

Streaming for Whom? Exploring the Audience Composition and Perceptions of Niche Sport Streams

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Abstract

The proliferation of over-the-top streaming platforms has enabled non-mainstream sports to bypass traditional broadcast gatekeepers and distribute their content directly to audiences. Whether this practice delivers meaningful value, however, remains largely unexamined, and the audiences it reaches are themselves poorly understood. This study explores the audience composition and broadcast perceptions associated with livestreamed non-mainstream sport through a case study of the Australian Water Polo League. Survey data from verified viewers ($n = 77$) reveal a structurally bounded audience constituted by sport-embedded insiders whose engagement is relationally driven and best understood through social identity rather than media preference. The broadcast was perceived positively within its own contextual frame of reference and functioned as an effective signal of organisational legitimacy. The findings nonetheless offer disconfirming evidence against assumptions underpinning the case for streaming in non-mainstream sport: that streaming provision itself generates new viewership beyond the participant base, and that incremental production sophistication yields proportionate perceptual returns. While the study's small sample constrains inferential generalisability, the findings provide an exploratory basis for audience-centred research on non-mainstream sport streaming.

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Introduction

The relationship between sport and media is among the most commercially significant in contemporary entertainment (Billings et al., 2017; Hutchins & Rowe, 2012). Historically, this relationship has been defined by a relatively small number of dominant sport properties commanding substantial broadcast rights fees from a concentrated group of television networks (Evens et al., 2023). Within this arrangement, non-mainstream sports occupied a structurally marginal position (Tickell et al., 2024). The emergence of digital streaming technologies, and in particular the proliferation of social live streaming services and over-the-top (OTT) platforms, has begun to challenge this arrangement. Where traditional broadcast infrastructure required capital investment and facilitated gatekeeping that systematically excluded smaller sports, digitalisation has dramatically lowered the threshold for production and distribution in sport (Wilmot, 2022). This has created what Hutchins and Rowe (2009) described as conditions of digital plenitude in which a far greater number of organisations can produce and distribute content for online consumption (Hutchins et al., 2019; Wymer et al., 2024). For non-mainstream sports, this represents a potentially transformative shift that opens pathways to visibility, audience engagement, and institutional legitimacy that were previously inaccessible (Cooky et al., 2021; Sherwood et al., 2017).

In Australia, this trend is reflected in the broader pattern of digital sport consumption, with 2.5 million Australians now choosing broadcast video on demand over traditional linear television, consuming 26 million hours of content per week (The Trade Desk, 2023). The infrastructure and audience behaviour that once made streaming a speculative undertaking for non-mainstream sports has, in a relatively short period, become normalised. Whether such investment is organisationally worthwhile, however, remains relatively underexplored. For non-mainstream sports, a proportion of which are niche (Fujak, Driesener, & Shilbury, 2025), the case to adopt streaming arguably rests on a critical supposition: that a meaningful audience exists or can be developed via exposure (Li, 2026). This assertion is assumed more often than it is demonstrated, particularly considering audience behaviour in non-mainstream sport may differ substantially from mainstream sport (Meier et al., 2020).

Institutional theory cautions that organisations frequently adopt practices not because their value has been demonstrated, but through mimetic isomorphism: imitating what peer organisations do under conditions of strategic uncertainty (DiMaggio & Powell, 1983). This tension highlights the need to examine whether streaming adoption in non-mainstream sport reflects demonstrated audience value or institutional imitation. Engaging this question requires attention to communicative dynamics that have received little direct empirical scrutiny: how audiences in non-mainstream sport are

constituted, how streaming functions as a signal of organisational legitimacy, and how viewers evaluate and respond to the broadcast. This study examines these dynamics through case study data from verified stream viewers of the Australian Water Polo League (AWL).

Literature Review

From Broadcast Scarcity to Streaming Abundance

The structural transformation of sport media distribution over the past two decades has been well documented. The transition from analogue broadcast systems, characterised by scarcity, high entry costs, and concentrated network control, to digital streaming environments has fundamentally altered who can produce and distribute live sport content (Hutchins et al., 2019; Hutchins & Rowe, 2009). Under the analogue model, access to broadcast infrastructure was controlled by a small number of television networks whose programming decisions were driven by commercial imperatives, principally the capacity of a sport to deliver mass audiences to advertisers. Within this viewer-volume dependant arrangement, non-mainstream sports were structurally disadvantaged, creating cultural oligarchies that have helped entrench dominant mainstream sports (Greenhalgh et al., 2011; Sherwood et al., 2017).

The advent of OTT platforms disrupted this arrangement by dramatically lowering the cost and complexity of live sport production and distribution (Wilmot, 2022). Central to this disruption is the process of disintermediation: where broadcast infrastructure once functioned as an unavoidable bottleneck through which sport organisations had to pass to reach any audience at scale, OTT delivery allows rights holders to bypass this gateway entirely (Evans & Donders, 2018). The structural implications for non-mainstream sports are considerable: organisations operating outside the broadcast mainstream can now access the technical and institutional capacity to cultivate audiences without broadcaster intermediation.

Consequently, semi-professional leagues, national governing bodies, and club competitions that previously operated without any broadcast presence have invested in streaming infrastructure, establishing direct-to-consumer channels through dedicated platforms, social media services, and purpose-built OTT portals (Hutchins et al., 2019; Wymer et al., 2024). For these organisations, visibility through media exposure offers a central mechanism to create exposure and awareness critical for fan development and the advancement of commercial objectives (Funk & James, 2001). Yet scholarship examining the outcomes of streaming investment for non-mainstream sports has not kept pace with the practice itself (Vann et al., 2018).

Existing work has tended to focus on distributional reach and structural conditions rather than audience-side outcomes (Hutchins et al., 2019; Meier et al., 2020). Institutional theory offers one explanation for why practitioner adoption has proceeded more quickly than evidence of its value: organisations in uncertain environments frequently adopt practices not because efficacy has been demonstrated, but to confer legitimacy through conformity with prevailing norms (DiMaggio & Powell, 1983). As

streaming has become embedded among major sport organisations, non-mainstream sports may follow suit as a means of signalling organisational modernity and credibility (Suchman, 1995). Whether streaming delivers genuine value to non-mainstream sport organisations, therefore warrants examination.

