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Article

How do event zones influence visitor behaviour and engagement with host destinations? A longitudinal study of the Cambridge half marathon (2017–2020)

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ABSTRACT

This work identifies important influencing factors that affect event visitor behaviour in and beyond event zones, utilising a four-year, mixed-method, longitudinal study (n=6212) of the Cambridge Half Marathon (2017–2020). We counter a commonly held view that visitors naturally spill out into local cultural and business precincts, arguing that event zones represent cities within cities that spatially segregate visitors from the host destination; only 7% of the sample engaged in longer and deeper cultural stays. Quantitative data reveals statistically significant demographic and tripographic factors that increase the likelihood of visitors venturing beyond the event zone, whilst qualitative data reveals the behavioural and organisational factors that *encourage* or *discourage* engagement. Managerial tactics and strategies for encouraging visitors to venture beyond event zones, across host destinations, to optimise local economic benefits across the host destination are presented.

1. Introduction

Cities have always played centre stage for hosting sporting events. Policymakers and planners have constantly (re)imaged how cities, citizens, consumers, visitors, and managers of public space (urban squares to green parks) can harmoniously co-exist and generate mutual benefit (Arnegger & Herz, 2016; Ashworth & Page, 2011; Page & Duignan, 2023; Werner et al., 2016). This is important because cities are complex and contested spaces occupied by producers and consumers with diverse interests and requirements (Smith, 2016). Therefore, understanding the complex interactions between the city and permanent urban zones and the construction of temporary event zones as sites of intense production and consumption, that, overlap and conflict with everyday uses, poses a critical challenge for event managers, tourist boards, and national and local governments who are keen to exploit events for social and economic value (Dickson et al., 2018).

The spatial designation and delineation of event zones is a popular planning tool that uses material and symbolic notional boundaries to produce a border between the event and the host destination, with the purpose of temporarily clustering the event's activity and visitors inside its borders (Carlini et al., 2020). Examples include music festivals, fan zones, to Olympic Parks. There are some axiomatic and some interpreted reasons for this. First, erecting barriers, walls, signage et cetera helps to securitise the event, particularly for ticketed events. Second, the event zone can often serve as a legal boundary for the event owner or manager's responsibility and duty of care. After 9/11, the use of airport style security screening at large events, alongside concrete blocks, and metal screens to protect smaller events like Christmas Markets, have been installed to help prevent terrorist threats. Third, event zones are often highly animated and therefore contain and focus the consumers' gaze on event-related sporting, cultural, and commercial activity (McGillivray & Frew, 2015), often critiqued as at the expense of those business and cultural interests positioned outside the event zone (Giulianotti et al., 2015). Fourth, containing visitors and spill out can reduce conflict

with adjacent neighbourhoods and residents. Together, these reasons have been cited to adversely impact entrepreneurial individuals, organisations, and the host destination at-large – outside the event zone - who seek to benefit from 'immediate leveraging' opportunities associated with temporary event visitor economies (Clark & Misener, 2015). Extant literature and a significant body of empirical work inside host destinations reveals this is a pervasive problem found in all types of events and contexts where event zones are constructed.

Event owners and managers of virtually all events cite social and economic benefits for the host's visitor economy – beyond the event zone – as something that naturally spills out before, during and after the event's occurrence (McGillivray et al., 2019). Yet repeatedly, scholars and critical commentators provide evidence on the contrary; pointing an ignorance of the problem and an absence of how to overcome the problem. This is significant as O'Brien (2006) posits events are just the seed capital and it is the targeted tactical and strategic interventions managers deploy that determine the success of the event. Furthermore, research have identified visitors take several days to first orientate and then navigate themselves in new destinations (Walmsley & Jenkins, 1992; Arnold et al., 2004). This is problematic for events with a limited time duration or that are one-day occurrences, like the Cambridge Half Marathon, because visitors often confine engagement to highly circumscribed event zones and overlook non-event related spaces (Hall, 2006; Fairley & Kelly, 2018; Kelly, Fairley, & O'Brien, 2019; Pappale-pore & Duignan, 2016; Carlini et al., 2020; Duignan et al., 2021). Promised social and economic benefits therefore often go unrealised, whether that be at a small Indy Car rally (Chalip & Leyns, 2002), a FIFA World Cup (Hall, 2006) to the Commonwealth Games (Carlini et al., 2020). The failure to meet local expectation can be compounded by adverse planning impacts such as event-induced disruption (e.g., closure of inner-city spaces) and displacement (e.g., regular consumers avoiding or being unable to access parts of the city due to restricted access) (Carlini et al., 2020; Giulianotti et al., 2015; Mhanna et al., 2017).

We argue negative impacts occur because those responsible for producing the event do not fully understand i) how event visitors behave, generally; and ii) how the construction of event zones specifically impacts behaviour and engagement with the host destination. This is unsurprising because although we cite literature evidencing limited spill out, these examples are generated by primarily qualitative insights and small sample sizes, and therefore provide limited data to inform event planning and design and the event visitor experience. Research to date has tended to focus on descriptive elements (e.g., 'what' they do, 'how' they travel, and 'who' are the target markets) and strategic elements (e.g., 'how' can we lever), but Fairley (2006) argues that we need to better understand how and why event visitors engage with their surroundings and what they consume during their visit. Examining the relationship between the event, place, people, and other non-sporting and non-event related activities is crucial to understand how managers can turn event and sport event visitors into active cultural visitors to optimise local benefits (Weed & Bull, 2009), which is a key contribution of this research article. With this in mind, the research questions guiding this study are:

1) What are the demographic and tripographic (quantitative) factors that are likely to influence visitor engagement beyond event zones?
2) What appear to be the behavioural and organisational (qualitative) factors that encourage and discourage visitor engagement beyond event zones?
3) How can we encourage event visitors to go beyond event zones to help optimise the local economic benefits of staging events in host destinations?

By recognising the aforementioned gap in knowledge, we can see how our understanding on the spill out of event visitors to other parts of the host destination and how events can encourage greater visitor engagement, is limited. This is surprising given the centrality of 'immediate leveraging' in Chalip's (2004) well-recognised Event Leverage Model, and Smith's (2016) more recent work on generating inclusive and positive local outcomes from staging city-based events, especially those that utilise public parks for commercial gain. Our aim is to respond to this gap and contribute to knowledge by 1) presenting a large-scale longitudinal study of event visitor behaviour to date to provide a more comprehensive evidence base and understanding on i) and ii) above; 2) helping to expose the problem and counter the natural spill out fallacy; and 3) identify how local stakeholders might optimise leveraging tactics to satisfy the needs of different event visitor markets, particularly those related to sport events (Weed, 2008) and the tactics and strategies managers can deploy to nudge visitors beyond event zones. We connect this contribution to our theoretical framework, developed across this Introduction and in the Literature Review, which includes the complex behavioural and organisational determinants identified by previous research and bringing these together, and both why these are significant in the context of constructing event zones and how these factors influence visitor behaviour.

Our four-year analysis of visitor behaviour associated with the Cambridge Half Marathon (CHM) from 2017 to 2020, represents one of the largest empirical studies of event visitor behaviour to date (n=6212). Intentionally, we chose an urban marathon where the event zone is situated central to the city and well positioned to encourage spill out. CHM is one of the largest half marathons in the UK with over 10,000 runners. Although the focus of our analysis is solely on the CHM runners' perspectives, studies on sport event visitor behaviour also includes those who passively consume the event (e.g., supportive friends and family, other spectators, fans, or even other athletes not participating but still attending the event). The most recent race analysed is that of March 8, 2020, just before the start of the first COVID-19 pandemic lockdown in the UK (March 23, 2020). This approach is novel as the quantitative analysis affords an examination of statistically significant, demographic and tripographic, factors to determine behaviour, and the qualitative analysis provides in-depth, nuanced insights concerning both organisational and behavioural factors (*encouraging* and *discouraging* behaviours). Furthermore, real-time, observational insights and visual evidence illustrate how the city transforms to stage the event and shape visitor behaviour. This work provides a new empirical context within which to drive theory development, with implications for both small, regional events and large, national events.

Underlying our critical analysis is a desire to demonstrate that the spatial fixity of event zones should be reimagined to extend their spatial reach to distribute visitor economic benefits more widely. This is significant as the paradox of urban events is that they require cities to host and resource them yet the cities themselves, especially those that have a diverse portfolio of economic activity, do not necessary need events. Therefore, this work is significant to inform whether using large sport events for local economic development purposes is a logical policy imperative for cities and how events can deliver optimal value for local stakeholders and the local economy.

2. Event visitor engagement and consumption: a neglected literature

Although we know little about event visitor behaviour in terms of their temporal and spatial activities, there is a growing body of literature on how the practice of event zoning and event zones impact visitor behaviour and engagement with host destinations (e.g., Giulianotti et al., 2015; McGillivray & Frew, 2015; McGillivray et al., 2019; Duignan et al., 2022). Event zoning aligns with the broader practice of 'urban zoning': The process of how urban planners delineate the city for various purposes such as commercial, cultural, and residential zones (World Bank, 2022). Despite cities witnessing exponential growth in the number of events that occupy urban zones , research has largely overlooked smaller, regional events like urban marathons (Kruger et al., 2012).

