

Pre-print version

VISITOR ATTRACTIONS AND EVENTS: RESPONDING TO SEASONALITY

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Visitor Attractions and Events: Responding to Seasonality

Abstract

Seasonality is a protracted problem for the tourism sector due to the uneven nature of demand and the relatively fixed nature of the supply of capacity and resources, particularly in the attraction sector. Managing the demand and supply at an individual business level poses many challenges for attraction infrastructure that is fixed in time and space and has a finite capacity. This paper explores how attraction managers develop and use special events as a tool to address issues of seasonality at a country level. The results show that: 70% of businesses remained open throughout the year, albeit with reduced opening hours to attract more visitors; 39% of attractions that stay open host special events; the local community is a key source market for special events; the periodicity of events and themes engage visitors most effectively. Business responses to seasonality are a more complex issue than conventional tourism research has recognised.

Keywords

Seasonality Scotland Visitor attractions Events Spatiality

1.1 Introduction

Despite the ever-increasing demand for tourism at a global scale, combating seasonality remains a major challenge for a large proportion of tourism destinations. It is well-documented that seasonal reductions in visitor numbers occur in temporal and spatial dimensions, and exist within a socio-cultural-institutional framework (see Hinch and Jackson 2000; Baum and Hagen 1999; Butler 1994). Marketing approaches to tackle the vagaries of the off-peak are plentiful yet seasonality is recognised as a complex phenomenon and one where significant challenge exists in both reducing its antecedent factors and dealing with its effects. A substantive amount of academic literature that attempts to understand seasonality is predicated on secondary data analysis and subsequent economic modelling through time, and, less frequently, space. While such research approaches are valuable in identifying and evaluating macro trends and patterns of demand, the felt consequences of seasonality and attempts to mitigate these by tourism enterprises are less well understood. This paper focuses on the responses of visitor attractions to seasonality, an integral part of the visitor economy subject to severe variations in visitor activity.

As an amalgam of individual businesses and sites, the visitor attraction sector harnesses and develops unique products and experiences to entice visitors, as well as to the wider destinations in which they are located. Visitor attractions play a key role in interpreting and energizing the visitor experience, providing focus and structure to itineraries as a means of visitor engagement with a destination. Yet attractions are highly susceptible to seasonally determined variations in market and product demand. Large disparities in visitor numbers and revenue for many attractions require innovations in product development and market diversification outside the peak

tourist season to maintain adequate levels of turnover. For others, tough management decisions about the cost effectiveness and desirability of operating through the off-peak where demand is insufficient often result in partial or even complete shutdown. While a shutdown period may be planned by lifestyle entrepreneurs, others may seek to remain open throughout the low season. For policy makers and marketers, a supply of attractions open through the season helps in attempts to address seasonality of demand through marketing destinations in more innovative ways to new and existing markets, and thereby stabilise or grow regional economies.

One area of innovation within the attraction sector in recent years has been the development of events to supplement the basic product offering. There is often a lack of clarity in the use of the terms *events* and *attractions*, relating to the extent to which events are conceptualised as attractions; for example, Swarbrooke (2002: 5) refers to “special events” as visitor attractions, albeit of a temporary nature. While the term ‘event’ covers a wide spectrum, in terms of events hosted *within* visitor attractions the focus is primarily on the visitor attraction using events as a strategic tool to promote and develop visitor activity. As such, the singular concern of this paper is ‘within-attraction’ events. Weidenfeld and Leask (2013) conceptualise the relationship between attractions and events, and depict the attraction-event nexus as a continuum dependent upon the level of integration of an attraction’s core product within an event, arguing that events add a new structure to attractions. The scope of this paper is to contribute further to this understanding of visitor attractions and events through an exploration of the role of events in the off-peak season as one measure to address seasonality.

Seasonality and responses to its management in tourism enterprises forms a somewhat limited area within tourism research. Accordingly, the contribution of this paper is to better understand the role of staging events in the management of seasonality in visitor attractions, and to offer new insights to the tourism seasonality literature as well as strategic and operational events research. In addition to providing an overview of off-peak events within visitor attractions, the investigation goes a step further to probe whether there are distinct factors that govern the experience of seasonality and associated responses to its management. One area that this paper focuses on is whether business responses to seasonality create distinct geographies for the visitor economy, an issue that has largely been overlooked in the extant literature. We argue that the relationships which emerge in the attraction-event nexus are a micro-level response by individual businesses to seasonality that are place-related in terms of the location and the size of markets upon which the attraction can draw. This analysis is somewhat different to the rather more macro responses typified by public sector agencies and destination marketing organisations (DMOs) that run campaigns to market tourism in the off-peak season, and highlights that certain regions may require more assistance than others in cultivating an off-peak market that helps contribute to micro-economies.

This paper investigates the complex relationship between visitor attractions and the role of events in the off-peak season in the context of Scotland, a cool temperate region that is subject to seasonal variations in tourism demand. The aim of this paper is to investigate the management behaviour of attractions in terms of their responses to seasonality. We argue that several key issues affect this response, primarily the

existence of local markets, ownership, attraction type and location act as key arbiters of how visitor attractions respond to seasonality of demand, which is framed in the conceptual framework outlined in Figure 1. The guiding research questions which informed this study were:

- What is the extent and scope of off-peak activity in the visitor attraction sector?
- Are events used as a tool to address seasonality? If so, what strategies are employed and how effective are these?
- To what extent is the pattern of business responses to seasonality shaped by the ability to harness the local community as a key market?;
- Is the pattern of business responses to seasonality influenced by type of attraction?;
- How are business responses to seasonality shaped by location?

In terms of the latter, that is, spatial responses to seasonality, prevailing public policy in Scotland emphasises a core-periphery framework, the core comprising the major central lowland belt and a number of key cities where much of the off-peak tourism marketing focuses (VisitScotland 2007a b; 2013), while the periphery encompasses a much larger proportion of the country including the Highlands and Islands. Whilst recent research modelling the geography of seasonality among international demand has challenged these simplistic notions (Coshall, Charlesworth and Page 2014), the more subtle nuances and responses of businesses to these spatial patterns of seasonality have been neglected. Such disregard is largely a function of the complexity of modelling seasonality and the availability of data to perform quantitative econometric assessments. However, such studies do not allow for explanations or responses from within the business community. This paper assesses

how individual businesses in the visitor economy represented by visitor attractions respond to seasonality in time and space, which partially challenges this core-periphery thinking.

FIGURE 1 HERE

The paper commences with a review of seasonality literature and its application to visitor attractions, including the use of events as a tool to overcome seasonality and to engage with new markets. The discussion then proceeds to highlight the scale and nature of seasonality for the Scottish attraction sector, followed by an outline of the methodology. The research takes a two-stage approach based on a quantitative survey of visitor attractions: the first stage designed to produce a range of descriptive statistics to scope out and explore the parameters of this complex subject, and; the second stage to explore some of the key findings through correspondence analysis and cluster analysis to depict how the attraction-event-seasonality relationship can be understood at a regional scale by looking at spatial clusters of activity in the off-peak season. A further expansion of this multivariate analysis is then undertaken using MANOVA to focus on the regional differences and urban/rural differences to derive a comparative analysis within the limitations of the sample size and ability to draw generalisations from the data. The results are followed by a discussion of the implications for the tourism sector both in Scotland and more widely in destinations where seasonality is a significant issue for tourism enterprises.