Streaming and Organisational Legitimacy

For non-mainstream sports, the act of broadcasting may offer a legitimacy signal that extends beyond its function as a distribution mechanism. Legitimacy, understood as the generalised perception that an organisation's actions are desirable, proper, or appropriate within a given system of social norms and values (Deephhouse et al., 2017; Suchman, 1995), is central to how audiences interpret a broadcast. Organisations acquire legitimacy not only through demonstrated performance but through conformity to institutionalised practices that socially recognised actors are expected to enact (Meyer & Rowan, 1977).

In sport media contexts, broadcasting communicates to audiences that a competition is worthy of mediated coverage, that the producing organisation is capable of professional presentation, and that the sport belongs within the recognised landscape of athletic competition (Boyle & Haynes, 2014). This signal is consequential for non-mainstream sports, which cannot draw on the accumulated institutional credibility of established leagues or the sustained media presence that functions as a proxy for legitimacy in mainstream sport (Greenhalgh et al., 2011). Whether a broadcast successfully performs this legitimacy function, however, depends on how audiences evaluate it. This evaluation is not made against absolute standards but against the reference points viewers bring to the experience (Sherif & Hovland, 1961).

Consumer behaviour research establishes that satisfaction is determined by the gap between prior expectations and perceived performance, a dynamic known as expectation disconfirmation (Oliver, 1980). Thus, prior standards and identification-related factors shape how sport audiences arrive at evaluations of satisfaction or dissatisfaction (Van Leeuwen et al., 2002; Yoshida & James, 2010). In the context of broadcasting, the same production may be evaluated differently depending on the standard a viewer brings to the experience (Wilmot, 2022). For non-mainstream sport broadcasts this is particularly consequential: research demonstrates that audiences hold structurally different perceptions of mainstream and non-mainstream sports (Greenhalgh et al., 2011). A viewer whose expectations are calibrated to semi-professional production standards may therefore rate an identical broadcast vastly better than one whose reference point stems from a major professional league.

The evolution of broadcast technologies compounds this dynamic. As audiences consume an increasingly diverse media diet across streaming platforms (Evans & Donders, 2018), continuous exposure to high-production content means the benchmark against which all broadcasts are implicitly compared is fluid. Concurrently, improvements in camera systems, graphics packages, on-screen information displays, and streaming stability have progressively lowered the cost of producing broadcasts (Wilmot, 2022). For non-mainstream sport organisations, the same technological

diffusion that has made professional-grade production achievable at modest cost through specialist streaming providers may simultaneously raise the audience expectations against which that production will be judged. Whether a broadcast clears this shifting threshold, and whether audiences consequently perceive it as a credible signal of organisational competence, are therefore questions that carry implications for how non-mainstream sport organisations pursue and sustain legitimacy through streaming. Accordingly, this study asks:

RQ1: How and to what extent does livestreaming function as a signal of organisational legitimacy in non-mainstream sport contexts?

RQ2: How and to what extent do viewers evaluate broadcast quality in non-mainstream sport contexts?

Audiences, Loyalty and Fan Development

Live sport retains strong audience loyalty and low substitutability, such that sport viewers resist switching to alternatives in ways most general entertainment audiences do not (Evens et al., 2023). Such loyalty at scale has long underpinned the commercial value of sport content. Yet the loyalty that distinguishes sport audiences is not only a commercial property; it is socially constituted (Lock & Heere, 2017). Social identity theory holds that individuals derive part of their self-concept from membership in valued groups, and that behaviour on behalf of those groups expresses and affirms that identity (Tajfel & Turner, 1979). Viewed from this lens, non-mainstream sports are well placed to foster strong identity-based communities, where following the sport is bound up with belonging to the network that sustains it (Cohen et al., 2012). How such identification shapes the way these communities consume mediated sport, however, remains less well understood.

Two competing accounts offer to fill this gap. The prevailing commercial logic draws from niche marketing, within which sports attracting small audiences are assumed to comprise preference-aligned consumers who are more engaged, committed, and resistant to substitution than mass markets (Dalgic & Leeuw, 1994), and therefore well suited to the direct-to-consumer models streaming enables (Fujak, Driesener, & Shilbury, 2025). An identity-based account offers a different reading. The concept of brand community holds that collective identity and communal obligation, rather than product preference, constitute the basis of membership (Muniz & O'Guinn, 2001), such that consumption functions as an enactment of belonging rather than a market choice. On this view, non-mainstream sport audiences may operate less as consumer markets than as participant communities, in which engagement is driven by social identification rather than discretionary media preference.

The two accounts predict materially different audiences. Major professional sports draw from the general population, converting casual interest into fandom through sustained media exposure, star power, and cultural ubiquity (Fujak, Frawley, & Adair, 2025; Shah & Williams, 2025). Non-mainstream sports rely instead on participant

networks: family, friends, coaches, and those directly involved in the sport (James & Ross, 2004; Wymer et al., 2024). For such audiences, watching is bound up with identification with the community itself, more than with the team or sport as a media product (Yoshida et al., 2015). Where consumption expresses social identity rather than consumer preference, loyalty may be strong yet narrowly bounded to the participant network, and its commercial convertibility correspondingly limited (Hammervold & Solberg, 2006). Whether the behavioural patterns observed in non-mainstream sport reflects preference-based self-selection or identity-based community membership warrants attention. We therefore ask:

RQ3: Who constitutes the viewing audience for non-mainstream sport streams, and how do social and relational ties shape their consumption?

Methodology

Empirical Context

The research focused on a case study in Australia. Australian government policy explicitly frames sport as central to national identity, public health, and social cohesion (Australian Sports Commission, 2018), and the nation recorded the second-highest global per-capita attendance at professional sporting events in 2024 (Two Circles, 2025). This is sustained by a diverse professional sport sector, which is reinforced by anti-siphoning media legislation that mandates nationally significant sporting leagues and events remain on free-to-air television ensuring structurally embedded coverage of mainstream sports (Cashman, 2010).

Water polo was selected as the specific case setting (Yin, 2018), as it is situated outside Australia's sporting commercial mainstream despite a strong community and participatory footprint (Fujak, Frawley, & Adair, 2025). At the elite level, Australia is internationally competitive, as illustrated by Australia's national women's team, who have won four Olympic medals including gold at the inaugural women's water polo tournament (Sydney 2000). Yet the sport receives negligible traditional broadcast coverage outside the Olympic cycle. Correspondingly, the sport's elite domestic competition, the AWL, contracts a third-party provider (Stream Team) to both technically produce match streams and host such telecasts on its web-based platform (WatchSport). Access to AWL content is free to users upon website registration. The WatchSport platform also hosts other sports of similar scale (e.g., Artistic Swimming) such that there exists the potential for audience growth from registered users not primarily derived from water polo.