Scholars have increasingly sought to understand how event visitors interact with the locations designated to stage live events (e.g., Giulianotti et al., 2015; Weed, 2008) because most events, large or small, are justified based on predicted visitor economic benefits for local businesses. Getz and Page (2016) highlighted a need for impact assessments of event visitor engagement, yet Duignan et al. (2019) suggested little is known either about visitor activity immediately before, during or after live staging or the extent to which visitors venture beyond event zones. Weed and Bull (2009) argue that sport event related visitor decisions are complex as they involve elements relating to the sport, the event and, perhaps even, to local culture, that all influence the interactions of visitors with the place. Indeed, the reconfiguration of the host destination to stage live events complicates how and why event visitors are influenced by extra-organisational factors as well as their own individual behavioural reasons too. This work, therefore, addresses both dimensions of the situation; first, we investigate visitor *behavioural factors* (i.e. reasons why visitors decide to engage or not in and beyond event zones); and second, we look at event *organisational factors* (i.e. how event managers organise events in ways that enable and/or constrain engagement and consumption in and beyond event zones).

2.1. Behavioural factors

Research on the determinants of visitor decision making, choice and selection processes, and how these translate into determinants of engagement is dominated by consumer psychology literature and economic theories of behaviour. Consequently, studies have generally focused on event visitors' motivations, levels of satisfaction and future visit intentions, or the studies have addressed microeconomic models of sport event tourism demand (Uysal et al., 1993; Heldt & Mortazavi, 2016). Sport tourism researchers have highlighted the paucity of theoretical frameworks that have been applied to visitor behaviour. Schofield and Thompson (2007) suggest there has been an excessive reliance on on-site visitor research motivations for attending and on satisfaction rates, with limited empirical work using both large scale quantitative data sets alongside qualitative insights to determine how and why event visitors engage beyond the event, and the likely spill out into local environments. This is significant as Richards (2019) identify a strong relationship between the experiences of visitors who ventured outside the event zones and i) increased satisfaction, ii) increased intention to return, and iii) increased intentions to recommend destinations to others. Zatori et al. (2018) also found that spontaneous interactions between visitors and local product/service providers positively impacted visitor experiences, and that the occurrence of such interactions increased when visitors were encouraged to go beyond event zones.

Literature on the behaviour of event visitors has primarily focused on a few key aspects, namely, a sense of shared identity, the time of year, novelty and rarity value, and the design of the event – yet there is minimal emphasis on local cultural interactions, specifically, beyond event zones (Duignan, Pappalepore, & Everett, 2019). Previous research has found that sport event visitors typically display aversion to cultural engagement beyond sport events themselves, because attendees engage with related sport and event activities to build a sense of identity with those inside event zones (Weed & Bull, 2009). Marathons for example attract running groups and clubs who utilise the event zone as a collective space to share sporting experiences and interact with one another to develop self- and group-identity (Wood & Kenyon, 2018). This is particularly heightened in more complex sport event environments like the Olympics where there is a high intensity of interactions between sport activities, fans, athletes, and nations (Weed, 2008).

The timing (diurnal and seasonal) of an event, particular winter climates, can affect visitor behaviour too. Whether an event is scheduled at peak or off-peak times, and/or subject to good or bad weather, are factors that determine how visitors engage with, and consume in, destinations, which, in turn, affects overall value for the visitor economy

(Fourie et al., 2011). Holding events in the off-peak season is often used as a strategy to extend the tourist season of popular summer tourist destinations (UNWTO, 2019). Connell et al. (2015) also find that events can support an all-year-round visitor economy; their study of Scottish attractions found two-thirds of respondents viewed the local community (the urban population within 10 km of the event) as a vital market for off-peak events. A strategic emphasis on all-year-round events can optimise the benefits of events for the local visitor economy. Moreover, off-peak sport events impact consumers' images of a destination and increase the likelihood of them making new, or repeat, visitations at another time (Kaplanidou & Vogt, 2007). A long-term value of hosting regular events can be to entrench the destination's image in visitors' minds, thereby creating visitor loyalty to both the event and the destination, which can also lead to future tourist spending, (Cunningham & Kwon, 2003; McCartney, 2005).

Thirdly, consumer behaviour theory suggests there is a positive correlation between satisfaction with a product (or event) and repeat use or visitation. This theory argues that novelty seeking plays a central role for determining tourist behaviour, identified by old (e.g. Crompton, 1995) and more recent research (e.g. Zatori et al., 2018). Therefore, the rarity value visitors attribute to attending sports and cultural events, and the proclivity (or not) for visitors to spill out beyond event spaces (Gandhi-Arora & Shaw, 2002), is still a key question for those looking to optimise 'immediate leveraging' opportunities associated with hosting events (Clark & Misener, 2015). This is significant as event zones have become increasingly central, experiential features of event visitor experiences; when changed and redesigned between subsequent events, they enable a recurring event to have changing relevance for consumers by offering surprise, spontaneity and novelty value (Tynan & McKechnie, 2009) – across various touchpoints before, during and after the event (Arnold et al., 2004). We posit this can be both a blessing and a curse; helping to generate return visitation, whilst also containing visitors inside the zone and reducing the propensity they will engage beyond its borders. This dilemma and these subtle consume behaviours serve as a useful pre-text to a study of the CHM given it takes place in the same destination at a similar time each year, therefore, questioning novelty and rarity value for repeat runners and visitors.

Finally, the design of event experiences can help events to stand out in a competitive field. Integrating local cultural elements into an event design generates a sense of uniqueness attached to the experience that can satisfy the consumer's novelty and rarity demand (Duignan et al., 2020). For example, in the USS, American College Football events are platforms for teams, bands, dancers and friends' parade in local districts before the games to showcase their colleges, and Brown et al. (2015) found that by drawing on local cultural and heritage links in the event experience has been shown to help trigger stronger and positive emotional responses.

2.2. Organisational factors

Concepts associated with visitors' decision making and choice behaviour have been increasingly applied to sport events, partly due to increased media coverage but also because of increased interest in experiential and activity-based visitor experiences. Building on the arguments presented in the previous section, Formica (1998), then Getz and Page (2016), argue that event managers must optimise the value of hosting an event for all stakeholders, particularly the emotional aspects of event experiences (Lee & Kyle, 2012; Robinson & Clifford, 2012). Consequently, as Barajas et al. (2016) suggests event managers need to recognise how to design the visitors' end-to-end engagement with events; to and from and across the host destinations and at the events themselves. This calls for a more holistic understanding of the event experience, that incorporates engagement and value that can be sought by fostering interactions between the event and the host destination (Ritchie & Hudson, 2009). Indeed, event consumption involves different stages and spaces of 'contact' and 'touchpoints', including: i) activities

before the event (i.e. at CHM visitors can collect their race pack the night before and engage with sponsor stands; ii) the purchase and/or core experience of the event (e.g., the CHM); and iii) the remembered experiences after the event (Arnold et al., 2004). The construction of event zones has played a central role in achieving the first two (McGillivray et al., 2019). These zones often contain a mixture of sporting venues, cultural spaces complete with cultural programming activities, as well as designated live sites and fan zones with sponsor activation spaces too (Giulianotti et al., 2019).

A key concept within event zoning is 'containment' where the creation of event zones aims to capture the flow, attention, engagement and consumption of event visitors (McGillivray & Frew, 2015). Increasingly, events have extended territorial presence through zoning practices with the primary intention of creating 'official' spaces which are 'the place to be' for event visitors. Yet this can undermine promises to circulate benefits for those outside the circumscribed event zones (Duignan, et al., 2022). There are a number of ways this occurs. First, the temporary spatial reconfiguration of a city can impact the way local populations and non-local visitors flow through that space and how, and where, they consume (Giulianotti et al., 2015). Carlini et al. (2020), who reviewed the organisation of the 2018 Gold Coast Commonwealth Games, note how these temporary spatial reconfigurations negatively impacted local businesses adjacent to the event site, who found themselves 'locked-out' from flows of visitors. Similarly, marathons erect barriers and other security measures to intentionally prevent visitor access on, or through, running spaces. The Tour de France cycle race and Monaco's Formula One race do the same.

McGillivray et al. (2019) argue that the above actions, such as erecting barriers and wayfinding, illustrate how events temporarily 'zone' cities. An event zone temporarily contains interaction, engagement and consumption within a demarcated area. The zones are often animated with official sponsors, VIP areas and food traders; whilst also housing administrative functions (e.g., race registration, medal collection and toilets). Simply put, they are the *place to be* – a shared collective experience where communitas is fostered (Wu et al., 2020). McGillivray et al. (2019) suggest that these spaces encourage visitors to stay within the confines of the event, which, in turn, reduces the likelihood that they will go beyond the event zones. Our study builds on the existing research in this area, to explore the relationship between the design and physical construction of the event city and event zone, and subsequent implications for local consumption.