2.1 Interconnections between Seasonality, Events and Visitor Attractions: Research Perspectives

2.1.1 Seasonality and events

As Getz (2010) argues, the strategic development of events and festivals at a destination level has an important role to play in attracting visitors, contributing to place marketing and expanding the economic impact of tourism. Within this positive frame, events are widely positioned as a strategic tool to assist in combating seasonality, a premise established in an early study by Ritchie and Beliveau (1974) and discussed in the context of peripheral destinations by Baum and Hagen (1999). In such respect, events can distort temporal imbalances (Goulding 2008). In a broad context, the concept of the winter festival is long-established in many destinations (see Foley and McPherson 2007; Muller and Peterssen 2006; Mules 2004, Wardrop and Robertson 2004; Higham and Ritchie 2001; Dewar, Meyer and Li 2001), with some festivals dating back hundreds of years and others resurrected or created to meet a range of political, environmental, economic and socio-cultural/community goals. Such events are multifarious in number and occur in addition to seasonal mega-events such as the Winter Olympic Games (see e.g. Essex and Chalkley 2004). Yet this paper is not concerned with destination initiatives but the strategic use of events within visitor attractions during the off-peak season, a subject that has received much less research attention yet is of considerable importance in understanding how events can help shape business responses to dealing with seasonality.

2.1.2 Tourism and seasonality: Using events as a tool to combat seasonality

The study of tourism and seasonality is largely attributed to Bar-On's (1975) seminal and much quoted study, representing the first major attempt to identify the principal contributing components to seasonality and the role of periodicities in influencing

demand. Seasonality factors are divided broadly between natural factors (e.g. climate, location and access related to weather, and sunlight hours) and institutional factors (e.g. calendar effects, leisure time, school holidays, social norms, available activities and trading patterns). Subsequent literature in the field developed the tourism-seasonality research domain as summarised in Table 1.

TABLE 1 HERE

In terms of addressing seasonality, Bar-On (1975) identified a range of tools directed towards businesses and policymakers, including elongating the peak summer season, adding a spring and winter season, and exploring opportunities for the development of shoulder seasons, as well as developing all-year appeal. Over the last 40 years, destinations worldwide have adopted elements of this approach to help expand tourism productivity (see Bar-On 1999). Butler (1994) suggests that destinations seeking to address seasonality of demand in the off-peak should focus on strategies to develop different forms of tourism. Inherent in this process is recognising the critical challenges of low productivity, and the potential of specific products and experiences to increase visitor demand during off-peak periods through product development and diversification. The development and application of event strategies to combat seasonality is acknowledged as one way to overcome seasonality (Ritchie and Beliveau (1974; Baum and Hagen 1999; Getz 2012) through expanding the tourist season, spreading demand to alternative locations and geographic areas, diversifying and increasing the appeal of destinations for existing and new markets, and creating a favourable destination image (see Getz 1989). An exploration of the use of events in the off-peak to encourage tourism is long overdue, particularly in the context of

visitor attractions within a specific geographic area, given that admissions to attractions is one measure of seasonality (see Hartman 1986). It is particularly apposite for visitor attractions given that the sector still finds footfall problematic outside the peak season, even when wet-weather facilities are provided. This is especially marked in cool temperate regions (Getz and Nilsson 2004; Baum and Hagen 1999).

2.1.3 Visitor attractions and seasonality

Visitor attractions comprise a range of natural, architectural, social, cultural and educational resources and assets. 'Within-attraction' events are often staged as an animator to interweave new narratives and elements that portray uniqueness, significance and/or special qualities at certain times of year (i.e. both a temporal and spatial element). Surprisingly little research has been undertaken on the relationship between visitor attractions and seasonality, although, as Leask (2010) reflects, there is a paucity of research on attractions in general. One exception is Goulding (2008), who defined a framework of perspectives on seasonality as it interacts with visitor attractions (i.e. demand, including marketing; causal factors, such as climate; spatial attributes, such as accessibility and institutional influences around public holidays; resource implications of the capability of the attraction to accommodate visitors and supply-led perspectives associated with capacity; and, operating decisions on opening, including labour force availability). However, in terms of enacting change, Garrod, Leask and Fyall (2007) argue that some attractions (i.e. 'first tier' visitor attractions with higher visitor numbers, more secure funding and superior management resources) are better placed than others.

The temporal variation in visitors to attractions creates an annual business cycle, referred to by Getz and Nilsson (2004) as coping, combating or capitulating to seasonal changes in demand, where, in general terms, the majority of activity takes place in the high/peak season, with reduced activity levels during the shoulder seasons that occur immediately either side of the peak, and minimal demand, if any, in the off-peak. The length of these seasons is variable according to place.

Attractions aim to work at capacity and on certain days, and at certain times of the day, visitor carrying capacities may be exceeded. Peak demand can be difficult to cope with given the potential for conflict (i.e. too many visitors, perceived reduction in service quality and visitor comfort, and stressful working conditions for staff). In contrast, the off-peak is characterised as a period of low visitor activity and diminished demand for attractions. Attractions adopt a range of approaches to such circumstances on a continuum of offering the full-range of facilities through to complete shutdown, with a range of strategies in between, such as reducing opening hours, limiting the available facilities and services, and reducing prices. Off-peak closedown is not problematic for businesses that seek downtime for re-investment and maintenance, or to make efficiency savings. For some, a shutdown period allows for forward planning, skills development and training, development of marketing programmes and web content (see e.g. Shields 2013). Furthermore, as Andriotis (2005), Getz and Nilsson (2004), Goulding, Baum and Morrison (2005) and Joliffe and Farnsworth (2006) indicate, the off-peak is embraced by lifestyle entrepreneurs as a time to suspend operations for personal motives. Conversely, a range of businesses continue to operate through the year, and must seek product development, marketing and market diversification opportunities to extend and expand seasonal

businesses prospects. This process necessitates a creative and flexible approach in the identification, development and management of new opportunities.

In a study of organisational change management in visitor attractions, By and Dale (2008) note that adaptability and flexibility is a key success factor for attraction managers, but that the majority of change tended to be ad hoc and reactive. The tourism environment is constantly changing and attraction managers must be ready to respond to external influences, such as fluctuating demand and competition from other leisure activities (Garrod, Leask and Fyall 2007). Such competition is keenly felt outside the peak season and there is an increasing need to add value to attractions and to create marketing strategies that will both entice and inspire the potential visitor. For those seeking all year round operation, the off-peak creates a perennial challenge in generating sufficient business but, as Jeffrey, Barden, Buckley and Hubbard (2002) note in a study of using events strategies within the hotel sector, the importance of hosting events not only has the potential to increase occupancy but to contribute to valuable media and PR opportunities. While there is an increasing presence of themed events at attractions during the off-peak period, particular those that promote special activities at key times (see Table 2), little is known about the role of events in assisting attractions to cope with season reductions in visitor demand.