Research Design, Data Collection and Analysis

This study employed a cross-sectional online survey design that leveraged the dualistic function of Stream Team as both a production provider and web-based streaming host of sport content. Survey respondents were obtained from the viewership of the

2026 AWL season-opening weekend fixtures between the Queensland Thunder and Hunter Hurricanes, contested across four matches (two women’s, two men’s) in January 2026. Across the four telecasts, two distinct production treatments, designed by the research team in collaboration with Stream Team, were deployed, enabling a within-study comparison of viewer perceptions across production conditions (basic vs. advanced). The treatments were designed in advance, with the basic and advanced conditions specified to correspond to the provider’s existing commercial production tiers such that each reflects a real-world package level that a sport organisation could procure. The four telecasts were produced distinctly according to these specifications and were available to viewers on both a live and on-demand basis. A summary of the four streams and their respective production treatments is provided in [Table 1](#).

The survey was administered by Stream Team, the third-party provider that produces and hosts AWL broadcasts on the WatchSport platform. Because WatchSport requires registration and login to access content, every viewer is a registered, identifiable user, and the platform maintains verified records of which users access each telecast. The research team did not obtain, access, or handle any viewer contact data; rather, the provider distributed survey invitations directly to viewers using these platform records. This yielded a verified-viewer population comprising the 1,201 users confirmed as having accessed one or more of the four target matches. Given the mandatory-login requirement, this represents the entire identifiable viewing population rather than a contactable subset of it. Rather than sampling from this population, all 1,201 verified viewers were invited to participate in a survey concerning the match they had watched (an attempted census); no platform-level selection, filtering, or eligibility screening was applied, and the realised sample therefore reflects respondent self-

Table 1. AWL Telecasts: Fixture Schedule, Production Treatment, and Sample Distribution

Match	Date	Time	Fixture	Production treatment	<i>n</i>
1	Thu 15 Jan 2026	7:00 PM	Women’s: Queensland Thunder v Hunter Hurricanes	Basic	16
2	Thu 15 Jan 2026	8:30 PM	Men’s: Queensland Thunder v Hunter Hurricanes	Advanced	35
3	Fri 16 Jan 2026	7:00 PM	Women’s: Queensland Thunder v Hunter Hurricanes	Advanced	9
4	Fri 16 Jan 2026	8:30 PM	Men’s: Queensland Thunder v Hunter Hurricanes	Basic	17
				Total	77

Note. Basic production comprised a single fixed wide-angle camera with no live commentary and no on-screen graphics. Advanced production incorporated multiple camera angles, live commentary, a full on-screen graphics package including score, clock, and player identification, and consistent replay inclusion. Production treatment allocation was determined by match schedule rather than random assignment. *n* refers to the number of respondents for whom each match was designated the primary match evaluation.

selection rather than researcher selection. Unlike general-population surveys or convenience samples that approximate sport media audiences indirectly, this approach directly captures the experiences and perceptions of confirmed viewers, responding to calls within sport communication scholarship for audience-centred research (Cummins & Hahn, 2025; Hutchins, 2014).

Survey invitations were distributed by email the day after the final broadcast, with a follow-up reminder issued one week later. Two further invitations to participate were issued before the survey closed two weeks after initial distribution. To incentivise survey participation, participants were advised they could choose to enter a prize draw at the end of the survey. The prizes consisted of four AUD \$50 gift cards and one \$75 gift card. Of the 1,201 invited viewers, 77 complete responses were returned, yielding a response rate of 6.4%. Of the final sample, respondents were grouped into basic ($n = 33$) and advanced ($n = 44$) production conditions based on their primary match designation.

The instrument combined established and purpose-built measures. Overall fandom was captured with the single-item measure of Kunkel et al. (2022), and fan identity with a three-item adaptation of the Sport Spectator Identification Scale (SSIS: Wann & Branscombe, 1993). The remaining composites were developed for this study to reflect the niche-sport streaming context, with item content grounded in the relevant theory: the benchmarking items operationalised expectation disconfirmation (Oliver, 1980) and comparative standards of judgment (Sherif & Hovland, 1961), and the perceived-legitimacy items reflected established conceptualisations of organisational legitimacy (Suchman, 1995). Broadcast quality, broadcast features, perceived legitimacy, and behavioural intentions were each assessed on seven-point scales (1 = strongly disagree, 7 = strongly agree, or equivalent contextual anchors); motivation was captured by forced-rank items.

Data were analysed using IBM SPSS. Descriptive statistics were computed for all demographic, involvement, motivation, and scale items. One-sample *t*-tests against the scale midpoint (4) assessed whether perceptual items differed significantly from the neutral point, and a paired samples *t*-test examined the difference between the two contextual benchmarking items. Welch's independent samples *t*-tests were used to compare group means across perceptual measures. Pearson correlations examined associations between broadcast quality, perceived legitimacy, and behavioural intention composites. Effective sample sizes vary across analyses due to voluntary responses and are reported alongside each set of findings. A sensitivity analysis ($\alpha = .05$, power = .80) indicated the confirmatory one-sample, paired, and correlational tests were powered to detect small-to-medium effects ($d \approx 0.35$; $r \approx 0.35$), while the production-condition comparisons could detect only medium-to-large differences ($d \approx 0.70$).