Some critical event studies (e.g., Armstrong et al., 2015) highlight the potential for events to have a negative impact on the use of spaces by other visitors (such as residents, cultural tourists and shoppers) due to displacement. Ex-ante projections by organisers and local authorities assume that visitors will go beyond the event zone, but scholars have identified specific ways in which sport events are organised that inadvertently preclude cultural and economic engagement across the host city. If maximising an event's economic value to the visitor economy and local community is a primary reason for hosting events, evaluating visitor flows (and subsequent consumption practices) is a significant policy and practice issue (UNWTO, 2019). Vassiliadas et al.'s (2013) study of a ski resort demonstrates that, if managed appropriately, what visitors spend during one-day sport activities can be highly valuable for the product and service providers involved. Generally, however, more critical insights are needed, especially for urban neighbourhoods, to avoid scenarios where residents are promised benefits, but the events' fail to deliver. Therefore, advancing what we know about how event visitors behave, generally, and how the construction of event zones specifically impacts behaviour and engagement with the host destination, and how we can optimise the value of hosting through targeted tactics and strategies to nudge beyond event zones is critical academic, policy, and managerial objective of this research.

3. Methodology

Our empirical work comprises a four-year event case study (Yin, 2013) of the CHM in the city of Cambridge, UK. CHM is one of the largest half marathons in the UK and one of the largest events in the region (Cambridgeshire). Since 2012, CHM has taken place annually in February or March, during the region's off-peak, tourist season. The most recent race was on March 8, 2020, just before the UK's COVID-19 lockdown came into force on 23 March. Fig. 1 shows the route around the city; the event zone is situated in a single location called Midsummer Common, which is a public park near Mile 13 of the race. The event zone serves as both the start and end point of the races, and it is where both runners and spectators are welcomed from approximately 6:30am on the day of the races. The races start at 9:00am.

A quantitative and qualitative approach was undertaken due to the complexity of factors that determine visitor behaviour (Greene, 2007). Qualitative and quantitative data was generated via a mix of open and closed question survey. The main purpose of the qualitative data was to help interpret the quantitative findings on factors *determining* behaviour and then, to provide in-depth insights into the complex factors *influencing* behaviour in and beyond the event zone. Visitor surveys were distributed each year (2017–2020), one day after the event, to all race finishers via email using an online platform (Survey Monkey). Over the four years, 6212 useable surveys were generated for final analysis with a response rate ranging between 12% and 22% (Table 1). Along with some demographic information, participants were asked about tripographic information, including their accommodation, transportation, duration of stay, accompanying spectators and whether they were first-time visitors or repeat visitors. Our approach was novel as our *quantitative analysis* afforded an examination of demographic and tripographic factors that might have determined behaviour, and our *qualitative analysis* provided in-depth nuanced insights concerning both *organisational* and *behavioural* factors that might have been *encouraging* and *discouraging* behaviour.

All participants were asked: "What activities did you take part in?". Multiple responses were allowed, with nine options: 1) food and drink, 2) museums and heritage, 3) nightlife, 4) cafes, 5) walks and wildlife, 6) retail, 7) visits to outside places, 8) leisure activities and 9) other. As for visitors' spending, they were asked: "Have you spent any money in Cambridge over the race weekend because of your involvement with the half marathon?". The race weekend was defined as including the day before and the day after the race day. Participants were asked to specify spending in four categories: i) accommodation, ii) food/beverage, iii) entertainment and iv) travel). SPSS software (v.26) was used to conduct the statistical analyses.

The post-race questionnaire included open-ended questions to generate qualitative data. For example:

Q12. Where, specifically, did you go outside the event zone?

Q16. What motivated you to explore beyond the event zone?

Q17. What is the main reason you did not explore beyond the event zone?

The research was characterised by its single, narrow framing (i.e., on one event and one place) and was strengthened by having an embedded analysis of multiple time intervals, multiple stakeholder perspectives, and a large sample size (Wilson, 2013). Relative to similar studies, our data triangulation afforded a rigorous approach for understanding sport event visitor behaviour, thereby constituting a methodological template for future research. NVivo software was used to manage and code the qualitative data. All the researchers involved in the study analysed the data sets and met frequently to discuss emerging themes. At the start of the project, we developed a set of questions for use in a survey on the day of the race. The questions were aligned to the main research objectives and conceptual framework guiding this article. The key findings that emerged from these surveys were defined as: i) the determinants of non-
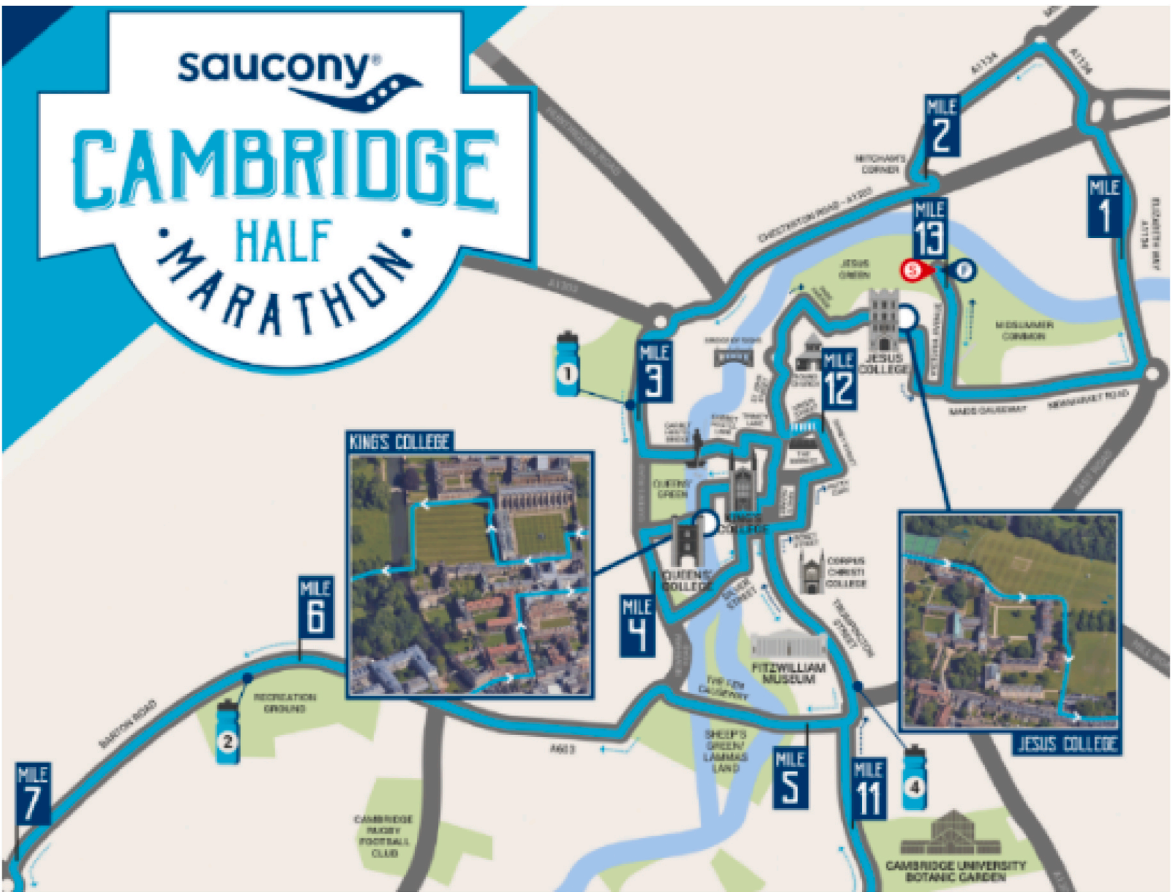
Fig. 1. CHM 2020 race route and event zone (location marked in red). Source: Cambridge Half Marathon (2020). (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

Table 1
Sample size and response rates.

	Finishers (N=33,611)	Sample size (n=6212)	Response rate
2017	6937	1534	22.11%
2018	7025	1519	21.62%
2019	8374	1782	21.28%
2020	11,275	1377	12.21%

local visitors' explorations beyond the event zone (split into both quantitative and qualitative evidence) and ii) the consequences of visitors' behaviours for the host community, which was split into how these factors influenced both visitor engagement and visitor spending across the host community.

5. Findings

This section presents the findings of our research split into four parts:

5.1 The event zone; 5.2 Profile of respondents (demographic and tripographic); 5.3 Determinants of non-local visitors' explorations beyond the event zone; and 5.4 The consequences of visitor behaviour for the host city.

5.1. The event zone

Images from CHM's event zone are shown in Figs. 2 to 4.

The images shown in Fig. 3, taken during the research period, help to visually illustrate the way that CHM was zoned; the images demonstrate how parts of the city have restricted access. Inevitably, these restrictions impact the way that visitors engage with, and consume in, the host community.