TABLE 2 HERE

2.1.4 Visitor attraction responses to seasonality

Conditioning factors that affect visitor attraction seasonality are posited by Goulding (2008) and include those factors related to the destination, the operation of the attraction, the marketing mix, wet-weather facilities and owner/manager objectives. Furthermore, community support is considered one of the critical success factors for attractions, particularly those in peripheral areas (Prideaux 2008), although the seasonality constructs associated with this factor have not been researched in any detail. The local community provides a potential market for attractions outside of the peak season. When attractions offer different experiences to local visitors (e.g. less congestion and queuing), and can capitalise on alternative markets, such as school visits. Market segmentation to identify existing users and markets that could be further developed allows attractions to diversify their product offering and align to user group needs. Strategies to attract local visitors and retain loyalty over the calendar year include, among other: pricing strategies (annual pass for local visitors at a discounted rate, discount vouchers or children go free promotions); revisit vouchers; free entry days (to encourage retail and catering spend); children's packages, such as fully supervised day sessions offering learning and fun experiences (e.g. zoos, country estates and aquaria) or whole day (or night!) birthday parties; and special themed events, based on a facet of the attraction (e.g. lambing days at a farm park) or on the needs of a particular client group (e.g. parent and toddler mornings). Inherent in such strategies is the role of the special event in an attempt to enliven an attraction and make it relevant to and seen as a recreational resource by the local community. Attention now turns to the Scottish attraction sector as the context in which this study is undertaken.

3.1 Study context: The Scottish Visitor Attraction Sector

As Garrod, Fyall and Leask (2002) note, the attractions sector plays a vital, yet sometimes unacknowledged, role in Scottish tourism. The visitor attraction sector in Scotland is a highly seasonal sector of the wider tourism economy that is worth around £4.4 billion to the Scottish economy. One of the major aspects affecting the visitor experience of Scotland is poor weather, so the off-peak season is challenging given the natural constraints of climate. Despite some dispute about total volume of attractions in Scotland due to the opening and closure of businesses, there are approximately 500 visitor attractions in Scotland recorded by the Visitor Attraction Monitor (VAM) survey (Moffat Centre 2010). The seasonality of visits to visitor attractions was outlined in the VAM for 2009 which found 15% of visits in January to March, 30% April-June, 37% July to September and 17% October to December and these figures remain broadly consistent year-on-year. This is not broadly dissimilar to the pattern of UK domestic tourist trips to Scotland, but it is not representative of the wider day trip market for the resident population. The GB Day Visits Survey (GBDVS) (VisitScotland, VisitWales and VisitEngland 2012) found that 6m visits were made to attractions in Scotland in 2011, accounting for approximately 4.5% of all 134 million day visits by UK residents. These day trips generated expenditure of £238 million. However, international visits are more concentrated in the April to September period with just under 80% of visits occurring in this period year on year.

To attempt to offset these obvious seasonal concentrations of visitation in the peak months of April through to September, public sector interventions by the national tourism organisation (NTO) VisitScotland have sought to influence visitor behaviour by promoting the positive appeal of visiting out of season. For example, in 2010-11 the NTO ran the Winter White marketing campaign with special offers for visitor

attractions aimed at both visitors and residents as a supplementary element but primarily aimed at driving up visitor spend through accommodation and stays. Critics of Scottish tourism have pointed to a more generic lack of industry leadership prior to the repositioning of the NTO as VisitScotland from its predecessor organisation. Leask (2010) points to the lack of engagement between the key industry lead body and lead tourism organisation, with expensive marketing campaigns undertaken without a fundamental understanding of existing sector activities and how to build these innovations into effective marketing¹. In other words, the understanding and coordination of the attraction sector as a key animator of tourist visits to Scotland remains neglected beyond the sector's own trade body - the Association of Scottish Visitor Attractions (ASVA). This tourism market provides a perfect setting for the analysis of the research questions.

4.1 Methodology

As indicated in Section 1.1, the aim of this paper is to investigate the management behaviour of attractions not only in terms of their response to seasonality, but a neglected feature of such behaviour - the role and importance of events as a management response to tackling seasonality. An empirical study was designed to explore the scale and scope of off-peak operations in the visitor attraction sector in Scotland, where reduced off-peak demand, largely based on climatic and accessibility factors (i.e. distance from key markets), remains a constraint on both international and domestic tourism activity. To define the survey population, and given the debate

¹ The situation is somewhat complicated as the lead organisation for bidding for and facilitating destination-led events of a national and international scale, EventScotland, does not routinely work with individual businesses in the visitor attraction sector. EventScotland does offer some funding to support innovation in the attraction-events nexus but of a modest scale. Its focus is on facilitating the major event programme Scotland-wide. Therefore, most of the businesses are engaged by the NTO - VisitScotland (in which EventScotland is located).

and lack of consensus within the academic and industry literature on the nature of visitor attractions (see Leask 2010), the definition of a *Visitor Attraction* as defined by VisitScotland was adopted:

“A permanently established excursion destination, a primary purpose of which is to allow public access for entertainment, interest or education, rather than being principally a retail outlet or a venue for sporting, theatrical or film performances. It must be open to the public for published periods each year, and should be capable of attracting tourist or day visitors as well.”

(Visitscotland 2004:1)

This all-embracing definition has a degree of consistency with other Scottish-based studies and allows a degree of comparability with existing data from the Scottish Visitor Attraction Monitor (VAM) (see Moffat Centre 2010). As such, the study was designed to incorporate private, public and third sector (e.g. charitable) organisations that operate attractions, and would include attractions of all sizes and in all geographic regions of Scotland.

As a population-wide perspective was sought, a quantitative method was deemed most suitable to collect a wide range of data from a large, geographically dispersed population. To assist with the data collection, the study was undertaken collaboratively with the Association of Scottish Visitor Attractions (ASVA). Several additional reasons made this decision appropriate: first, an existing survey of attractions collected on a monthly basis meant that an additional survey directed to the sector would have received a low response rate due to being in direct competition (i.e. oversurveying). A survey sent to members via the membership body

was considered to stand a better chance of being responded to. Second, it is widely acknowledged that the more innovative and proactive attractions form the ASVA membership and so the survey would be targeting established leaders within the sector. Thirdly, cooperating with a large trade body not only added credibility to the survey instrument but had the potential to align the project with members' interests for later dissemination.

4.2 Survey Instrument

In discussion with the Chief Executive Officer of ASVA, a questionnaire survey instrument was developed to ensure it had relevance and applicability to the sector, seeking to avoid duplication with ASVA's own annual monitoring study and other previously commissioned studies. This dialogue resulted in the development of a self-complete questionnaire using an online platform to implement the survey, a method deemed the most efficient and streamlined manner in which to attract the attention of busy attraction managers, combined with the attraction sector's growing engagement with electronic communication over the last decade. Timing is crucial in such studies since avoiding the peak season while capturing response prior to any planned closures for the shoulder or winter season to assist in maximising survey response rate meant a narrow window in late September in which to run the survey. ASVA's 450 members were sent the questionnaire in late September 2011 with a one month period in which to complete the survey. A link was distributed to ASVA's membership by the CEO with an accompanying letter to promote response.