Results

Seventy-seven respondents completed the survey, with audience profile results provided in Table 2. The sample was predominantly Australian (90.9%), female (58.4%),

Table 2. Demographic and Involvement Characteristics of AWL Broadcast Viewers

Characteristic	<i>n</i>	%
Gender		
Female	45	58.4
Male	31	40.3
Non-binary/third gender	1	1.3
Age		
18–24	17	22.1
25–34	9	11.7
35–44	3	3.9
45–54	34	44.2
55–64	11	14.3
65+	3	3.9
State (Australian respondents, <i>n</i> = 70)		
Queensland	36	51.4
New South Wales	30	42.9
Victoria	2	2.9
Western Australia	1	1.4
Tasmania	1	1.4
Annual personal income (AUD)		
Less than \$25,000	9	11.7
\$25,000–\$49,999	5	6.5
\$50,000–\$74,999	9	11.7
\$75,000–\$99,999	7	9.1
\$100,000–\$149,999	15	19.5
\$150,000–\$199,999	9	11.7
\$200,000 or more	7	9.1
Prefer not to say	16	20.8
Water polo viewing frequency		
Frequently	45	58.4
Occasionally	11	14.3
A few games before	2	2.6
First time watching	1	1.3
Not specified	18	23.4
Motivation for viewing (multiple response)		
Family member or friend was playing	47	61.0
Follow the AWL generally	32	41.6
Play or coach water polo	29	37.7
Supporter of Hunter Hurricanes	23	29.9
Supporter of Queensland Thunder	22	28.6
Interested in the livestream	14	18.2

(continued)

Table 2. (continued)

Characteristic	<i>n</i>	%
Recommended or shared with me	3	3.9
Curious or browsing	1	1.3
Involvement in water polo (multiple response)		
Family member involved	47	61.0
Friends involved	36	46.8
Fan (attending/watching)	31	40.3
Official/coach/administrator	27	35.1
Active social participant	18	23.4
Former competitive athlete	17	22.1
Active elite athlete	10	13.0
None of the above	0	0
SSIS Fan identity scale (1–7)	<i>M</i>	<i>SD</i>
Strength of fan identification	5.71	1.36
Importance of being a fan	5.29	1.45
Closeness of following the sport	5.28	1.39
Composite	5.43	1.21
Single item fandom scale (1–7) (Kunkel et al., 2022)		
When I think about being a fan of water polo, I consider myself a.....	5.43	1.31

Note. *M* = mean; *SD* = standard deviation.

and concentrated in the 45–54 age bracket (44.2%). Geographically, the audience was drawn from the two competing states, Queensland (51.4%) and New South Wales (42.9%), with viewers clustered in the clubs' immediate catchment areas. Within NSW, half of all respondents were in the Hunter Valley and Newcastle region, the home territory of the Hunter Hurricanes, with a further 26.7% from the adjacent Central Coast. Within Queensland, 80.6% were from the Brisbane metro, consistent with Queensland Thunder's club base.

Stream Legitimacy and Viewer Intentions

Respondents assessed the degree to which streaming conferred a sense of legitimacy and professional credibility across six items, rated on a 7-point agreement scale (see Table 3). All six items were significantly above the scale midpoint ($p < .001$), with the composite confirming a broadly positive legitimacy response ($M = 5.23$, $SD = 1.38$, $n = 62$; $t(61) = 7.06$, $p < .001$). Responses followed a clear descending gradient, with items anchored to event-level legitimacy attracting the strongest agreement. The broadcast made the league feel legitimate ($M = 5.47$) and made the competition feel as though it belongs alongside recognised sports ($M = 5.40$), while items referencing comparison to elite-level production standards attracted the most tempered responses. This meant that

Table 3. Perceived Legitimacy and Behavioural Intentions

Item	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Perceived legitimacy				
Broadcast made the league/event feel legitimate	62	5.47	1.55	7.43***
Broadcast made competition feel alongside recognised sports	62	5.40	1.51	7.32***
Production quality signalled sport is taken seriously	62	5.31	1.44	7.12***
Broadcast quality made sport feel professionally run	62	5.27	1.48	6.76***
Broadcast looked like produced by a serious organisation	62	5.10	1.48	5.84***
Production quality felt consistent with elite-level sport	62	4.85	1.58	4.27***
Behavioural intentions				
Would watch an AWL livestream again in the future	59	6.61	0.79	25.44***
Would recommend watching AWL livestreams to others	60	6.27	1.10	15.92***
Enjoyed watching the match	60	6.17	1.21	13.87***
AWL livestreaming increases my general interest in water polo	60	5.95	1.29	11.67***

Note. Perceived legitimacy and behavioural intentions items rated on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). *t*-values reflect one-sample tests against the scale midpoint (4); degrees of freedom = *n* - 1. ****p* < .001.

the stream was perceived as credible and professionally run within its own context, but not with reference to elite sport.

Behavioural intention scores were the strongest in the survey, with all four items significantly above the scale midpoint ($p < .001$) and the composite reaching $M = 6.29$ ($SD = 0.88$, $n = 59$; $t(58) = 19.88$, $p < .001$). Rewatch intent was the highest rated item across the entire instrument ($M = 6.61$, $SD = 0.79$). Recommendation likelihood ($M = 6.27$, $SD = 1.10$, 85% at 6 or 7), match enjoyment ($M = 6.17$, $SD = 1.21$), and interest lift for the sport ($M = 5.95$, $SD = 1.29$) were similarly elevated. Broadcast quality, perceived legitimacy, and behavioural intentions were all significantly and positively related: broadcast quality and legitimacy shared the strongest association ($r = .795$, $p < .001$), followed by broadcast quality and intentions ($r = .724$, $p < .001$), and legitimacy and intentions ($r = .583$, $p < .001$), indicating that higher quality perceptions were closely linked to both the sense of sporting credibility the broadcast conveyed and viewers' subsequent engagement intentions.

Audience Profile, Behaviours and Motivations

Profiling revealed an audience predisposed to, and strongly connected with, water polo. More than half (61.0%) of respondents identified having family members involved in the sport, 35.1% served in an official, coaching, or administrative capacity, and 13.0% identified as active elite athletes. Notably, no respondent among those who responded selected 'None of the above' in relation to the involvement conduits to water polo. In relation to specific motivations for streaming, the results largely mirrored those around broader involvement. Personal connection to a player was the dominant motivation for

viewing (61.0%) and the most important overall driver ($M = 1.44$, $SD = 0.77$). General AWL followership (41.6%) and playing or coaching the sport (37.7%) were the next most cited motivations, followed by team support for Hunter Hurricanes (29.9%) and Queensland Thunder (28.6%). Discovery-based motivations such as word-of-mouth referral (3.9%) and casual browsing (1.3%) were negligible.