5.2. Profile of respondents

The CHM sample of 6212 respondents was segmented into three groups: i) local visitors (n = 3,559, 57.3%); ii) non-local visitors who

Fig. 2. Collage including race signage (left), start and finish line (middle), and Midsummer Common – the epicentre of the event zone. Source: Author's own.

Fig. 3. Collage illustrating how the city of Cambridge became locked down and precluded visitor access to parts of the city. Source: Author's own.

remained inside the event zone (n = 2,184, 35.2%); and iii) non-local visitors who explored beyond the event zone (n = 469, 7.6%). These results indicate that very few visitors (<8%) engaged with the host city.

Table 2 gives the participants' demographic data. Gender was evenly distributed (49% female). Most participants were in their 30s and 40s (60.6%), and 62% had an annual income of £50,000 or more, which indicates that visitors could afford to engage with the host city. Chi-square tests compared the demographics of the study sample to the

CHM runner population. The results revealed that the study sample's composition of gender and age was not statistically different from the CHM runner population over the same period (χ^2_{gender} = 0.50, p=.478; χ^2_{age} = 2.88, p=.578). Besides, previous marathon research reports that the average age of participants is around 40 years old and predominantly male (Wicker & Hallmann, 2013).

A series of *t*-test and chi-square tests were performed to compare the demographics (i.e., age and gender) and tripographics (i.e., first time/ repeat visitor, transportation and accommodation) among the three visitor groups. The chi-square results showed a significant difference in age among the three groups (χ^2 = 119.57, p < .001). Post-hoc analysis revealed that the local visitors tended to be younger than the other two groups, with higher proportions in the 17–39 age range and lower proportions in the 40+ age ranges. This is likely due to the large population of university students in the city. A significant difference was also found in gender (χ^2 = 8.85, p < .05); specifically, there were more males in two of the three groups: local *and* non-local visitors who explored beyond the event zone.

In terms of tripographics, the proportions of first time and repeat visitors were significantly different between local visitors and non-local visitors (χ^2 = 211.126, p < .001). The two non-local visitor groups had more first-time visitors than the local visitor group. In addition, significant differences were found in the types of transportation (χ^2 = 1379.55, p < .001) and accommodation (χ^2 = 364.08, p < .001) among the three visitor groups. Specifically, local visitors preferred to travel on foot and by bicycle, while non-local visitors were more likely to travel by car, train or bus. Although cars were the primary mode of transport for all visitors, at 42.1% (n = 2599), most visitors parked adjacent to the

Table 2
Respondent profiles.

Variable	Total[a]	Local Visitors[b]	Non-local Visitors (within the event zone bubble)	Non-local Visitors (beyond the event zone bubble)	χ^{2}[b]	p
Age					119.57	<.000
17–29 years old	903 (14.6%)	635 (17.9%) [a]	215 (9.9%) [b]	53 (11.4%) [b]		
30–39 years old	1664 (26.9%)	1016 (28.6%) [a]	527 (24.3%) [b]	121 (26.0%) [a, b]		
40–49 years old	2086 (33.7%)	1134 (31.9%) [a]	790 (36.4%) [b]	162 (34.8%) [a, b]		
50–59 years old	1193 (19.3%)	599 (16.9%) [a]	502 (23.1%) [b]	92 (19.7%) [a, b]		
60+ years old	340 (5.5%)	167 (4.7%) [a]	135 (6.2%) [b]	38 (8.2%) [b]		
Gender					8.85	.012
Male	3165 (51.0%)	1856 (52.2%) [a]	1058 (48.5%) [b]	251 (53.7%) [a]		
Female	3036 (49.0%)	1698 (47.8%) [a]	1122 (51.5%) [b]	216 (46.3%) [a]		
First time/Repeat					211.13	<.000
First time	2709 (46.3%)	1205 (37.7%) [a]	1226 (56.1%) [b]	278 (59.3%) [b]		
Repeat	3138 (53.7%)	1989 (62.3%) [a]	958 (43.9%) [b]	191 (40.7%) [b]		
Transportation					1379.55	<.000
Bus/coach	1488 (24.1%)	488 (13.7%) [a]	889 (41.2%) [b]	111 (23.8%) [c]		
Cycle	753 (12.2%)	715 (20.1%) [a]	27 (1.3%) [b]	11 (2.4%) [b]		
Foot	1088 (17.6%)	892 (25.1%) [a]	140 (6.5%) [b]	56 (12.0%) [c]		
Train	187 (3.0%)	15 (0.4%) [a]	145 (6.7%) [b]	27 (5.8%) [b]		
Car	2599 (42.1%)	1416 (39.9%) [a]	940 (43.6%) [b]	243 (52.0%) [c]		
Other	61 (2.0%)	26 (0.7%) [a]	16 (0.7%) [a]	19 (4.1%) [b]		
Accommodation					364.08	<.000
Home	1851 (61.7%)	424 (85.1%) [a]	1288 (62.8%) [b]	139 (31.0%) [c]		
Family and friends	478 (15.9%)	38 (7.6%) [a]	277 (13.5%) [b]	163 (36.3%) [c]		
Hotel	345 (11.5%)	6 (1.2%) [a]	239 (11.7%) [b]	100 (22.3%) [c]		
Other	324 (10.8%)	30 (6.0%) [a]	247 (12.0%) [b]	47 (10.5%) [b]		

Notes.
[a] The total number of responses for each variable might vary due to non-responses in the questionnaires.
[b] Each subscript letter denotes a subset of group categories whose column proportions do not differ significantly from each other at the .05 level.

event zone, which resulted in limited engagement with the wider city (unlike arriving at Cambridge's train station, as 3% of the respondents did (n=187)). The event parking was a significant determinant of visitor behaviour as visitors expressed a desire to avoid crowds and congestion, and to escape the city by car after the race finished. This partly explains why economic engagement with the city was limited. As for accommodation, most local and non-local visitors who did not explore beyond the event zone stayed at home. In comparison, non-local visitors who explored beyond the event zone were more likely to stay with family and friends, or in hotels, rather than choosing either of the other two options. Several of the factors discussed here play a key role in understanding the determinants of behaviour and they should be priorities when event organisers and local governments make policy and managerial recommendations.

5.3. Determinants of non-local visitor exploration beyond event zones

5.3.1. Quantitative evidence

Binomial logistic regressions were conducted to ascertain the effects of demographics, tripographics, and event satisfaction on the likelihood that visitors explored beyond the event zone. Only non-local visitors were included in the regressions due to the lack of local visitor data related to exploration beyond the event zone. Moreover, the principal objective of this research is to better understand how non-local visitors culturally and economically engage with events' host cities; in particular, Cambridge and the CHM. The responses to whether respondents left Cambridge city centre were recoded as a dummy variable (0 = No, 1 = Yes) and included in the regression model as the dependent variable. The model had a total of 14 independent variables, including age, gender, first time visitor, the number of spectators, and ten aspects of visitor satisfaction (including the online registration process, fee/value for money, pre-event information, etc.) (Table 3).

The regression model was statistically significant ($\chi^2 = 93.69$, $p < .001$) and explained 5.1% of the variance (Naqelkerke $R^2 = 0.051$). Of the 14 predictors, four variables were statistically significant (p < .05), namely gender, the number of accompanying spectators, satisfaction

Table 3
Logistic regression predicting the likelihood of CHM visitors to explore beyond the event zone.

Variables	B	S.E.	Wald	df	P	Exp (B)
Constant	−1.426	.552	6.682	1	.010	.240
Gender - Male	.222	.101	4.865	1	.027	1.248
Age			6.980	4	.137	
Age (30–39 years old)	.006	.171	.001	1	.973	1.006
Age (40–49 years old)	−.154	.166	.861	1	.353	.858
Age (50–59 years old)	−.129	.183	.500	1	.480	.879
Age (60 + years old)	.320	.231	1.930	1	.165	1.378
First time visitor	−.086	.100	.740	1	.390	.971
Number of spectators	.225	.032	50.343	1	<.000	1.253
Satisfaction - Online registration	−.117	.076	2.361	1	.124	.890
Satisfaction - Fee/Value for money	.142	.069	4.281	1	.039	1.153
Satisfaction - Pre-event information	−.100	.090	1.219	1	.270	.905
Satisfaction - Medal	−.103	.077	1.789	1	.181	.903
Satisfaction - Course	−.089	.090	.982	1	.322	.915
Satisfaction - Overall atmosphere	.127	.118	1.155	1	.282	1.135
Satisfaction - Results/ timing	.032	.084	.141	1	.707	1.032
Satisfaction - Overall organisation (excluding bag storage)	−.147	.085	2.948	1	.086	.864
Satisfaction - Bag storage	−.075	.049	2.302	1	.129	.928
Satisfaction - Food and beverage	.248	.068	13.295	1	<.000	1.282

with fee/value for money and satisfaction with food/beverage. Specifically, male visitors were 1.248 times more likely to explore outside the event zone than female visitors. Moreover, increasing one person in a spectator group (i.e., the travel group size) increased the odds of exploring outside the event zone by 1.253. In terms of increased satisfaction with "fee/value for money" and "food and beverage", the odds of visitors venturing beyond the event zone increased by factors of 1.153 and 1.282, respectively. From the quantitative data, age and whether the visitor was a first time or repeat visitor were not significant predictors. However, the qualitative evidence suggested that repeat visitors may be discouraged to engage beyond the zone as they've "done it all before".