Recognising that the study was framed as an exploratory study seeking to scope the field, investigate the breadth of activities and the variety of practices across the

entire country, the survey sought to elicit responses to a range of closed questions to gather numerical and categorical data, as well as some more insightful responses through an open questioning approach, on key elements of each individual attraction, their business operation and the nature of their engagement with the issue of seasonality and use of events. A series of Likert scales were employed to measure attitudes to specific themes and elements of the attractions marketing activity to respond to seasonality. The survey contained 31 questions comprising those to categorise the type, location and characteristics of the attraction; and, questions on the accessibility of the local community to the attraction along with data on the main markets and volumes of visitors received by season, opening and closure details and rationale for remaining open (or closing down). A section of the questionnaire was designed for those businesses which opened in the off-peak season to ascertain how the sector engages with special events, event themes, periodicity issues within the off-peak and how important events are to off-peak operations. Further empirical data on the impact of events was asked for along with the wider impact on visitor trends to assess motivation for initiating events-led marketing along with other strategies the attraction adopted.

After two weeks, ASVA sent a reminder and by the end of the survey period. Some 165 responses were received from individual attractions, yielding a 36.6% response from ASVA members. In terms of the representativeness of ownership and attraction type, this study achieved a similar distribution of responses to the VAM from heritage-related attractions. The VAM achieved a 69% response rate from heritage-related attractions compared with just under 75% in this study. Furthermore, in terms of the VAM the numbers of attractions charging for admission was 56% compared with 88% in

this study. This indicates that this sample has a larger proportion of commercially operated attractions which was a positive outcome for the study as it has the potential to inform the business practices of more commercially-oriented operators within the attraction sector. Consequently, this study is not focused primarily on public sector operated attractions as the sample contains a substantive proportion of large attractions compared to the VAM (further detail on these issues can be found in section 5.2.1).

The response rate for the study is seen as above average compared with other studies of tourism phenomenon using online survey instruments, where rates of between 10-19% are increasingly common (Hung and Law 2011). Attraction managers also provided additional responses through open questions which provided more in-depth insights on the operational and strategic issues associated with seasonality. This additional data has helped to elaborate on the experiences of specific attractions and was analysed using thematic analysis to map the broad range of respondents experiences and views. Some of these views are highlighted at appropriate points throughout the analysis but space prohibits a much more detailed analysis of these responses in this paper.

4.3 Approach to analysis

To explore the quantitative results beyond a descriptive level, multivariate tests were utilised to examine the key relationships in the data set. First, cluster analysis was used to group the data into a more manageable form and assess the degree of statistical coherence and extent of distinct groupings in relation to the theme of place and seasonality. Secondly, correspondence analysis was applied to demonstrate

the spatial variation in the pattern of seasonality and business behaviour of the attractions (see Greenacre 1993). Finally, MANOVA is also applied to test for the seasonal differences between regions, ownership type and the importance of the local community.

4.3.1 Correspondence analysis as a multivariate technique²

While correspondence analysis has been used by some authors, the technique is not widely used in tourism research and so a brief overview is of value at this point to highlight its purpose as a multivariate technique, its characteristics, uses and how to interpret the results. Correspondence analysis is a descriptive/exploratory technique designed to analyse simple two-way and multi-way tables containing some measure of correspondence between the rows and columns. Correspondence analysis can transform nonmetric data to a metric-level form using a dimensional reduction approach to determine the degree of association among variable categories. In correspondence analysis the associations between the rows and columns of a frequency table are illustrated in a plot that suggests the proximity of the row and column categories. Such plots are particularly useful when the large number of categories makes a cross-tabulation difficult to interpret, as is the case in this study. This is particularly helpful if one wants to see which categories are close enough to be combined without destroying the association between the rows and columns. Correspondence analysis is a useful visual add-on to a chi-square test of association, but the requirements for a valid chi-square test of association are not needed for

² Initially, Correspondence analysis was a popular methodology in France and Japan. In France, it was developed under the strong influence of Paul Benzecri, and in Japan, under Chikio Hayashi. The name 'correspondence analysis' itself is a translation of the French phrase 'analyse des correspondances'. But the technique has other names as well, such as optimal scaling, reciprocal averaging, optimal scoring, appropriate scoring (in the US), quantification method (in Japan), homogeneity analysis (in Netherlands), dual scaling (in Canada) and scalogram analysis (in Israel).

correspondence analysis, allowing the use of this method with multiple response data and with cells having low expected counts.

However, some caution is necessary when interpreting correspondence analysis plots. In any correspondence analysis plot, the plot for the rows is never strictly comparable with the column plot, so the proximity of row and column points can only be approximately measured by creating axes from crucial points to the origin. It is important within correspondence analysis to note that it is not the closest points that are related. For example, with the issue of seasonality, by drawing axes through the origin for each of the seasonal cluster points and then dropping perpendicular lines to these new axes, we begin to deduce what the association is. The perpendicular lines furthest from the origin on the same side of the axis as the seasonal cluster have the strongest relationship with that cluster. In statistical terms, correspondence analysis is a weighted Principal Component Analysis of a contingency table, which enables us to find a low dimensional configuration of the association between the rows and columns of the table.

5.1 Findings

The findings are organised around a two-stage approach, designed to first explore the basic elements through univariate and bivariate analysis and highlight critical issues before moving on to explore the data in a more evaluative further dimension based on multivariate cluster, correspondence analysis and MANOVA.

5.2 Stage1: Scoping the importance of events in managing seasonality in visitor attractions: a descriptive analysis

As the subject of the research is somewhat innovative, a frequency analysis is deemed to be an appropriate first stage in scoping the nature and extent of activities that form the focus of the attraction-event-seasonality relationship.

5.2.1 The nature and scope of attractions

The sample comprises a large number of historic and heritage-related properties, which reflects the wealth of heritage visitor attractions in Scotland. Just over one-quarter of the sample is defined as a castle/fort, with a further 25% defined as an historic property. In addition to this, a further 22% were heritage-related, including museums and heritage centres. Accordingly, just under three-quarters of the sample is historic or heritage-related in theme. However, the remaining attractions reflect a wide range of other interests, including several science centres, wildlife, farm and zoo attractions, outdoor recreation sites and transport-related attractions. Of the 165 attractions, 143 charge for admission, and 2 request a formal donation (overall, 87.9% in total classified as paid entry). There is significant variation in admission charges according to the nature of the attraction, ranging from £2.00 to £23.00 for standard adult admission (2011 charges), with a mean of £6.47. The ownership structure of the sample is broadly comparable to the VAM in terms of charity/trust (25.5% in this study against 26% in the VAM), privately owned (16.4% in this study and 18% in the VAM). However the principal differences emerge between the remaining categories of ownership which include government ownership, local authority and other ownership types.

An initial frequency analysis of visitor numbers, types and patterns of visiting reveals a number of key relationships; First, a relatively large number of attractions have visitor numbers of less than 50,000 which is slightly higher than the overall sample analysed in the VAM (2010). The VAM recorded 75% of attractions receiving under 50,000 visits a year compared to 62.7% in the ASVA sample, indicating that the ASVA sample contains a higher proportion of larger visitor attractions. However, both surveys point to the relatively low visitor numbers at the majority of attractions. Furthermore, it appears that domestic visitors dominate the visitor population compared to the international market.