The depth of audience connection to the sport was further reflected in self-reported viewing habits and fan identity. Most respondents reported watching water polo frequently (58.4%), and fan identity scores confirmed the committed nature of the viewer base across two independent measures. Using the single-item fan categorisation scale adapted from Kunkel et al. (2022), the sample mean was $M = 5.43$ ($SD = 1.31$, $n = 60$). This was corroborated by three items drawn from the SSIS (Wann & Branscombe, 1993), assessing strength of identification, importance of fandom, and closeness of following, which returned similarly strong scores (composite $M = 5.43$, $SD = 1.21$, $n = 58$). These motivational and attitudinal patterns were reflected in actual viewing behaviour, with 82.7% of respondents watching for 30 minutes or more. Collectively, findings describe a broadcast audience which is constituted almost entirely by sport-embedded insiders who report strong avidity.

Stream Perceptions and Quality Evaluations

Respondents evaluated the broadcast across a range of quality dimensions, providing assessments of specific broadcast features, overall production standards, and the broadcast's performance relative to prior expectations and professional sport comparisons (See Table 4). Two broadcast features were present in both production conditions and could be assessed across the full sample: camera angles and their contribution to understanding play ($M = 5.19$, $SD = 1.44$) and poolside audio ($M = 5.12$, $SD = 1.54$), both rated positively and significantly above the scale midpoint ($p < .001$). The remaining features were specific to the advanced condition; among the viewers who experienced them, commentary ($M = 5.69$, $SD = 1.41$), live replays ($M = 5.43$, $SD = 1.63$), and on-screen information ($M = 5.12$, $SD = 1.42$) were each rated positively and significantly above the midpoint (all $p < .001$, $n = 42$).

The broadcast performed strongly relative to expectations ($M = 5.66$, $SD = 1.30$, $n = 67$), significantly above the midpoint ($t(66) = 10.45$, $p < .001$). The comparison to professional sports produced a markedly different result, with a mean of $M = 4.04$ ($SD = 1.62$) that did not differ significantly from the scale midpoint ($t(66) = 0.23$, $p = .822$). A paired samples t -test confirmed that the difference between these two benchmarking ratings was statistically significant and large in magnitude ($t(66) = 10.04$, $p < .001$, $d = 1.23$), indicating that while the broadcast substantially exceeded viewer expectations for this level of competition, it was perceived as below the standard of mainstream professional sports broadcasting. These findings also help account for the descending gradient observed across the legitimacy items reported above. Together, these findings suggest that the AWL stream performs well within its contextual frame of reference while a clear quality differential relative to professional sport remains.

Table 4. Broadcast Quality Perceptions and Contextual Benchmarking by Production Treatment

Item	M	SD	n	M (SD)	M (SD)	t
				Basic production	Advanced production	(Group)
Broadcast features (1 = strongly disagree, 7 = strongly agree)						
Camera angles helped understand the play	5.19	1.44	69	5.15 (1.61)	5.21 (1.34)	−0.18
Poolside audio supported the viewing experience	5.12	1.54	69	5.04 (1.56)	5.17 (1.54)	−0.34
Commentary enhanced the broadcast experience	5.69	1.41	42			
Live replays enhanced the broadcast experience	5.43	1.63	42			
On-screen information enhanced the broadcast	5.12	1.42	42			
Broadcast quality (1 = strongly disagree, 7 = strongly agree)						
Livestream was smooth and stable	5.88	1.17	69	5.85 (1.10)	5.90 (1.23)	−0.19
Easy to follow what was happening	5.74	1.29	69	5.63 (1.36)	5.81 (1.25)	−0.55
Overall broadcast quality was high	5.62	1.24	69	5.52 (1.22)	5.69 (1.26)	−0.56
Broadcast felt professionally produced	5.58	1.30	69	5.52 (1.48)	5.62 (1.19)	−0.30
Broadcast expectations (1 = much lower, 7 = much higher)						
Broadcast quality relative to expectations	5.66	1.30	67	5.36 (1.50)	5.83 (1.15)	−1.36
Broadcast quality relative to professional sports	4.04	1.62	67	3.68 (1.77)	4.26 (1.50)	−1.37

Note. Overall M and SD are based on the full sample. Commentary, live replays, and on-screen information were present only in the advanced production condition and are reported for advanced-condition viewers ($n = 42$); they were not assessed in the basic condition and are excluded from the production-group comparison. All broadcast quality items rated on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). Contextual benchmarking items used a 7-point comparative scale. Basic production: Women's Thursday 15 January and Men's Friday 16 January ($n = 25$ – 27). Advanced production: Men's Thursday 15 January and Women's Friday 16 January ($n = 42$). Overall t -values in the full-sample columns reflect one-sample tests against the scale midpoint (4); all broadcast quality items $p < .001$. Group comparison t -values are Welch's independent samples tests; no comparisons were statistically significant (all $p > .05$).

To examine how production treatment influenced viewer perceptions, respondents were separated into two conditions: a basic production condition ($n = 33$) and an advanced production condition ($n = 44$). Independent samples t -tests revealed no statistically significant differences between groups on any comparable feature rating, broadcast quality item, or benchmarking measure ($p > .05$). Mean scores were closely

aligned across all comparable items, and the largest remaining difference was for broadcast quality relative to expectations ($M = 5.83$, $SD = 1.15$ vs $M = 5.36$, $SD = 1.50$). The small basic-production group meant the comparison could detect only medium-to-large differences ($d \approx 0.70$), well above the largest observed gap, so these nulls are inconclusive rather than evidence of equivalence.

Discussion

This study explored the audience composition and broadcast perceptions associated with livestreamed non-mainstream sport, using a case study approach (Yin, 2018). The results identify a highly engaged but structurally bounded audience, the implications of which offer disconfirming evidence surrounding several assumptions that underpin the case for streaming in non-mainstream sport, including the realisation of streaming's audience-broadening capacity and whether incremental production sophistication shapes viewer perception. These exploratory results thus carry both theoretical and applied implications for how non-mainstream sport organisations understand their streaming practices and point toward a research agenda that warrants further development. The identified insider composition provides an empirical window onto how audiences in non-mainstream sport may be constituted, a question that has received little direct attention and to which an audience-centred, verified-viewer design is particularly well suited (Cummins & Hahn, 2025).

Can Streaming Foster Organisational Legitimacy?