5.3.2. Qualitative evidence

The qualitative data provides a deeper understanding of the potential reasons why visitors were *encouraged* and *discouraged* to go beyond the event zone. The analysis is split into two parts: firstly the determinants for encouraging exploration (Table 4) and, secondly, the determinants for discouraging (Table 5).

5.4. The consequence of visitor behaviour for the host city

5.4.1. Visitor engagement with the host community

Visitors' lengths of stay, and the numbers of activities they participated in, were used as a proxy for visitor engagement with the host city (Higham, 2018). On average, respondents stayed in Cambridge for 1.43 days (SD=0.87). As shown in Table 6, the one-way ANOVA test revealed a significant difference in the duration of stay among the three groups (F=198.22, p < .001). Post-hoc analysis suggested that non-local visitors who remained in the event zone stayed for a shorter time than local and non-local visitors who ventured beyond the event zone.

From the nine types of activity categories listed in the questionnaire, participants were asked what they did (multiple responses were allowed), and results showed 69.6% participated in at least one activity during the weekend. A one-way ANOVA test highlighted the difference in the number of activities visitors participated in among the three visitor groups, showing a significant difference (F=20.924, p < .001). Not surprisingly, post hoc analysis showed that non-local visitors who went beyond the zone participated in more activities (mean=2.62, SD=1.84) than both local visitors (mean=1.68, SD=2.07) and non-local visitors who remained in the zone (mean=1.65, SD=1.46).

From these findings, we conclude that to increase the event's social and economic value, organisers need spatial strategies that can achieve two objectives: 1) use the event to entice local visitors to participate in wider cultural offerings; and 2) encourage greater, non-local visitor engagement with the city. Our results validate seminal models of urban tourism (e.g., Jansen-Verbeke, 1986; Ashworth & Page, 2011) that posit that different users of the city engage with various city resources but not necessarily alongside other users of the city. In other words, the geography of the event city is spatially constricted to a narrow range of resources (attractions, accommodation and built environment) that do not necessarily reflect the event planners' views of the expected outcomes. Our outcomes reflect a geographical naivety that suggests event planners do not recognise that cities have multiple cities within them.

We used chi-square tests to investigate if the three visitor groups exhibited different activity patterns. Results showed a significant difference among the three groups across all activities (Table 7). Analysis showed that non-local visitors who explored outside the event zone were more likely to participate in eight of the nine types of activities (excluding the category entitled 'other') than were non-local visitors who remained within the event zone. Non-local visitors who explored beyond the event zone were *more than twice* as likely to participate in activities related to museum/attraction and heritage, nightlife and wildlife, than were non-local visitors who stayed within the event zone.

Table 4
Determinants for encouraging exploration.

Qualitative theme	Commentary	Example quotes
The need for sustenance	Runners sought to replenish energy before travelling back to hotels/home, thus increasing spending but also engaging with the community.	"Sustenance!" "Hungry and thirsty!"
Avoiding the rush	Many visitors stayed for food and social activity (e.g., talking with other racers) to avoid congestion due to everyone leaving at the same time, made worse by road closures. Leveraging visitors who seek to intentionally 'dwell' is a fruitful strategic area.	"We felt that it would be too much of a rush on Sunday morning and didn't want to wait for the 'park and ride' as we felt it was too far too long in 2019." "Less traffic if we left later." "Avoid crowds after the event."
Communitas	Visitors wished to stay and enjoy the event environment.	"Great crowd support." "To celebrate the achievement of finishing the half marathon somehow, with the local staff." "Enjoyed the atmosphere afterwards."
Get out of the crowd	Some wanted to do the opposite and move beyond the event zone and crowds.	"Find a place to eat without too many crowds."
Warm down	Visitors used their post-run warm down to explore beyond the event zone.	"Mainly to get some extra miles logged, but also to explore some footpaths that I had noticed. Also, running alongside the river after the event was beautiful."
Transport options closed and couldn't get home	Some couldn't escape the city due to road closures. Several respondents cited that the 'X5 bus' (the bus between Cambridge and Oxford) ceased to operate until the city opened back up. When visitors are forced to 'dwell' in the event zone, this offers another strategic opportunity.	"Waiting for the X5 to start running again after the road closures ended."
Weather	Many mentioned the cold but sunny weather as a reason to stay. Rain would be likely to severely impact levels of visitor exploration and spending.	"Sunny day." "Nice weather."
Miscellaneous	Some random responses, e.g., one girl was thinking of going to the University of Cambridge, so her parents looked around the city after the event.	"Daughter is planning to come to the university here next year."
No comment	Many visitors indicated that nothing encouraged them to explore.	"N/A." "No." "Nothing."

Table 5
Determinants for discouraging exploration.

Qualitative theme	Commentary	Quotes
COVID-related factors	COVID-19 played a role but, surprisingly, not in many responses.	"Worried about infection." "Due to the coronavirus, we limited our stay to the hotel." "Unfortunately, my family and friends could not come to support me (due to concerns over COVD-19, being unwell or being on holiday)."
Cold weather	Whilst some visitors enjoyed the cold but sunny weather, others did not.	"Weather." "Too cold after finishing event." "Too cold."
Exhausted and wanted to get home	Why would people want to twin sport racing and culture together? Several of the themes below relate to this query.	"I've just run a half marathon ???" "Exhausted after running/ early start." "Needed to get home and rest." "Too tired to explore after the event." "Tired and sore!!"
Sweaty and uncomfortable	As above.	"Did not feel like looking around the city in sweaty kit." "Wanted to get home as in sweaty running gear." "I just wanted to get home as I was wearing my running gear and needed a bath to relax?!"
Been to event before, seen Cambridge	Events lose novelty, which reduces potential gains for city over time.	"Done it all before." "Been many times." "I have done it all before, plus kids were hungry."
Came only for sports	This was implied in many responses; most respondents came for the sport and not the culture.	"I don't use running events for tourism." "We only came for one night."
Had other things to do	Some respondents did not plan to stay.	"Other commitments that meant we had to return home." "Daughter was playing football in the afternoon." "Wanted to get home for Sunday roast!!!"
Maybe next time	The event, possibly due to being routed around the city's iconic university colleges, may inspire racers to return at another time to be a cultural visitor and explore.	"Not enough time - we would like to come back to Cambridge for a weekend to explore more." "Simply didn't have enough time, but Cambridge charmed me, and I will definitely come back to stay and explore more." "Time restraints, it looks a beautiful place to visit - next time we'll stay over."
Public transport commitments	Some had to rely on public transport to get home.	"Had a train to get home." "Had to get back home to the dog as the direct trains were not running so took longer than usual."
Limited knowledge/ support to engage	Lack of information provided	"I didn't know what the options were or how to easily get there."
Did not plan to stay	Respondents stated they did not plan to stay and had an early start and end due to travelling from a far.	"I was alone and had quite a long journey back to Kent."
Other organisational factors	Provision of showers might encourage racers to stay.	"There was a long wait for food at the restaurant as it was near the finish line, so it was mid-afternoon by the time I'd finished and no access to showers unless I went home."

(continued on next page)

5.4.2. Visitor spending across the host community

Participants were asked to detail their spending during their visit in different categories (i.e., accommodation, food, entertainment, and travel). The questions on spending did not specify whether the information was for an individual or a group. Since correlations between spending and the number of people in travel parties were relatively low (between 0.03 and 0.21, p < .01), the following estimates of CHM economic contribution assume that the average spending indicated was per individual.

Chi-square tests were employed to compare the spending patterns of the three visitor groups (Table 8). The findings suggested that non-local visitors who explored beyond the event zone spent significantly more than the other two groups spent, across all categories ($\chi_{Accommodation}^{2} =$

Table 5 (*continued*)

Qualitative theme	Commentary	Quotes
Went to friends/ family house	Popular theme, if not local, many went to see local family and friends instead.	"Staying with friends so walked back to their house and ate there afterwards." "We were going for lunch to relative's house." "Opportunity to visit family."
Busy and wanted to dash off	Some just dashed off as soon as possible as the event zone was busy.	"[I wanted to] stay close to the park and ride and pick up points to escape the crowds."
No desire to engage	Some just didn't want to engage and gave no reason.	"We didn't feel we needed to."
Too expensive	Cambridge is an expensive city to stay in	"Hotel prices prevented staying overnight and longer in the city."

Table 6
Duration of stay and types of activities.

	Local[a]	In bubble	Out bubble	F	p
Duration of stay (days)	1.83 $_a$	1.24 $_b$	1.77 $_a$	198.22	<.000
Number of types of activity that visitors participated in	1.68 $_a$	1.65 $_a$	2.62 $_b$	20.924	<.000

Note.
[a] Each subscript letter denotes a subset of group categories whose column proportions do not differ significantly from each other at the .05 level.