The conceptualisation of visitor attractions as a resource for local people is identified in the survey findings. Some 43.5% of the sample stated that the local community (living within approximately 10km of the attraction³) is an essential market for the attraction, with a further 38% stating that the local community is quite important (totalling 81.5% of the sample). In terms of key markets, 37.5% of attractions were oriented particularly towards families with children. This is an important feature from the perspective of off-peak school holidays and weekend destinations, as well as for parents with pre-school children seeking different places to go during weekdays out of season.

5.2.2 Spatial distribution of attractions

The survey returned responses from across Scotland. In terms of non-response, data was potentially less representative of attractions in Aberdeenshire, Ayrshire and

³ The 10km catchment has been used within travel studies to define a trip of short duration as highlighted by Banister (1997).

Arran, and Shetland (which aligns with the ASVA membership with a predominantly greater urban and historic property bias compared to the VAM with a much greater geographical spread in more remote locations). The pattern of response illustrates a clear regional split between the lowland central Scotland region containing the major gateways and access to the main cities of Glasgow and Edinburgh and the wider central Scotland region covering The Forth Valley and Trossachs. This is in contrast to the more rural distribution of attractions in regions, such as the Highlands and Perthshire, often clustered at smaller towns and service centres or in remoter rural and coastal locations. The distribution by former Tourist Board region (Table 3) combines a number of local authority districts but has a degree of geographical coherence in terms of the clustering of distinct attraction types and visitor markets. This is a far more logical and helpful basis for the spatial analysis of tourism in Scotland than the more recent simplistic categorisation by VisitScotland of tourism regions into North, South, East and West (Table 4) which does not accommodate the nuances and resource base of tourism in each of the very distinctive former Tourist Board regions.

TABLES 3 & 4 HERE

5.2.3 Attractions open during the off-peak

Some 78% of attractions opened during the off-peak period. Of these, 70% opened throughout, closing only for the public holidays over Christmas and New Year. The remainder closed for a part of the off-peak period but not in its entirety. While over one-quarter of the attractions open during the off-peak maintained the same opening times all year round, it appears that a frequent response to changes in the season is

to reduce opening hours. Most commonly, attractions remain open on a daily basis, as in the peak period, but for fewer hours in the off-peak (42.6%). Other strategies included opening for fewer days (4.9%), for fewer days and for reduced hours (11.5%) weekends only and a variety of other attraction-specific strategies. A chi-square test ($p=0.000$) indicates a significant relationship between visitor numbers and whether an attraction is open off-peak: it appears that those attractions with higher annual visitor numbers are more likely to remain open, where 86.7% of those with numbers less than 20,000 closed during the off-peak.

The reasons for opening in the off-peak are not simply confined to a statement of financial interest. The biggest single reason stated by some 24% of respondents was that seasonality of demand was not a significant issue and that their attraction enjoyed all year demand: “it’s not off peak for us” was a comment from one operator. A further 14% stated that the main reason for opening was in relation to a commitment to open, as stated by museums and public sector attractions, as well as member organisations which feel an obligation to deliver to their supporters. A third area of importance rests with the value of the local community, where operators recognised that a large proportion of their market was local and not tourist, that there was an obligation to make historic resources available to the community, and that school visits formed an important market in the off-peak for some operators. The research highlights the approach of some attraction operators who view their organisation/business as a part of a wider interest - that of developing tourism and leisure in the destination. Comments from operators specifically identify the premise of remaining open to support tourism throughout the year. One operator stated that there are always visitors about and it might be detrimental to their experience if they

are unable to access a range of attractions, another view was that it drives local business to remain open, while a more vociferous view was that tourism will never develop “if we all shut up shop”. Overall, 5% of the main reasons given for remaining open in the off-peak season were for this purpose, which while small is an indication of the importance of this element for some operators with the bigger picture in mind.

In terms of attractions open during the off peak period, some 22% closed completely during the period October to March. The chief reasons for closure are broadly inter-related: first, that there is insufficient visitor demand and/or that it is not cost-effective to remain open (46.2% of reasons given for closure); second, that the off-peak period is designated as a period when routine maintenance, conservation and/or upgrading activities are undertaken (38.5%). The latter is particularly marked for historic site attractions, where just over one-third of attractions in this sub-sector closed during the off-peak, compared with 9% of non-historic site attractions. Other reasons for closing included winter weather for one attraction, while a second attraction closed in order to host corporate events.

Respondents who stated that their attraction was closed during the off-peak were asked to consider if there were any factors that might increase the likelihood of the attraction remaining open for a longer period during the year. Two issues appear to act as major constraints: first, numbers of visitors to the area in general perceived as insufficient to justify keeping opening hours; a second constraint relates to the rationale for financing opening the attraction where costs exceed revenue generation. Other issues mentioned included weather and degree of rurality in attracting visitors which combines with issues of accessibility. Despite these obvious

seasonal constraints, it is apparent that for the majority of attractions, there is a growing trend towards expanding the market for off-peak visits to make better use of the capital investment in the attraction, to maximise revenue from visitor spending. Even where attractions reduce entry prices off-season in response to demand, additionality from spending in attraction shops and cafés provide complementary revenue. Of those attractions remaining open during the off-peak, 56.1% employed more staff in the peak period, only 26.8% employed considerably more staff in the peak period, compared with 43.9% of attractions which employ about the same number of staff throughout the year - over one-half of the latter attractions are museums.

5.2.4 Attractions and special events in the off-peak period

One of the key strategies employed to build the off-peak market is the use of special events. Some 39% of attractions stated that special events were held during the off-peak period. Of these, 47.1% held just one to two events, while 35.3% held more than five events. The larger the scale of the visitor market for the attraction, the greater likelihood that they will host special events. One might argue that this is a necessity for the larger attractions with visitor markets of over 100,000 visitors a year for critical cash flow issues to ensure all-year round use of the asset. Many of the larger attractions are urban-based in the larger cities (with one exception in a ski resort) and so they have access to over 70% of Scotland's population as additional off-peak visitors to replace the loss of tourism in the peak period. This conforms to a clear inverse hierarchical principle in visitor volumes (i.e. small numbers of larger attraction operators host special events) as illustrated in the volumes of visitors and the smaller numbers of attractions operating at the higher thresholds of visitor

numbers. One explanation of this advanced in relation to sporting events in the USA is the significance of central place theory (see Daniels 2007) in activity concentrating at centrally located points in a region. This has some degree of salience in the case of Scotland, where the location of major gateways and arterial routes (accessibility) are a major determinant of visitation to region when seasonality (especially climatic considerations and institutional factors such as the timing of holiday leave and school holidays) is added into the equation.

