SEASON and HOMEGAME illustrates no significant effect (SEASON\*HOMEGAME= 0.0004, t(792) = 0.83, p = .408).

### **INSERT TABLE 3 ABOUT HERE**

 $H_3$ : BBL television viewership exhibits longitudinally stable patterns of consumption.

Analysis of the BBL's seasonal changes in ratings determines the competition's viewership to have been volatile, counter to the prediction of Hypothesis 3. This is firstly identified by the significance of independent variable SEASON within the HLM output described in Table 3. To explore the stability of consumption in more detail however, variation in growth is observed in Table 4. Table 4 illustrates most audience growth occurred in Season 3, and across all five regions. Reverse Helmert contrasts reveal that there is a significant statitistical intra-season variance in average viewership across all regions, resulting in a national average audience (Combined Metropolitan) that varies significantly. Three of four Season contrasts on the Combined Metropolitan audience are highly significant, with only the increase from Season 1 to 2 narrowly missing the .05 significance threshold (see Table 4). The results of these contrasts result in the rejection of Hypothesis 3.

Measurement of market consumption stability through the average audience is comprised of two underpinning components of potential and distinct variance which can be further explored. The average audience is the sum of the aggregate number of people who watched the program at any point (Reach) and the amount of minutes watched per person (Viewing Minutes). Table 4 illustrates that the growth in average audience size over the period was predominantly caused by an increase in consumption per viewer (Viewer Minutes), rather than an increase in the total number of individuals viewing (Reach). While average viewership increased by 13% between Seasons 1 and 5, driving this increase was Viewer Duration, which grew 19%, whereas Reach increased only 5%. Viewership growth has therefore been driven by increased audience commitment rather than a growth in the base of consumers.

### **INSERT TABLE 4 ABOUT HERE**

### **Discussion and Implications**

Establishing a loyal fan base is a key challenge faced by sport organisations (James et al., 2002). Two such challenges include the influence of novelty as well as support from the broader market, both of which have largely yet to be explored (Park et al., 2011). The present study thus broadens the scope of the field by assessing market behaviour towards new sport leagues and teams over an extended time period, addressing previous calls by Kunkel, Funk and King (2014).

Our findings support Hypothesis 1. Specifically, local viewers exhibited a biased behavioural preference for fixtures involving their local home team in the first season of FTA coverage. This conclusion is consistent with previous media research in both international (Tainsky & Jasielec, 2014) and domestic (Author, 2013) settings, which confirm fan preferences towards local teams within established leagues. That consumers express an immediate preference for a new team in their home city is also consistent with existing research on team identification. Specifically, Lock and colleagues (Lock et al., 2009; Lock et al., 2011) and James et al. (2002) found that members and fans of new teams develop meaningful identification quickly. The present study, therefore, advances our understanding of team identification towards new teams by illustrating that behavioural preferences can occur at market level as well as among a highly attached subset of fans.

Given that the vast majority of consumers did not have direct viewing access to BBL teams until the introduction of FTA coverage, the immediacy with which local markets

adopted a viewing preference for local teams is consistent with prior evidence detailing how external group identities influence team identification (Delia, 2015; Delia & James, 2018; Heere & James, 2007; Heere et al., 2011). Although loyalty towards a new team has been observed at a city level among passionate fans (Lock et al., 2011; Uhlman & Trail, 2012), these findings illustrate that consumers exhibit localised preferences at a market level early within a team's existence. Teams do not develop an identity in isolation, but in relation to the city and culture in which they are placed (Delia & James, 2018; Heere & James, 2007). The confirmation that broadcast markets exhibit immediate viewing preferences towards local teams confirms that a team's linkage to a geographic identity influences market behavioural preferences.