The AWL broadcast functioned as a meaningful legitimacy signal within viewers' frame of reference, though the nature of that signal is best understood through how audiences calibrated their evaluations. The AWL broadcast substantially exceeded viewer expectations relative to its perceived level of competition, yet was perceived as meaningfully below the standard of mainstream professional sports broadcasts. This divergence suggests viewers applied two distinct reference frames simultaneously (Van Leeuwen et al., 2002), consistent with Oliver's (1980) expectation disconfirmation model, whereby evaluations are determined not by absolute performance but by the gap between prior expectations and perceived delivery. That the broadcast cleared the contextually appropriate threshold, even whilst falling short of elite benchmarks, carries direct implications for how streaming functions as a legitimacy mechanism for non-mainstream sport organisations.

Suchman (1995) distinguishes between pragmatic, moral, and cognitive legitimacy, and the pattern observed across the legitimacy items, whereby event-level credibility was more strongly endorsed than elite-level production equivalence, maps most closely onto cognitive legitimacy: the broadcast appears to have normalised the AWL as a recognisable and credible sporting institution within viewers' frame of reference. For non-mainstream sports, this is arguably an appropriate and achievable legitimacy target, and the strong correlation between broadcast quality and perceived legitimacy ($r = .795$) underscores the degree to which production standards function as an active

legitimacy signal for this insider audience. This is consistent with Meyer and Rowan's (1977) argument that the adoption of institutionalised practices communicates organisational competence independently of instrumental performance.

Who is Watching Non-Mainstream Sport Streams?

Findings demonstrated AWL viewership was constituted almost entirely by sport-embedded insiders, including family members of players, coaches, officials and active athletes. Correspondingly, discovery-based motivations were negligible. As the study observed only those who watched, the results describe the composition of the realised audience rather than streaming's capacity to reach prospective viewers. The audience exhibited strong avidity, evidenced by substantial viewing durations and strong fan identity scores (Kunkel et al., 2022; Wann & Branscombe, 1993). The insider-dominated composition of the AWL audience is consistent with the existing work on CrossFit (Wymer et al., 2024), within which the audience composition was drawn nearly entirely from CrossFit insiders (82% current or former members and only 9% never involved). These audience compositions occur despite streaming removing the distributional barriers that have historically constrained the accessibility of non-mainstream sport, suggesting the technical capacity of streaming platforms to reach new audiences does not inherently translate to the broadening of audiences.

The motivational profile suggests viewer loyalty reflects relational interest grounded in social and community ties rather than preference-based self-selection into the sport as a media product (Yoshida et al., 2015). The dominance of personal connection to a player as the primary motivation points to consumption that is socially rather than product motivated, a pattern coherently understood through social identity (Tajfel & Turner, 1979): where following the sport expresses membership in the community that sustains it, watching functions less as media consumption than as an enactment of belonging. This accounts for several features of the audience at once: viewing is driven by personal connection rather than discovery; recommendation circulates within, rather than beyond, the participant network, as identity-based sharing reinforces group boundaries rather than extending them; and the audience may be relatively insensitive to production quality, evaluation resting on relational investment rather than on the broadcast as a media product. For the smaller-scale sport media ecosystems in which such audiences predominate, engagement is sustained by social identification rather than by the qualities of the media product itself, with consequences for how such ecosystems develop.

The dominance of sport insiders within audience composition carries direct practical implications for sport organisations involved in, or considering, streaming. High recommendation scores are conventionally read as evidence of word-of-mouth potential, a primary growth strategy for niche brands (Fujak, Driesener, & Shilbury, 2025), yet within an insider audience such endorsement is unlikely to extend the base. Consistent with this, Wymer and colleagues' (2024) CrossFit study found comparable insider concentration despite 73% of its sample viewing via the far more accessible YouTube platform, suggesting the limited reach beyond insiders is not merely an

artefact of the AWL's login-gated platform. That organisations adopt streaming despite its limited reach beyond insiders may reflect mimetic isomorphism, whereby non-mainstream sport organisations may be adopting streaming practices by replicating the behaviour of larger organisations to signal legitimacy rather than because of demonstrated value (DiMaggio & Powell, 1983).

Whether this insider boundedness is a durable feature of non-mainstream sport streaming or a condition of this particular case warrants consideration. This boundedness is better read as contingent than intrinsic. Media exposure can expand sport audiences beyond an existing base, as Formula One's documentary-driven growth illustrates (Shah & Williams, 2025), but such audience expansion likely depends on conditions associated with commercial broadcasting: narrative-driven production, high-reach platforms, and substantial investment. These are largely absent from semi-professional streaming produced at more modest cost, suggesting the insider-bounded audience may reflect the level of the sport rather than a fixed ceiling on what streaming can achieve for non-mainstream sport more broadly.

Production Sophistication and the Insider Audience

A related question concerns whether the level of production sophistication shapes viewer response. The comparison of basic and advanced production conditions provides a direct empirical basis, and the absence of statistically significant perceptual differences between them, despite substantive differences in production sophistication, warrants careful interpretation. This likely reflects methodological limitations of the study, given the small basic production group, which limits statistical power. Read alongside the audience analysis above, however, it is also consistent with the possibility that highly involved insider audiences are less sensitive to production variation than a general viewing public, evaluating the broadcast through relational investment rather than as a media product (Muniz & O'Guinn, 2001; Yoshida et al., 2015).

This carries a practical implication for non-mainstream sports considering production sophistication. Where the audience is primarily relational, the value of incremental production refinement may be limited, since production quality is not the basis on which such viewers engage. The case for more sophisticated production rests principally on attracting broader discretionary audiences, which the present findings suggest non-mainstream sport streaming is unlikely to reach. Production sophistication beyond a modest threshold may therefore offer limited additional value for the current insider base, a possibility warranting further examination beyond the limitations of this data.

Limitations and Future Directions

Several limitations of the present study warrant acknowledgement. Most fundamentally, the exploratory nature of the findings is constrained by sample size. Whilst the verified-viewer sampling frame is a methodological strength, the resulting sample ($n = 77$) is insufficient to support inferential generalisation. This constraint is in part intrinsic to the method rather than a remediable shortcoming. Verified-viewer

sampling trades scale for authenticity: restricting the frame to confirmed viewers captures an actual audience rather than an approximated one, but in a non-mainstream setting that audience is itself small, with the entire verified viewership of the season-opening weekend numbering 1,201. Because all verified viewers were invited, the resulting sample reflects the realistic yield of surveying a niche streaming audience directly rather than a failure to recruit from a larger pool. A modest sample is therefore an expected condition of audience-centred research in these environments, and we accordingly position the findings as an exploratory basis rather than as grounds for generalisation. The findings are further bounded by the study's single-case design. Situated in one sport, one league, and a single season-opening weekend, the results should be read as context-specific rather than representative of non-mainstream sport streaming generally, and the patterns observed may reflect features particular to water polo, to these two clubs, or to this competitive moment.