Respondents were asked to explain their reason for hosting events at their attraction during the off-peak period. A number of responses made specific mention of significant dates and celebrations in the seasonal calendar on which the attraction could capitalise to attract visitors. Underpinning the rationale was either an opportunity to map a seasonal or celebratory theme to the attraction in a general (e.g. historic houses and castles and spooky tours linked with Hallowe'en) and/or in a person-site specific way (e.g. locations linked with Robert Burns and St. Andrew). The business rationale for engaging in special events is also very evident, demonstrating an understanding of what events might achieve in terms of increased footfall, additional revenue, brand awareness and other marketing activities. For some organisations, an organisational perspective drives the event programme where for some there is a perceived need to provide for a membership, or to fulfil a specific objective (particularly in the non-commercial sector). For others, the community role of the attraction is significant, where an all year round function exists including maintaining community-related amenities and activities, continuation of fund-raising, and working with educational audiences, such as school visits. Indeed, for some attractions, school visits fill in the gaps left by tourists in the off-peak.

The range and type of events hosted by attractions in the off-peak is extensive, and overall 285 different events were recorded indicating the degree of innovation across the sector. The most numerous types and themes for events are identified in Table 5.

TABLE 5 HERE

The off-peak period is punctuated by peaks in activity and visitor demand stimulated by school half-term holidays, the build-up to Christmas and the Christmas and New Year (known as Hogmanay in Scotland, where January 1st and 2nd are public holidays). Table 6 illustrates the proportion of attractions open during the off-peak which hold events during these periods. The data suggests that October to Christmas is a particularly important one for attractions seeking to capitalise on the available markets and seasonal themes during this time of year.

TABLE 6 HERE

5.2.5 Issues connected with events in the off-peak

In terms of the outcomes of events in the off-peak for individual attractions, there are some significant differences between the pre-Christmas/Christmas period compared with other periods (Table 7). Table 7 suggests that the events organised around the Christmas period focus more strongly on revenue generation, especially when compared with events at other times of the low season. This illustrates a major retailing opportunity for attractions and the opportunity to provide visitors with a

different perspective on the attraction, building upon the differences which seasonality and climate may add to the attraction setting.

TABLE 7 HERE

Respondents were asked to detail their experiences of the types of events that have been most and least successful during the off-peak period. These responses gained through an open question provided more qualitative responses that provide greater insights into experiences, and these are explored in relation to the peak period off the low season (Table 8).

TABLE 8 HERE

Table 8 reflects the innovation amongst many attractions to cater for the October half-term school holiday to develop events congruent with family markets with themes that appeal particularly to young children. Hallowe'en coincides with this holiday and it is increasingly widespread to see events for families with children for 'low-scare experiences' (e.g. dressing-up, pumpkin carving, story-telling). However, spooky themes are not exclusively aimed at children, with scare experiences (e.g. ghost tours, theatrical events and other entertainment) designed for adult audiences. Indeed, one smart strategy is to offer two strands of events for each audience during a week-long promotion of Hallowe'en-related activities at a normally quiet time of year. Where attractions reported a lack of success in the hosting of events, a range of factors were cited (in some cases a lack of market analysis and understanding of the accessibility/inclement weather underlined the preparations and investment in an

event), but above all, no single factor explains perceived lack of success. What is apparent from this data is that similar attractions pursuing similar event strategies do not necessarily achieve the same outcomes. Thus conventional thinking on the need to innovate and develop a diversified portfolio of products for the off-season attraction market are contingent upon a wide range of factors, only some of which can be controlled for. This may also reflect the professionalism which many established and experienced attraction businesses apply to the organisation of events (some employing event organisers or utilising in-house expertise) versus those who are dipping their toes in the water. As a result this generated a range of responses to the significance of events in the off-peak.

5.2.6 The importance of events in the off-peak

In terms of the importance of special events to attractions, 73.1% of respondents either agreed or strongly agreed that special events are a core element of off-peak business strategy. In terms of sub-sector, events appear to be more important for museums (78.6%), while less important for visitor centres, places of worship and art/craft galleries. There appears to be a significant relationship between annual visitor numbers and events as a core element of off-peak operations. A chi-square test ($p=0.04$) indicates that attractions with less than 100,000 annual visitors show a propensity to view events as a core strategy for the off-peak.

Just under one-half of respondents agreed or strongly agreed that special events help their business to remain cost-effective during the off-peak. Indeed, 32.5% did not think that events helped their business remain cost-effective (the majority of which were museums), although 17% stated that they would not remain open during the off-

peak if they did not run special events: one example is a heritage railway where Hallowe'en and Santa Specials create significant business out of the main tourist season. Only a small number of attractions (7.5%) viewed private events (such as birthday parties, weddings and corporate events) as more important as a business strategy than events open to the general public.

While encouraging tourism businesses to develop events programmes is viewed as a more recent initiative within the literature, this survey indicates that events are not a new strategy for many visitor attractions in Scotland. Some 53.7% of respondents that hold off-peak events stated that the attraction had always hosted events, with a further 39% stating that they had always done so but had increased the number in recent years. However, events are not the only strategy adopted in an attempt to boost visitor numbers in the off-peak, with nearly 70% of attractions stating that other measures were taken to combat seasonality problems((including all museums in the survey).

5.2.7 The importance of the local community in hosting events

Two-thirds of respondents view the local community (defined as resident visitors from within 10km) as the most important market for off-peak events. This was a dominant response from those attractions which recognised that they had access to these markets, and within 10km of a urban population capable of supporting events (primarily museums and animal-based attractions), with more rural and island communities seen as less able to support attractions in the off-peak period. Attractions that perceive the local community as less important in event staging include visitor centres, nature-based, art/craft galleries and a range of 'other'

attractions including transport-based attractions, which are perhaps more likely to appeal to a tourist market. Given the importance of the local community, access to markets and the timing of events, it is now pertinent to examine the relationship between these themes and to model their importance to understanding the business behaviour of attractions in establishing events.

5.3 Stage 2: Multivariate Analysis: Cluster and Correspondence Analysis for Exploring Seasonal Effects

In order to build on the findings of the descriptive analysis and address the research questions, multivariate analysis was applied to the dataset to explore the seasonal characteristics of the attractions and the relationship between these seasonal characteristics and a range of variables including type and ownership of attraction, off-peak events strategy, importance of local community and spatial differences. The first stage of the multivariate analysis used cluster analysis to categorise the seasonal characteristics of each attraction. The percentage of visitors in each of the four seasons, November-February (off-peak), March-May (shoulder 1), June-August (peak) and September-October (shoulder 2) were used for this analysis in addition to the percentage of international visitors. The percentage of international visitors shows a significant positive correlation with the percentage of summer visitors and a significant negative correlation with the percentage of visitors for the remaining three seasons, as identified by Coshall et al (2014), making this variable a useful indicator of the seasonal characteristics of each attraction. Three clusters of attractions with different seasonal characteristics emerged when using a hierarchical cluster analysis with Ward's method used to measure the distance between clusters. As Table 9 shows, the first cluster contained 43 attractions and attracted the highest

percentage of international visitors (26%). This cluster managed to have relatively stable visitor numbers throughout the year with, on average, 18% of visitors in the November to February period and is therefore labelled the “Year-Round Cluster”. The second cluster contained 39 attractions and was less successful in attracting visitors in the off-season period with on average only 9% of visitors in the November to February period. However, there was certainly some off-season market for these attractions. Finally, the third cluster contained 53 attractions and on average only 2% of visitors in the November to February period, suggesting very little off-season market for these attractions.