Perhaps more fundamentally, the findings confirm that consumers display significantly greater viewing preferences for the city in which they live. For some consumers, city identification may not necessarily be meaningful, with a preference for local team consumption perhaps created solely by comparison of non-local teams as representing a geographic out-group (cf. Tajfel & Turner, 1979). For others, it may represent a deeper psychological connection (Funk & James, 2001). This is none the less significant because, although Heere and James's (2007) conceptual model identifies three levels of geographic identity (city, regional, national), the importance of such identities are a reflection of the underlying communities which an individual construes as representations of self (Heere, James, et al., 2011). Within the BBL, city identification was evident across each of the five capital cities, despite an average population size of 3.1 million residents (OzTAM, 2016). The implication for sport practitioners may be simple but nonetheless significant: At a market level, consumers appear to be influenced by geographic identities. Given the receptiveness of the market to such cues, new teams need to carefully consider how to align themselves to a suburban, city, state, or regional identity.

Although viewer interest in the league increased during the five seasons of investigation, Hypothesis 2 was not supported. Viewership growth was driven by increased overall league interest rather than towards individual local teams. Consistent with the behavioural market patterns predicted by Ehrenberg et al. (2004), the differential in audience interest between local and non-local teams normalised from the inception of the BBL competition (Ehrenberg & Goodhardt, 2000). The largest differential in local audiences during the five seasons was in Perth, whereby the Perth Scorchers played in fixtures that generated 35% of the cumulative Perth audience despite accounting for only 25% of games. However, this was no doubt also a function of their time zone, as Perth is three hours behind the East Coast where the majority of non-local fixtures occur. In Brisbane, meanwhile, the Heat were involved in fixtures that accounted for 31% of cumulative Brisbane viewership, despite accounting for 25% of fixtures. While these figures reinforce that local teams increase local audiences (Tainsky & Jasielec, 2014), such small differentials belie the assertion that local teams "capture most—perhaps nearly all—of the value of national rights for many teams" (Noll, 2007, p. 23). Rather, the BBL derives its audience via a relatively representative national dispersion.

The rejection of Hypothesis 2 reveals other notable behavioural patterns in viewer consumption of the BBL competition that are of interest. Of some surprise, viewing audiences declined for public holiday fixtures. Previous studies have illustrated an insignificant effect of student holiday periods on viewing audiences (Feddersen and Rott, 2011), while televising matches on public holidays has been illustrated to have no significant influence on attendance rates (Buraimo & Simmons, 2008). Given the public holidays of this competition occur over the Christmas period however, it would appear that a heightened competition for leisure time may act to significantly decrease the BBL's viewing audience (Scriven, et al., 2015).

Significantly higher audiences were observed for fixtures held on weekdays, running counter to previous studies observing significantly lower viewership (Burarimo & Simmons, 2015; Scelles, 2017) or no significant difference to weekends (Caruso, et al., 2019, Bond & Addesa, 2019). Curiously, previous studies have treated the working week to include Friday and the weekend encompassing only Saturday and Sunday (Buraimo & Simmons, 2015; Bond & Addesa, 2019; Caruso, et al., 2019; Feddersen and Rott, 2011; Scelles, 2017). This has intended to 'capture the reduced leisure time available during the week relative to the abundance of leisure time available at the weekend' (Buraimo & Simmons, 2015, p 459). Yet weekend leisure commences on Friday evening, with this study choosing to include Friday evening fixtures as part of weekends. That weekdays recorded a significantly higher audience may reflect that while the weekend contains greater leisure time, it may also retain greater competition between broader leisure alternatives (Scriven, et al., 2015).

Less surprising was the absence of a significant influence of outcome uncertainty in BBL viewership, which aligns to previous studies (Buraimo & Simmons, 2015; Scelles, 2017). However, while the body of extant literature has predominantly focused on wellestablished football leagues (Buraimo & Simmons, 2015; Caruso, et al., 2019; Scelles, 2017; Tainsky, 2010; Tainsky & McEvoy, 2012, Tainsky & Jasielec, 2014), the finding here instead considered the context of a nascent sports league. The fast-pace and consumer-friendly positioning of T20 cricket, as a short-form version of the game, may help insulate the sport from both the presence of low outcome uncertainty and a potential diminishing effect on audiences (Paton & Cooke, 2011).