554.74, p < .001; χ_{Food}^2 = 509.62, p < .001; $\chi_{Entertainment}^2$ = 102.73, p < .001; χ_{Travel}^2 = 1626.35, p < .001). Specifically, the analysis showed that while most local and non-local visitors who stayed within the zone spent nothing on accommodation, non-local visitors who ventured beyond the event zone were more likely to respond in the high spending categories (i.e., ≥ £50). A similar pattern was observed in visitor spending on entertainment. For food-related spending, most local and non-local visitors who stayed in the zone spent less money on food (i.e., < £50), and few spent more than £50. However, non-local visitors who explored beyond the event zone demonstrated a different picture; the distribution of this group's food spending was concentrated in the three highest spending categories. In terms of travel-related spending, non-local visitors who explored beyond the event zone spent the most, but the gap between the two non-local visitor groups was smaller in travel spending than in other types of spending.

6. Discussions and implications

This study has followed the well-established thinking on how, where and when event activity occurs in time and space, notably questioning whether events like an urban marathon are an appropriate, feasible, or

even desirable type of tourism to generate visitor economy benefits beyond the event zone. Our findings echo Gibson (2004) who's study of American college football shows how visitors are likely to spend more when they engage beyond the event zone. Strategically targeting 'away fans' (in our case, non-local visitors) could yield greater visitor, economic benefits for the local economy, although our study showed that the impact of CHM's 'unlock discounts' scheme was limited. Qualitative evidence revealed why this one-off promotional scheme needed to be complemented with other organisational and behavioural changes. Consistent with previous studies, we note that leveraging events as 'seed capital' (O'Brien, 2006), to bestow benefits to the local host community, is both politically and economically challenging; local communities can face disruption and displacement in the periods in and around events, depending on the size and scope of the events in question (Talbot & Carter, 2017).

'Dwell time' (defined as the period of time that participants remained in the zone after the end of the race) was a key factor determining behaviour at CHM. One reason that visitors said they dwelled was a desire to avoid crowds and traffic, but this was not well facilitated with pre-event guidance or infrastructure available at the event e.g., showers. Gibson (2004) suggested that joined-up strategies between event managers and Destination Management Organisations (DMOs) should be used to encourage deeper cultural engagement and longer stays, i.e., event zones need to be made permeable in terms of how spatial and temporal dimensions might be managed differently. Furthermore, Gibson (2004) suggested that destinations should develop a portfolio of events designed to attract specific target markets. As in Taks et al., (2013), where sport coaches were targeted, if the CHM were to focus on running clubs, this might encourage larger groups to engage outside the zone; our findings showed that groups were more likely than individuals to explore beyond the zone. At the CHM, there is a need to provide better signposting to sites of interest, during the event and before the event. People had not set aside time to explore the city so one suggestion is to ensure the race pack outlines what attractions are available so that visitors can pre-plan their trips. Organisers should look to incentivise engagement with the city in the lead up to the event.

Serendipitous engagement with the host community afforded a more locally integrative event, as witnessed during the Rio 2016 Olympics (Duignan et al., 2020), so more careful crafting of the pre/post event could maximise exposure, engagement and spend with local businesses and environments. As McCartney (2005), Cunningham and Kwon (2003), and Kaplanidou and Vogt (2007) note, people who have had previous event experience with a destination (particularly if during the off-peak winter months) are more likely to plan a revisit. Our findings confirmed a significant difference in behaviour between first time and repeat visitors in terms of their likelihood to engage beyond the event zone.

Although there are limitations to making generalisations based on just one UK event, in seeking to summarise the policies and practices

Table 7
Visitor participation in different types of activity.

Activities[a]	Local visitors[b]		Non-local visitors (remained within the event zone)		Non-local visitors (explored beyond the event zone)		χ^2	p
	Yes	No	Yes	No	Yes	No		
Food and drink	998 (46.5%) $_a$	1147 (53.5%) $_a$	410 (56.9%) $_b$	311 (43.1%) $_b$	139 (74.3%) $_c$	48 (25.7%) $_c$	67.69	<.000
Museum/attraction & heritage	213 (9.9%) $_a$	1932 (90.1%) $_a$	51 (7.1%) $_a$	670 (92.9%) $_a$	31 (16.6%) $_b$	156 (83.4%) $_b$	15.96	<.000
Nightlife	139 (6.5%) $_a$	2006 (93.5%) $_a$	22 (3.1%) $_b$	699 (96.9%) $_b$	13 (7.0%) $_a$	174 (93.0%) $_a$	12.39	.002
Café	668 (31.1%) $_a$	1477 (68.9%) $_a$	275 (38.1%) $_b$	446 (61.9%) $_b$	97 (51.9%) $_c$	90 (48.1%) $_c$	39.89	<.000
Walk & wildlife	329 (15.3%) $_a$	1816 (84.7%) $_a$	68 (9.4%) $_b$	653 (90.6%) $_b$	49 (26.2%) $_c$	138 (73.8%) $_c$	36.56	<.000
Retail	401 (18.7%) $_a$	1744 (81.3%) $_a$	156 (21.6%) $_a$	565 (78.4%) $_a$	63 (33.7%) $_b$	124 (66.3%) $_b$	24.93	<.000
Leisure activity	412 (19.2%) $_a$	1733 (80.8%) $_a$	78 (10.8%) $_b$	643 (89.2%) $_b$	34 (18.2%) $_a$	153 (81.8%) $_a$	26.86	<.000
Others	187 (8.7%) $_a$	1958 (91.3%) $_a$	98 (13.6%) $_b$	623 (86.4%) $_b$	22 (11.8%) $_{a,b}$	165 (88.2%) $_{a,b}$	14.82	.001

Note.
[a] Total response for each variable might vary due to the missing value (item non-response).
[b] Each subscript letter denotes a subset of group categories whose column proportions do not differ significantly from each other at the .05 level.

Table 8
Crosstabulation of visitor types and spending categories.

Variable[a]	Total	Local visitors[b]	Non-local visitors (within the event zone)	Non-local visitors (beyond the event zone)	χ²[b]	p
Accommodation						
£0	5294 (89.4%)	3289 (96.2%)_a	1708 (83.1%)_b	297 (66.7%)_c	554.74	<.000
Less than £10	79 (1.3%)	32 (0.9%)_a	37 (1.8%)_b	10 (2.2%)_b		
£10-£50	149 (2.5%)	49 (1.4%)_a	75 (3.6%)_b	25 (5.6%)_b		
£50-£100	182 (3.1%)	25 (0.7%)_a	112 (5.5%)_b	45 (10.1%)_c		
£100 and more	215 (3.6%)	24 (0.7%)_a	123 (6.0%)_b	68 (15.3%)_c		
Food						
£0	2593 (42.5%)	1690 (48.4%)_a	852 (39.7%)_b	51 (11.0%)_c	509.62	<.000
Less than £10	954 (15.6%)	541 (15.5%)_a	362 (16.9%)_a	51 (11.0%)_b		
£10-£50	1823 (29.9%)	1009 (28.9%)_a	622 (29.0%)_a	192 (41.3%)_b		
£50-£100	470 (7.7%)	184 (5.3%)_a	192 (8.9%)_b	94 (20.2%)_c		
£100 and more	266 (4.4%)	69 (2.0%)_a	120 (5.6%)_b	77 (16.6%)_c		
Entertainment						
£0	5234 (90.0%)	3097 (91.0%)_a	1813 (90.8%)_a	324 (77.5%)_b	102.73	<.000
Less than £10	255 (4.4%)	145 (4.3%)_a	83 (4.2%)_a	27 (6.5%)_a		
£10-£50	254 (4.4%)	127 (3.7%)_a	79 (4.0%)_a	48 (11.5%)_b		
£50 and more	74 (1.3%)	33 (1.0%)_a	22 (1.1%)_a	19 (4.5%)_b		
Travel						
£0	3260 (54.3%)	2474 (72.0%)_a	704 (33.3%)_b	82 (17.8%)_c	1626.35	<.000
Less than £10	1345 (22.4%)	717 (20.9%)_a	537 (25.4%)_b	91 (19.8%)_a		
£10-£50	1201 (20.0%)	225 (6.6%)_a	773 (36.6%)_b	203 (44.1%)_c		
£50 and more	203 (3.4%)	19 (0.6%)_a	100 (4.7%)_b	84 (18.3%)_c		

Note.
[a] The number of responses for each variable might vary due to the missing value (item nonresponse).
[b] Each subscript letter denotes a subset of group categories whose column proportions do not differ significantly from each other at the .05 level.

that might help to lever greater economic and social benefits from events more generally, we offer some suggestions here that could be generally useful for managers of all kinds of events, particularly those that erect event zones and are organised in cities (Table 9).