TABLE 9 HERE

There are several significant differences between these three clusters of attractions that relate to the strategies employed and the success and importance of these attractions to the local community. There were distinct differences between the clusters with regard to the importance of the local community (Chi-Square=10.1, df=4, p=.037), essential for 56% of the Year-Round cluster but essential for none of the attractions in the cluster with little off-season market. There were similar differences in visitor numbers with 45% of the Year-Round attractions receiving more than 100,000 visitors in 2010, while this number of visitors was obtained by only 2% of the cluster with little off-season market. For the off-season period October to March 33% of the Year-Round cluster opened on public holidays and 76% of these attractions staged special events during the off-season. Finally, there were clear differences with associated with admission charges. Nearly all (98%) of the attractions with little off-season market charged for admission, while 74% of the year-round cluster attractions

charged for admission. However, there were no significant associations between these clusters and the ages of visitors that they attract (Table 10).

TABLE 10 HERE

Having established that there are three distinct clusters of attractions in terms of seasonal demand, correspondence analysis provides a visual tool for analysing the relationship between these seasonal clusters, the types of attraction, their ownership and their location. The large number of different locations and the large variety of owners and attraction types make this a particularly useful approach. Figure 2 illustrates the significant relationship (Chi-Square=62.6, df=6, $p < .001$) between the seasonal clusters and the type of attraction. The results suggest that Art/Craft Galleries, Natural Reserves and Wetlands, Steam/Heritage Railways and Country Parks are most likely to have year round visitors. Forest Parks and Heritage/Visitor Centres are most likely to fall in the second cluster with some off-peak visitors. However, Historic Properties and Distilleries/Vineyards are most likely to fall in the third cluster having very little in the way of off-peak season visitors. Finally, although museums are most likely to fall in the year-round visitor cluster, castles/forts are unlikely to fall in this cluster.

The next relationship illustrated using correspondence analysis examined how ownership affects the seasonal clustering (Figure 3). This relationship is also significant (Chi-Square = 62.6, df=12, $p < .001$). With some notable exceptions, attractions owned by a government agency charged with the care of a range of historic properties in Scotland are most likely to have very little off-peak activity while attractions run by a local authority or non-charitable organisations are most

likely to have year-round visitation. There are notable exceptions to this such as where international heritage icons under government management attract all year round visits, but as Cuccia and Rizzo (2011) argue, perhaps the more minor heritage properties perform a strategic role than the 'superstars' in the off-peak given a higher propensity for local visitors. Attractions owned by charitable organisations and other organisational modes of ownership are most likely to have at least some off-peak visitation.

FIGURES 2 & 3 HERE

The significance of region was then tested with those adjacent regions with small counts by category aggregated for the purposes of analysis, to explore the pattern of responses to seasonality by location (Chi-Square = 33.9, df=6, $p < .001$). Figure 4 shows that the year-round cluster (1) consists of attractions in the Edinburgh, the Lothians, Greater Glasgow and Clyde Valley Regions, concentrated in the Eastern and Western areas of Scotland. The cluster with very little off-peak visitation (3) is based largely in the Outer Hebrides, Orkney, Shetland Islands, Dumfries and Galloway (again highlighted by Coshall et al (2014) with reference to international visitation), concentrated in the northern and southern regions of Scotland. Finally the cluster with some off-peak visitation (2) consists mainly of attractions situated in the Kingdom of Fife, a region within relatively easy travelling distance of major cities such as Edinburgh, Dundee and Perth.

FIGURE 4 HERE

The above analyses have shown that, in particular, there are significant relationships between seasonal demand, the importance of the local community as a market, the type of attraction, its ownership and geographical position. The pattern of business responses to seasonality are clearly shaped by location, ownership structure, type of attraction and the ability to harness the local community as a key market. To further refine the level of regional analysis within the data to assess the importance of location (i.e. region), a further level of statistical analysis was undertaken, namely MANOVA.

5.3.1 MANOVA analysis

MANOVA was employed to assess the significance of region, ownership and community in relation to seasonality given that the sample size was relatively small to achieve a comparative analysis within the data, particularly the urban and rural dimensions of the data. As a statistical technique, MANOVA is a test which allows one to compare the mean values of several groups which is evident in this data set to assess statistical significance. A four factor between subjects MANOVA analysis was used to test for the seasonal differences in the data. A logit transform was used for the seasonal percentages in order to ensure that the assumptions for this analysis were supported. Groups with small frequencies were combined into an “Other” category. Significant seasonal differences were found in the case of region ($F(12,310)=3.1$, $p<.001$, partial $\eta^2=.095$), ownership ($F(12,310)=2.774$, $p=.001$, partial $\eta^2=.086$) and the importance of the local community ($F(8,234)=2.038$, $p=.043$, partial $\eta^2=.065$). However, no

significant differences were found for the type of attraction ($F(16,358)=1.108$, $p=.346$). Significant differences were also found between rural and urban locations ($F(8,258)=4.467$, $p<.001$, partial $\eta^2=.122$) with urban locations favoured in the winter months and rural locations favoured in the summer months (Table 11). Even when we control for the effect of region, the rural/urban effect is still significant ($F(8,250)=2.150$, $p=.032$, partial $\eta^2=.064$). As shown in Figure 5 the western and eastern regions have relatively low percentages for the summer (June - August), while Table 12 shows that attractions within government ownership have relatively high percentages for this period, as do attractions for whom the local community is not important as shown in Figure 6.

Table 11 and 12 and Figure 5 and Figure 6 here

6.1 Implications

This study highlights that seasonality presents an operational issue for attractions, but generalisations at the macro level can conceal a range of business practices at the micro scale that allow the visitor economy to be sustained through the off-peak season. Significant seasonal disparities exist between geographic regions regarding visitor activity, highlighting that seasonality is not a simple concept easily addressed by broad policy objectives in national strategies. Recognising the spatial element of visitor attraction operations potentially stimulates a more sophisticated understanding of how such businesses operate in both a seasonal and geographic context, alongside a range of other factors. However, while seasonality reduction measures are a relatively common feature of tourism strategies, limited progress has

been made in overcoming the natural and institutional components that drive seasonal demand patterns (Butler and Mao 1997; Hinch and Jackson 2000). From a supply perspective, policymakers in tourism and economic development must acknowledge the nuances in off-peak visitor demand in geographic areas and work more closely with operators to capitalise on opportunities that exist or might be generated. Greater partnership working and co-operation between public sector forces trying to grow and develop economies and those seeking to operate viable commercial or non-profit organisations might be beneficial.

In Scotland, the importance of market access and place as determinants of businesses responses to seasonality challenge conventional thinking; the 2013 draft Tourism Development Plan for Scotland (VisitScotland 2013) largely overlooks seasonality even though it is a key element in the business model affecting tourism and regional economies. Spatial seasonality, and the way businesses respond to it, should precede the current thinking that market failure exists on the basis of the macro pattern of seasonality. Indeed, this study identifies flaws in such thinking, while seasonality may be an impediment to Scottish tourism at a macro level, it is not necessarily the case with regard to all sectors - in this case, visitor attractions, where a range of successful and proactive practices to grow the seasonal offering are in evidence in some areas. However, the overall pattern of spatial seasonality observed in this study confirms previous analyses, such as Kerr (2003), which identify the dominance of the central belt (Edinburgh, Glasgow and Stirling) in developing all year round business. This spatial concentration reflects wider inequalities in regional economic activity in Scotland (Allen 2013) and socio-economic performance (Thomson, Vellinga, Slee and Ibiyemi 2013).