BBL viewer interest during the five seasons telecast on FTA television was found to be volatile, resulting in the rejection of Hypothesis 3. Within a five season span, the league exhibited evidence of growth, plateauing and retraction. A potential explanation as to why BBL viewership did not conform to theorised marketing norms may relate to the seasonal nature of the BBL sport product. Ehrenberg and Goodhardt's (2000) research suggests that brands reach a regular repeat purchase rate with final penetration levels stabilising within approximately 30 to 36 weeks. These findings were based on purchase behaviour patterns from within the prescription drugs, food, drink, personal and household cleaning product categories, which are available year-round and thus do not suffer from seasonality. Given the BBL is played annually within a six to seven week window, the totality of its duration over five seasons has equated to 30.5 weeks of availability. As Viewer Duration appeared to normalise between Seasons 3 and 5, it is plausible that the theorised norms predicted by this body of marketing literature may only have begun to emerge towards the end of the analysis period (Ehrenberg, & Goodhardt, 2000: Trinh, et al., 2016).

The findings support the proposition of Mahony et al. (2002) that new leagues initially face challenges in developing loyalty in the face of product novelty among consumers. This is reflected in the longitudinal growth of Viewer Duration for BBL telecasts, which is an effective measure of commitment to viewing. In Season 1, viewers watched an average of 68 minutes per typical 175 minute BBL broadcast, the lowest of the five seasons. In Season 2, this increased to 74 minutes before increasing and plateauing above 80 minutes from Season 3 onwards. BBL television consumers are therefore shown to be becoming heavier consumers of the product over time (Mullin, et al., 1993).

An empirical aspect in which new sport leagues may differ from other settings may be the timeliness with which novelty seeking behaviour onsets and peaks. Novelty seeking behaviour is said to reflect human desire to seek out the new and different (Hirchsman, 1980), with the epistemic value of product linked to the utility derived from the product's capacity to arouse curiosity and novelty (Sheth et al., 1991). The novelty effect is therefore associated with short-term time horizons and this has certainly appeared true in the context of the impact of superstar athletes, where the effect has been most pronounced in the first season (Shapiro, et al., 2017; Jewell, 2015). It is contentious however whether BBL novelty peaked in Season 1 or across Seasons 3 and 4. Season 1 exhibited the lowest commitment to watching telecasts, indicating a greater propensity for curiosity based consumption that was transient in nature (Berlyne, 1960; Park, et al., 2011). Season 3 and 4 exhibited the highest number of people consuming the BBL, resulting in seemingly abnormally high average ratings which would align more strongly with the collection of previous empirical cases of new sport leagues (Nakazawa et al., 1999; Collins, 2006).

#### Conclusion

The BBL represents an opportune context in which to evaluate consumer behaviour within new leagues and teams. The focus of the study upon television ratings as the dataset for analysis was also opportune given that previous research on new teams and leagues has almost singularly focused on club STH. While that cohort represents a club's most passionate and resilient market segment, it constitutes a relatively small proportion of the overall market. The present study addresses that limitation by considering fan behaviour and preferences at a market level, as reflected by television ratings.

The research offers new contributions to our investigation and understanding of new sport leagues and teams. First, whereas previous research focused solely upon STH, the current study extended the data set to focus on television viewership preference. Local audiences were found to exhibit an instantaneous viewing preference towards local teams, generating viewership approximately 30% larger than for non-local games. This finding expands the boundaries upon which social identity theory has been tested in the context of new sport teams, confirming that entire markets (cities) exhibit biases towards new local teams. This expands upon the existing body of work (Lock et al., 2009; Lock et al., 2011; James et al., 2002) and is consistent with Heere and James's (2007) conceptual model.

but rather fluctuated concurrently with interest in the league as a whole. This was significant because it illustrated that growing television audiences is a league-led rather than a team-led managerial task (Kunkel et al., 2014).

Finally, the present study explored consumer novelty in the context of a new league, adding to a small pool of scholarship to explore sport curiosity and novelty (Park, Mahony, & Kim, 2014). It concluded that the league appears to have experienced an initial period of novelty seeking behaviour by consumers (Hirschman, 1980), with potential stabilisation of market consumption towards the end of the analysis period (Ehrenberg & Goodhardt, 2000). These findings were consistent with the limited pool of existing empirical enquiry into initial fortunes of new sport leagues as a whole (Mahony et al., 2002), providing some evidence towards an empirical generalisation that the fourth season of a new sport league represents a turning point in respect to novelty and embeddness.