7. Conclusion

This study has highlighted the need for destinations to revisit their rationale for hosting events (be they sporting or non-sporting), the benefits they anticipate and how such events can serve as a catalyst for post-event legacies. In line with studies such as McGillivray et al. (2019), the case of the CHM highlights that we should not assume that all events automatically generate benefits to local cultural and business districts, which risks raising the hopes of local communities that their ambitions

Table 9
Engaging visitors beyond event zone.

	Event organiser	Destination Management Organisation (DMO)
Pre-event	Collaborate with destination to ensure wide benefits to the local host community	Establish destination policy with a clear agenda for hosting of events (destination event portfolio)
	Schedule events to enable time to visit destination (month/day of week/time of day)	Incorporate adequate stakeholder engagement to design event-specific (themed) cultural and accommodation experiences
	Collaborate with destination to build a destination-friendly event brand	Collaborate with event organiser for pre-event destination marketing (include a message about repeat visitation)
	Incorporate local community in event (route) and destination (experience) planning	Collaborate with transportation providers (e.g., on signage and parking) to ensure ease of event navigation, visitor flow and engagement with destination "touchpoints"
	Design event zone to maximise sense of community "communitas", bonding and togetherness	Campaign to raise awareness among local "hosts" to promote destination to "guests"
	Collaborate with all impacted stakeholders for seamless and beneficial event hosting	Campaign locally to raise awareness of the potential for displacement to regular activities *and* the benefit of hosting events
	Engage local schools, associations, clubs etc. In event participation and broaden appeal of event and event "interactions"	Ensure sensitivity to various participating and non-participating markets
During event	Use nostalgia to enhance potential repeat visitation	Promote participation in the event experience to local residents
	Provide "warm down"/post-event facilities across the destination to encourage longer durations of stay	Campaign to raise awareness among visitors of wider destination appeal ("slow down and enjoy your stay")
	Showcase authentic local food and drink provision	Showcase destination appeal throughout event (event marketing, local event volunteers and ambassadors)
	Promote a sense of belonging and a need to return (annual events) through event participation	Encourage local "fan" participation and develop a sense of pride in community participation (e.g., Tour de France)
	Provide event passes for future participation	
	Provide all-weather alternatives to enhance comfort levels and durations of stay	
	Maintain liaison with local community to deepen engagement and commitment to future events	
Post-event	Review success (or otherwise) of event from both participation and destination perspectives	Review destination policy to ensure hosting of event was consistent with intended aim(s)
	Maintain marketing and social media presence with event visitors	Review event-specific (themed) cultural and accommodation experiences for future amendment
		Maintain marketing and social media presence with event visitors
		Collaborate with all event and destination stakeholders for future event planning

of cultural development and economic impact can be achieved with (sport) events. Our study does in fact highlight the need for host destinations to develop a more sophisticated understanding of their destination, their visitors, and the role events play in attracting, distributing, and retaining visitors; and their spend. The findings of this study are not dissimilar in some ways to studies on overtourism (see for example Atzori, 2020; Sibrijns & Vanneste, 2021) whereby visitors are frequently attracted to the core, albeit fixed, attraction with many failing to explore the destination more widely. Encouraging visitors to disperse across the destination, to experience the wider cultural benefits and local authenticity, and migrate away from the "in-out, bucket-list tick-box" tendencies of mass tourism have much in common with our study, with

the increasing professionalism of managing "event zones" potentially inhibiting the wider cultural and economic benefit of hosting events in the destination context. In this regard, we have highlighted the need to critique ex-ante projections versus ex-post realities to truly understand the real social and economic benefits of hosting urban events for the city and local stakeholders. Given it is likely that many events are still being planned and hosted on this potential false assumption and a degree of complacency that wider community benefits will automatically follow event visitors, the implications of this study are important and timely. In drawing upon a broad range of interdisciplinary work we have suggested that future studies should adopt a more critical perspective. In terms of practical implications, DMOs and event planners must seek a more critical understanding of where event participants go, why, when and with what impact upon the destination, to better inform the design of event spaces to help local communities genuinely benefit from event visitors.

In addressing the first research question of what demographic and tripographic factors determine engagement beyond event zones, quantitative and qualitative data were generated to demonstrate that there are multiple event users, each with their own preferences and motivations. Event participants and supporters cannot be uniformly grouped via segregation in one restricted event area, then asked to desegregate and behave as a uniform group who will disperse and engage with cultural and social offerings in a city. For the event to generate greater value for the local community in the city beyond the main event zone, different strategies are needed for locals and visitors. We found that non-local visitors who left the event zone were *more than twice* as likely to participate in activities related to culture and heritage as non-local visitors who stayed within the event zone. This suggests that targeted strategies are needed. Visitors' spend was much higher than local spend when visitors went beyond the event zone. Understanding connections between the nuances of different visitor markets for an event remains unclear and fragmented. Therefore, future studies should help organisers and destinations recognise how to leverage event visitor spending more effectively.

In exploring the second question of what behavioural and organisational factors encourage and discourage engagement beyond event zones, deeper knowledge about what the event visitor is looking for (from the event itself and the post-event experience) is key to designing event spaces to maximise benefits. Knowledge of visitor demands can be used to design interventions to encourage visitors to enjoy the events and engage more fully in the locale. Applying some of the basic principles of behavioural geography and environmental psychology about wayfinding, and how visitors construct their own mental maps of places, can have significant value for event organisers. Through broader local stakeholder engagement, improved pre-event information and providing simple logistical additions to event spaces (such as showers) event organisers and DMOs can help provide experiences for the temporally limited event visitor that increase 'dwell time' and encourage participants outside of the event zones. In a similar way to how the accommodation sector learnt how to sell surplus weekend room capacity as short breaks, we have highlighted how event visitors navigate spaces and offered a few ways a city-based event offer may be designed to offer a broader range of experiences for the temporally limited event visitor too.

The event literature has significant way to go in developing the spatiality of events so that the paradox (that events need cities, but cities do not need events) can be revised or removed to ensure event staging offers a win-win for both destinations and localities. Our findings are consistent with many of the spatially-contingent studies of events, which recognise that events are limited in time and space, and that realising the benefits requires an understanding of stakeholders' expectations of the event (Getz & Page, 2016). These insights are significant given the competitive nature of hosting events and the justification used by planners to support their arguments on why destinations should host events. If we are to change the paradox, we encourage researchers to

build on this study to challenge the spatial segregation concept of the event zone and to implement, then test, the suggestions outlined in this paper. Research could also be extended beyond a single location and include events with diverse subjects, not just sport.

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References

Arnegger, J., & Herz, M. (2016). Economic and destination image impacts of mega-events in emerging tourist destinations. *Journal of Destination Marketing & Management, 5*(2), 76–85. https://doi.org/10.1016/j.jdmm.2015.11.007

Arnold, E., Price, L., & Zinkhan, G. (2004). *Consumers* (2nd ed.). New York: McGraw-Hill/Irwin.

Ashworth, G., & Page, S. J. (2011). Urban tourism research: Recent progress and current paradoxes. *Tourism Management, 32*(1), 1–15. https://doi.org/10.1016/j.tourman.2010.02.002

Atzori, R. (2020). Destination stakeholders' perceptions of overtourism impacts, causes, and responses: The case of Big Sur, California. *Journal of Destination Marketing & Management, 17*, Article 100440. https://doi.org/10.1016/j.jdmm.2020.100440

Barajas, A., Coates, D., & Sanchez-Fernandez, P. (2016). Beyond retrospective assessment. *European Research on Management and Business Economics, 22*(3), 124–130. https://doi.org/10.1016/j.iedee.2015.05.001

Brown, G., Lee, I. S., King, K., & Shipway, R. (2015). Eventscapes and the creation of event legacies. *Annals of Leisure Research, 18*(4), 510–527. https://doi.org/10.1080/11745398.2015.1068187

Cambridge Half Marathon. (2020). Available https://cambridgehalfmarathon.com/wp-content/uploads/2020/10/OSB-21-ESG-Policy.pdf.

Carlini, J., Coghlan, J., Thomson, A., & O'Neil, A. (2020). From legacy rhetoric to business benefits. *Event Management, 24*(1), 75–96. https://doi.org/10.3727/152599519X15506259856057

Chalip, L. (2004). Beyond impact: A general model for host-community event leverage. In B. Ritchie, & D. Adair (Eds.), *Sport tourism: Interrelationships, impacts and issues* (p. 228). Clevedon: Channel View Publications.