The study also did not directly assess viewers' willingness to participate in the sport, limiting insight into how engagement may translate into behavioural involvement. The cross-sectional design precludes assessment of whether the legitimacy and engagement outcomes observed are sustained over time or across multiple broadcast exposures. Relatedly, the intention measures captured here were attitudinal rather than behavioural. Future research could triangulate stated intentions against platform behavioural data, including actual return viewership and watch duration. The production treatment comparison carries its own limitations. Treatment allocation was determined by match schedule rather than random assignment, meaning unobserved differences between the two viewer groups cannot be fully controlled for. The basic production group was substantially smaller than the advanced group, constraining statistical power and limiting the interpretive weight that can be placed on the non-significant group comparisons. Future research employing larger and more balanced samples, or experimental designs in which production conditions are randomly assigned, would provide a more robust basis for examining the relationship between production investment and viewer perception in non-mainstream sport contexts.

Notwithstanding these constraints, the study responds to an identified need within sport communication scholarship for audience-centred research that moves beyond content analysis to examine how viewers experience, evaluate, and respond to mediated sport (Cummins & Hahn, 2025). In doing so, it demonstrates the value of a verified-viewer sampling frame for reaching an audience that conventional population or convenience samples capture only indirectly, offering a replicable basis for audience-centred enquiry in other non-mainstream sport settings. Future research should build on this foundation through larger-scale, multi-sport audience studies that can support inferential generalisation across non-mainstream sport contexts.

Conclusion

This study sought to explore the audience composition and broadcast perceptions associated with livestreaming non-mainstream sport. The findings, whilst exploratory due to the case study application and sample size limitations, nonetheless contribute to

the examination of sport media practices within non-mainstream contexts, an area of inquiry that remains underdeveloped within the sport literature. The findings converge on a consistent picture: non-mainstream sport streaming audiences are anchored in existing participant networks and constituted through relational and community ties, are responsive to streaming as a signal of organisational legitimacy, yet show little evidence of extending beyond the participant base from which they are drawn. This tightly bounded, insider-constituted audience offers an empirically grounded account of how audiences form in non-mainstream sport, rooted in relational and participatory ties rather than the discovery-driven consumption assumed of mainstream sport media. Characterising this structure is a necessary precondition for understanding whether, and how, such audiences might be developed beyond it.

These findings carry direct implications for how non-mainstream sport organisations understand their streaming practices. This study does not constitute an argument against streaming; rather, it underscores the importance of clarity regarding what streaming is expected to achieve (Tickell et al., 2024). Where the primary function is reinforcing organisational legitimacy and serving an existing participant community, that function appears well served by even modest production (Suchman, 1995). Where expectations extend to developing audiences beyond the participant base, the present findings suggest such broadening should not be assumed to follow from streaming provision alone (Funk & James, 2001). As streaming becomes an increasingly normalised practice across the spectrum of sport organisations (Hutchins et al., 2019), the capacity to distinguish between streaming's legitimacy-building function and its more uncertain audience-development potential, and to pursue each through appropriately targeted strategies, will shape whether the practice delivers meaningful value.

In contributing an empirically grounded audience-centred analysis to an area of practice that has outpaced scholarly examination (Wymer et al., 2024), the study also advances a methodological case for the verified-viewer approach as a means of capturing the perceptions and attitudes of confirmed viewers in non-mainstream sport contexts (Cummins & Hahn, 2025). Future research should build on this foundation through larger-scale, multi-sport studies capable of testing whether the insider audience structure identified here represents a generalisable feature of non-mainstream sport streaming, and under what conditions, if any, streaming investment can meaningfully extend audience reach beyond existing participant networks.

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References

- Australian Sports Commission. (2018). *Australia's sport 2030: Shaping the future of sport and active recreation in Australia*. Australian Government.
- Billings, A. C., Butterworth, M. L., & Turman, P. D. (2017). *Communication and sport: Surveying the field*. SAGE.
- Boyle, R., & Haynes, R. (2014). Sport, public relations and social media. In A. C. Billings & M. Hardin (Eds.), *Routledge handbook of sport and new media* (pp. 133–142). Routledge.
- Cashman, R. (2010). *Paradise of sport: A history of Australian sport* (2nd ed.). Walla Walla Press.
- Cohen, A., Brown, B., & Welty Peachey, J. (2012). The intersection of pop culture and non-traditional sports: An examination of the niche market of quidditch. *International Journal of Sport Management and Marketing*, 12(3-4), 180–197. <https://doi.org/10.1504/ijsmm.2012.052666>
- Cooky, C., Council, L. D., Mears, M. A., & Messner, M. A. (2021). One and done: The long eclipse of women's televised sports, 1989–2019. *Communication & Sport*, 9(3), 347–371. <https://doi.org/10.1177/21674795211003524>
- Cummins, R. G., & Hahn, D. (2025). 10 years of Communication & Sport: A review of theory, method, and authorship. *Communication & Sport*, 13(5), 881–903. <https://doi.org/10.1177/21674795241293041>
- Dalgic, T., & Leeuw, M. (1994). Niche marketing revisited: Concept, applications and some European cases. *European Journal of Marketing*, 28(4), 39–55. <https://doi.org/10.1108/03090569410061178>
- Deephouse, D. L., Bundy, J., Tost, L. P., & Suchman, M. C. (2017). Organizational legitimacy: Six key questions. In R. Greenwood, C. Oliver, T. B. Lawrence, & R. E. Meyer (Eds.), *The Sage handbook of organizational institutionalism* (2nd ed., pp. 27–54). SAGE.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. <https://doi.org/10.2307/2095101>
- Evans, T., & Donders, K. (2018). *Platform power and policy in transforming television markets*. Palgrave Macmillan.
- Evans, T., Iosifidis, P., & Smith, P. (2023). *The political economy of television sports rights* (2nd ed.). Palgrave Macmillan.
- Fujak, H., Driesener, C., & Shilbury, D. (2025). Empirically testing for niche sports. *Sport Management Review*, 28(1), 51–72. <https://doi.org/10.1080/14413523.2024.2395578>
- Fujak, H., Frawley, S., & Adair, D. (2025). Investigating the prevalence and distribution of sport fandom. *Leisure Sciences*. Advance online publication. <https://doi.org/10.1080/01490400.2025.2577850>
- Funk, D. C., & James, J. (2001). The psychological continuum model: A conceptual framework for understanding an individual's psychological connection to sport. *Sport Management Review*, 4(2), 119–150. [https://doi.org/10.1016/S1441-3523\(01\)70072-1](https://doi.org/10.1016/S1441-3523(01)70072-1)
- Greenhalgh, G. P., Simmons, J. M., Hambrick, M. E., & Greenwell, T. C. (2011). Spectator support: Examining the attributes that differentiate niche from mainstream sport. *Sport Marketing Quarterly*, 20(1), 41–52. <https://doi.org/10.1177/106169341102000107>