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	Local						
-	Local	Non-Local	Local				
Region	Team/s	Teams	Share <sup>a</sup>	t	df	р	d
Sydney	164,509	133,737	3.47%	2.35	29.72	.03	0.82
Melbourne	235,879	189,501	5.08%	2.06	28.99	.05	0.73
Brisbane	109,196	76,616	3.57%	3.88	30.00	<.01	1.28
Adelaide	79,072	63,064	5.63%	2.51	30.00	.02	0.95
Perth	92,435	52,586	4.90%	6.02	30.00	< .01	2.18

Descriptive and Inferential Statistics for FTA Season 1 (2013/14) by Region

<sup>a</sup>Size of audience for local team matches relative to the region's population.

Summary statistics

Variable	n	Mean	SD	Min	Max
Level two variables					
Region	840	3.00	1.42	1.00	5.00
Level one variables					
HomeGame	840	0.33	0.47	0.00	1.00
Intensity	840	1.78	0.48	0.00	2.00
Uncertainty	840	0.00	0.08	-0.14	0.25
PublicHoliday	840	0.09	0.27	0.00	1.00
Season	840	2.10	1.45	0.00	4.00
WeekPart	840	0.45	0.50	0.00	1.00

## HLM Results

Fixed Effect	Estimate	(SE)
Intercept	0.0322**	(0.0048)
(Game Level) Independent	t Variables	
Season	0.0014**	(0.0003)
HomeGame	0.0126**	(0.0014)
Uncertainty	-0.0057	(0.0043)
PublicHoliday	-0.0027*	(0.0014)
WeekPart	-0.0034**	(0.0007)
Intensity	0.0018*	(0.0008)
Season*HomeGame	0.0004	(0.0005)
Random Effect		
Residual	0.0001**	(5.46E + 6)
Intercept	0.000102	(7.25E + 5)

Note. Standard errors are in parentheses. \*p < .05, \*\*p < .001.

		Average	Audience	Viewer	Contrast
Region	Season	Audience	Reach	Duration	sig*
Sydney	2013/2014	147,200	384,347	67.09	-
	2014/2015	145,130	394,728	69.55	.78
	2015/2016	168,326	391,657	78.90	< .01
	2016/2017	154,360	412,334	72.89	.93
	2017/2018	150,641	385,967	75.51	.31
Melbourne	2013/2014	209,791	515,552	70.40	-
	2014/2015	223,535	554,391	76.13	.29
	2015/2016	291,471	616,958	86.57	< .01
	2016/2017	261,575	599,561	85.15	.04
	2017/2018	213,501	511,135	80.48	< .01
Brisbane	2013/2014	84,761	239,987	61.69	-
	2014/2015	81,963	235,928	65.48	.38
	2015/2016	102,332	250,263	74.93	< .01
	2016/2017	121,638	281,007	83.76	< .01
	2017/2018	115,138	264,106	83.02	< .01
Adelaide	2013/2014	67,066	170,026	69.65	-
	2014/2015	74,366	180,201	76.72	< .01
	2015/2016	87,989	187,954	84.97	< .01
	2016/2017	85,087	198,037	83.31	.03
	2017/2018	77,648	179,676	82.08	< .01
Perth	2013/2014	62,548	145,463	74.03	-
	2014/2015	63,670	133,840	89.09	.96
	2015/2016	103,273	189,511	99.55	< .01
	2016/2017	97,426	194,987	96.53	< .01
	2017/2018	85,934	182,632	89.77	.05
Combined	2013/2014	571,366	1,455,375	68.36	-
Metropolitan	2014/2015	588,664	1,499,088	73.95	.05
	2015/2016	753,391	1,636,343	84.27	< .01
	2016/2017	720,086	1,685,926	83.02	< .01
	2017/2018	642,862	1,523,517	81.49	<.01

Audience Metrics across the Regular BBL Season

\*Reverse Helmert contrasts, comparing current level to previous level of Average Audience.