Chalip, L., & Leyns, A. (2002). Local business leveraging of a sport event. *Journal of Sport Management, 16*(2), 132–158. https://doi.org/10.1123/jsm.16.2.132

Clark, R., & Misener, L. (2015). Understanding urban development through a sport events portfolio: A case study of London, ontario. *Journal of Sport Management, 29*(1). https://doi.org/10.1123/JSM.2013-0259

Connell, J., Page, S. J., & Meyer, D. (2015). Visitor attractions and events: Responding to seasonality. *Tourism Management, 46*, 283–298. https://doi.org/10.1016/j.tourman.2014.06.013

Crompton, J. L. (1995). Economic impact analysis of sport facilities and events: Eleven sources of misapplication. *Journal of Sport Management, 9*(1), 14–35. https://doi.org/10.1123/jsm.9.1.14

Cunningham, G. B., & Kwon, H. (2003). The theory of planned behaviour and intentions to attend a sport event. *Sport Management Review, 6*(2), 127–145. https://doi.org/10.1016/S1441-3523(03)70056-4

Dickson, G., Milne, S., & Werner, K. (2018). Collaborative capacity to develop an events portfolio within a small island development state: The Cook Islands. *Journal of Policy Research in Tourism, Leisure and Events, 10*(1), 69–89. https://doi.org/10.1080/19407963.2017.1409751

Duignan, M. B., Down, S., & O'Brien, D. (2020). Entrepreneurial leveraging in liminoidal olympic transit zones. *Annals of Tourism Research, 80*, 1–19. https://doi.org/10.1016/j.annals.2019.102774

Duignan, M. B., Everett, S., & McCabe, S. (2022). Events as catalysts for communal resistance to overtourism. *Annals of Tourism Research, 96*. https://doi.org/10.1016/j.annals.2022.103438.

Duignan, M. B., Pappalepore, I., & Everett, S. (2019). The 'summer of discontent': Exclusion and communal resistance at the London 2012 Olympic Games. *Tourism Management, 70*, 355–367. https://doi.org/10.1016/j.tourman.2018.08.029

Duignan, M. B., Pappalepore, I., Smith, A., & Ivanescu, Y. (2021). Tourists' experiences of mega-event cities: Rio's Olympic 'double bubbles. *Annals of Leisure Research, 25*(1), 71–92. https://doi.org/10.1080/11745398.2021.1880945

Formica, S. (1998). The development of festivals and special events studies. *Festival Management and Event Tourism, 5*(3), 131–137.

Gandhi-Arora, R., & Shaw, R. N. (2002). Visitor loyalty in sport tourism: An empirical investigation. *Current Issues in Tourism, 5*(1), 45–53. https://doi.org/10.1080/13683500208667907

Getz, D., & Page, S. (2016). Progress and prospects for event tourism research. *Tourism Management, 52*, 593–631. https://doi.org/10.1016/j.tourman.2015.03.007

Gibson, H. J. (2004). Moving beyond the 'what is and who' of sport tourism to understanding 'why. *Journal of Sport & Tourism, 9*(3), 247–265. https://doi.org/10.1080/1477508042000320232

Giulianotti, R., Armstrong, G., Hales, G., & Hobbs, D. (2015). Global sport mega-events and the politics of mobility. *British Journal of Sociology, 66*(4), 118–140. https://doi.org/10.1111/1468-4446.12103

Greene, J. C. (2007). *Mixed methods in social inquiry*. John Wiley & Sons.

Hall, C. M. (2006). Urban entrepreneurship, corporate interests and sport mega-events. *Sociological Review, 54*, 59–70. https://doi.org/10.1111/j.1467-954X.2006.00653.x

Heldt, T., & Mortazavi, R. (2016). Estimating and comparing demand for a music event using stated choice and actual visitor behaviour data. *Scandinavian Journal of Hospitality and Tourism, 16*(2), 130–142. https://doi.org/10.1080/15022250.2015.1117986

Higham, J. (2018). *Sport tourism development*. Bristol: Blue Ridge Summit: Channel View Publications. https://doi.org/10.21832/9781845416560

Jansen-Verbeke, M. (1986). Inner-city tourism: Resources, tourists and promoters. *Annals of Tourism Research, 13*, 79–100. https://doi.org/10.1016/0160-7383(86)90058-7

Kaplanidou, K., & Vogt, C. (2007). The interrelationship between sport event and destination image and sport tourists' behaviours. *Journal of Sport & Tourism, 12*(3–4), 183–206. https://doi.org/10.1080/14775080701736932

Kelly, D., & Fairley, S. (2018). What about the event? How do tourism leveraging strategies affect small-scale events? *Tourism Management, 64*, 335–345. https://doi.org/10.1016/j.tourman.2017.09.009

Kelly, D., Fairley, S., & O'Brien, D. (2019). It was never ours: Formalised event hosting rights and leverage. *Tourism Management, 73*, 123–133. https://doi.org/10.1016/j.tourman.2019.01.016

Kruger, M., Botha, K., & Saayman, M. (2012). Information source preferences and associated expenditure of first-time and repeat visitors at a South African wine festival. *Tourism Analysis, 17*(3), 343–355. https://doi.org/10.3727/108354212X13412775927943

Lee, J., & Kyle, G. T. (2012). Recollection consistency of festival consumption emotions. *Journal of Travel Research, 51*(2), 178–190. https://doi.org/10.1177/0047287510394197

McCartney, G. J. (2005). Hosting a recurring mega-event: Visitor raison d'être. *Journal of Sport & Tourism, 10*(2), 113–128. https://doi.org/10.1080/14775080500223231

McGillivray, D., Duignan, M. B., & Mielke, E. (2019). Mega sport events and spatial management. *Annals of Leisure Research, 23*(3), 280–303. https://doi.org/10.1080/11745398.2019.1607509

McGillivray, D., & Frew, M. (2015). From fan parks to live sites: Mega events and the territorialisation of urban space. *Urban Studies, 52*(14), 2649–2663. https://doi.org/10.1177/0042098014550456

Mhanna, R., Blake, A., & Jones, I. (2017). Challenges facing immediate tourism leveraging. *Managing Sport and Leisure, 22*(2), 147–165. https://doi.org/10.1080/23750472.2017.1412269

Pappalepore, I., & Duignan, M. B. (2016). The London 2012 cultural programme: A consideration of olympic impacts and legacies for small creative organisations in east London. *Tourism Management, 54*, 344–355. https://doi.org/10.1016/j.tourman.2015.11.015

Richards, G. (2019). Event experience research directions, 2019. In J. Armbrecht, E. Lundberg, & T. D. Andersson (Eds.), *A research agenda for event management*. Cheltenham: Edward Elgar.

Ritchie, J. R., & Hudson, S. (2009). Understanding and meeting the challenges of consumer/tourist experience research. *International Journal of Tourism Research, 11*(2), 111–126. https://doi.org/10.1002/jtr.721

Robinson, R. N., & Clifford, C. (2012). Authenticity and festival foodservice experiences. *Annals of Tourism Research, 39*(2), 571–600. https://doi.org/10.1016/j.annals.2011.06.007

Schofield, P., & Thompson, K. (2007). Visitor motivation, satisfaction and behavioural intention. *International Journal of Tourism Research, 9*(5), 329–344. https://doi.org/10.1002/jtr.638

Sibrijns, G. R., & Vanneste, D. (2021). Managing overtourism in collaboration: The case of 'From Capital City to Court City', a tourism redistribution policy project between Amsterdam and the Hague. *Journal of Destination Marketing & Management, 20*, Article 00569. https://doi.org/10.1016/j.jdmm.2021.100569

Smith, A. (2016). *Events in the city: Using public spaces as event venues*. London: Routledge.

Tynan, C., & McKechnie, S. (2009). Experience marketing: A review and reassessment. *Journal of Marketing Management, 25*(5–6), 501–517. https://doi.org/10.1362/026725709X461821

UNWTO. (2019). Overtourism? New UNWTO report offers case studies to tackle challenges. Available https://www.unwto.org/global/press-release/2019-03-05/overtourism-new-unwto-report-offers-case-studies-tackle-challenges.

Uysal, M., Gahan, L., & Martin, B. (1993). An examination of event motivations: A case study. *Festival Management and Event Tourism, 1*(1), 5–10.

Walmsley, D. J., & Jenkins, J. (1992). Tourism cognitive mapping of unfamiliar environments. *Annals of Tourism Research, 19*, 268–286. https://doi.org/10.1016/0160-7383(92)90081-Y

Weed, M. (2008). *Olympic tourism*. Oxford: Elsevier.

Weed, M., & Bull, C. (2009). *Sport tourism: Participants, policy and providers*. Oxford: Elsevier.

Werner, K., Dickson, G., & Hyde, K. F. (2016). Mega-events and increased collaborative capacity of tourism destinations: The case of the 2011 Rugby World Cup. *Journal of Destination Marketing & Management, 5*(3), 227–238. https://doi.org/10.1016/j.jdmm.2015.12.009

Wicker, P., & Hallmann, K. (2013). Estimating consumer's willingness-to-pay for participation in and traveling to Marathon events. *Event Management, 17*(3), 271–282. https://doi.org/10.3727/152599513X13708863377953

Wood, E. H., & Kenyon, A. J. (2018). Remembering together: The importance of shared emotional memory in event experiences. *Event Management, 22*(2), 163–181. https://doi.org/10.3727/152599518X15173355843325

World Bank. (2022). Available: https://urban-regeneration.worldbank.org/node/39. (Accessed 3 March 2022).

Zatori, A., Smith, M. K., & Puczko, L. (2018). Experience-involvement, memorability and authenticity. *Tourism Management, 67*, 111–126. https://doi.org/10.1016/j.tourman.2017.12.013