- Hammervold, R., & Solberg, H. A. (2006). TV sports programs—Who is willing to pay to watch? *Journal of Media Economics*, 19(3), 147–162. https://doi.org/10.1207/s15327736me1903_1
- Hutchins, B. (2014). Twitter: Follow the money and look beyond sports. *Communication & Sport*, 2(2), 122–126. <https://doi.org/10.1177/2167479514527430>
- Hutchins, B., Li, B., & Rowe, D. (2019). Over-the-top sport: Live streaming services, changing coverage rights markets and the growth of media sport portals. *Media, Culture & Society*, 41(7), 975–994. <https://doi.org/10.1177/0163443719857623>
- Hutchins, B., & Rowe, D. (2009). From broadcast scarcity to digital plenitude: The changing dynamics of the media sport content economy. *Television & New Media*, 10(4), 354–370. <https://doi.org/10.1177/1527476409334016>
- Hutchins, B., & Rowe, D. (2012). *Sport beyond television: The internet, digital media and the rise of networked media sport*. Routledge.
- James, J. D., & Ross, S. D. (2004). Comparing sport consumer motivations across multiple sports. *Sport Marketing Quarterly*, 13(1), 17–25. <https://doi.org/10.1177/106169340401300103>
- Kunkel, T., Karg, A., & McDonald, H. (2022). The utility of a single-item self-perception fandom measure for sport consumer segmentation and predicting behavior. *Sport Marketing Quarterly*, 31(2), 141–156. <https://doi.org/10.32731/smq.312.0622.05>
- Li, J. (2026). The illusion of interaction: How emotional connection, not functional engagement, drives viewer loyalty in social sports broadcasting. *Communication & Sport*. Advance online publication. <https://doi.org/10.1177/21674795251415295>
- Lock, D., & Heere, B. (2017). Identity crisis: A theoretical analysis of ‘team identification’ research. *European Sport Management Quarterly*, 17(4), 413–435. <https://doi.org/10.1080/16184742.2017.1306872>
- Meier, H. E., Schreyer, D., & Jetzke, M. (2020). German handball TV demand: Did it pay for the handball-Bundesliga to move from free to pay TV? *European Sport Management Quarterly*, 20(5), 618–635. <https://doi.org/10.1080/16184742.2019.1657475>
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363. <https://doi.org/10.1086/226550>
- Muniz, A. M., Jr., & O’Guinn, T. C. (2001). Brand community. *Journal of Consumer Research*, 27(4), 412–432. <https://doi.org/10.1086/319618>
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469. <https://doi.org/10.2307/3150499>
- Shah, D., & Williams, A. L. (2025). “Drive to Survive” drives new fans to Formula 1? Studying viewer experiences of a sports documentary and its influence on the sport’s fandom. *Communication & Sport*, 13(6), 1213–1234. <https://doi.org/10.1177/21674795241280209>
- Sherif, M., & Hovland, C. I. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change*. Yale University Press.
- Sherwood, M., Osborne, A., Nicholson, M., & Sherry, E. (2017). Newswork, news values, and audience considerations: Factors that facilitate media coverage of women’s sports. *Communication & Sport*, 5(6), 647–668. <https://doi.org/10.1177/2167479516645535>
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610. <https://doi.org/10.2307/258788>

- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Brooks/Cole. The Trade Desk. (2023). *The future of television in Australia*. The Trade Desk Intelligence.
- Tickell, S., Sobral, V., & Meier, H. E. (2024). Finding a niche in digital plenitude: Sport media strategies of smaller European football leagues. *European Sport Management Quarterly*, 24(4), 876–897. <https://doi.org/10.1080/16184742.2023.2218868>
- Two Circles. (2025). *Global sports fan attendance report 2024*. Two Circles.
- Van Leeuwen, L., Quick, S., & Daniel, K. (2002). The sport spectator satisfaction model: A conceptual framework for understanding the satisfaction of spectators. *Sport Management Review*, 5(2), 99–128. [https://doi.org/10.1016/S1441-3523\(02\)70063-6](https://doi.org/10.1016/S1441-3523(02)70063-6)
- Vann, P., Bruns, A., & Harrington, S. (2018). Transmedia social platforms: Livestreaming and transmedia sports. In M. Freeman & R. R. Gambarato (Eds.), *The Routledge companion to transmedia studies* (pp. 107–115). Routledge.
- Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology*, 24(1), 1–17.
- Wilmot, S. (2022). Broadcast production and logistics. In H. Fujak & S. Frawley (Eds.), *Sport broadcasting for managers* (pp. 35–54). Routledge.
- Wymer, S., DeMartini, A. L., & Brown, A. R. (2024). Crossfit games: A case study of consumer engagement on social live-streaming service platforms. *International Journal of Sport Communication*, 17(4), 461–475. <https://doi.org/10.1123/ijsc.2024-0102>
- Yin, R. K. (2018). *Case study research and applications* (6th ed.). SAGE.
- Yoshida, M., Gordon, B., Heere, B., & James, J. D. (2015). Fan community identification: An empirical examination of its outcomes in Japanese professional sport. *Sport Marketing Quarterly*, 24(2), 105–119. <https://doi.org/10.1177/106169341502400204>
- Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management*, 24(3), 338–361. <https://doi.org/10.1123/jsm.24.3.338>