The key implications of this research focus on *five* distinct areas. First, in relation to the operation of visitor attractions, a relatively large proportion remain open to the public during the substantive off-peak period (October to March), although the data suggests that those with larger total annual visitor numbers are more likely to maintain all-year round operations given probable infrastructure, staffing and financial commitments. Further, the idea of the off-peak as ‘no season’ (Lundtorp, Rassing and Wanhill 1999) is only partially evidenced in this research: some operators do not perceive an off-peak period in their operations at all. Conversely, some closures are programmed and embraced for operational reasons, especially in the heritage sector and for those who are too remote to engage within a geographic cluster of attractions accessible to both local communities and off-peak tourists. As Hall, Lynch, Michael and Mitchell (2007) argue, small-scale complementary business activities have the potential to build capacity to develop destinations through a clustering effect, but these effects must be captured by other businesses and shared within the community of operators to achieve spatially contingent success.

Second, the use of events to address off-peak reduction in demand demonstrates that events are a frequently used strategy for individual attractions and for the sector as a whole. Much of the hosting of events appears to be trial and error for some attractions learning about how to improve the position year on year, which reinforces the view that these businesses understand the environment they operate in and can adapt and tailor their business to local conditions, particularly the significance of place in terms of location and access to markets. For many businesses, this is routine

operational activity not a new approach to product development, especially for some smaller attractions where holding events supports the case for remaining open.

Third, the emphasis by attractions on events open to the public illustrates that only a relatively small number of attractions nurture private and corporate events as an off-peak revenue generator. The main driver of events appear to be the leisure needs of families with children, which while important in deriving footfall in the school holidays and weekends creates temporal variation within the off-peak, where quiet periods still need to be addressed. However, events are not the only strategy used to generate visitor interest in the off peak and businesses cannot rely on this singular approach. In addition, some respondents perceived a levelling off in off-peak visitor numbers within the last two years, suggesting that there is little more they can do as individual businesses in developing opportunities outside of the peak season.

Fourth, this research highlights the role of local residents in supporting the viability of attractions outside the peak season. Local people often perform a compensatory role for attractions when peak tourism demand abates and events can act as a vehicle to facilitate that compensatory effect. Our research is indicative of the ability of the attraction to build markets that are not focused exclusively on tourism as evident from Weidenfeld and Leask's (2013) analysis, highlighting the significance of the local community to the market for visitor attractions. Further, the remit of some attractions is to work as part of or to serve the local community (e.g. museums), opening all year round to service research, education and leisure needs and where tourism delivers a beneficial bonus function in revenue generation.

Finally, this study highlights the existence of a community of tourism operators to drive destination development. Findings suggest the existence of a small group of tourism businesses that 'buy in' to the idea of collective responsibility in maintaining tourism resources for all year round operation and for those tourists who travel out of season, avoiding the "lack of offer" and neglected feel of a destination out-of-season (Figini and Vici 2012: 827). For the smaller attraction sector which is predominantly family-owned and facing a highly competitive environment for visitors, this research highlights the collaborative benefits of their working with a wider cluster of businesses in their community. Such an approach would offer more opportunities for year round operation.

7.1 Conclusion

While Flogenfeldt (2002) questions the cost-effectiveness of investing in season extending initiatives, particularly given that natural factors such as poor weather cannot be altered, it is possible for tourism businesses to extend their activities beyond the main season. This paper has demonstrated the role of attraction-based events to counter the effects of reduced seasonal demand, and the importance of events in maintaining interest and activity through the off-peak. This study represents a starting point in the empirical validation of the Weidenfeld and Leask (2013) notion of visitor attraction and event success being aligned to the concept of the core product/ nucleus and notion of a continuum of attractions. Our cluster analysis shows that there is a considerable degree of diversity and more complexity than that classification infers: for example, success in hosting Christmas and other events such as Hallowe'en and other celebratory activities are not necessarily aligned

to the core theme of the attraction. Instead it is more indicative of the attraction sectors entrepreneurial and routine operational response to an implicit recognition of seasonality as opposed to recognition of how to grow the brand and core offering. We identified three broad groupings of businesses as attractions where the event-attraction nexus was shaped by their ownership structure, size in terms of annual visitor markets, location and ability to harness local leisure markets. This illustrates a broad conceptualisation of the factors that are affecting the broad responses to seasonality. Further research might examine the generalisability of the current thinking on events and visitor attractions and the extent to which these findings can be applied to other countries with a distinct seasonal pattern of demand as illustrated in Figure 7.

FIGURE 7 HERE

The results also reflect a wider finding applicable to the attraction sector: much of the efforts to extend the season in the attraction sector have required innovation by individual businesses and no public sector subsidies that major events or programmes of events require. Goulding, Baum and Morrison (2005) argue that public policy to extend the season will not effect change if the supply-side dynamic to seasonal trading fails to recognise the benefits of lifestyle trading, especially in peripheral regions. However, unlike the accommodation sector, the attractions sector is not dominated by lifestyle entrepreneurs and this paper provides evidence that many attraction operators seek to cultivate an all-year round market where possible, and events play a role in planning for the off-peak season. Further, it is argued that seasonality as a demand-driven concept might partly be an oversimplification given

that supply-side factors negate against 'retreat' responses. The wider community and societal roles that many attractions play mean that operators have a moral or legal obligation to remain open and to encourage public engagement throughout the year. Leveraging the best practice, success stories and evidence of seasonal business operation elevates our thinking from the often anecdotal and narrow thinking about seasonality that is reliant upon demand statistics that are aspatial and overlook the geographic seasonality which exists within countries.

Clearly this research is the first empirical validation of the attraction-event nexus and further explorations of the theme are needed. However, this study illustrates how new research directions to inform business strategy and public policy need to create an evidence base to challenge the current paradigm of major investment in events to address perceived issues of seasonality. This research may help to explain, as economic analyses of seasonality and tourism infer, that public sector interventions (e.g. investments) to reduce seasonality and sustain demand based on a social welfare perspective, are not necessarily followed by the private sector (Cellini and Rizzo 2012) who pursue profit motives. This finding is especially the case where public and private sector deseasonalising goals are complementary and competition between providers creates differentiated products. Attractions are dynamic businesses which have to cope with fluid trading conditions influenced by a wide range of factors, and events are one element of the wider attraction development strategies which businesses develop. The study also highlights that whilst the academic analysis of attractions may seek to differentiate the users of attractions into distinct groups shaped by motives, for the attraction manager the footfall is the

critical element of the business, and a diversified visitor portfolio that seeks to maximise revenue and meet other objectives is essential.

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Figures and Tables

Figure 1: Simplified conceptual framework

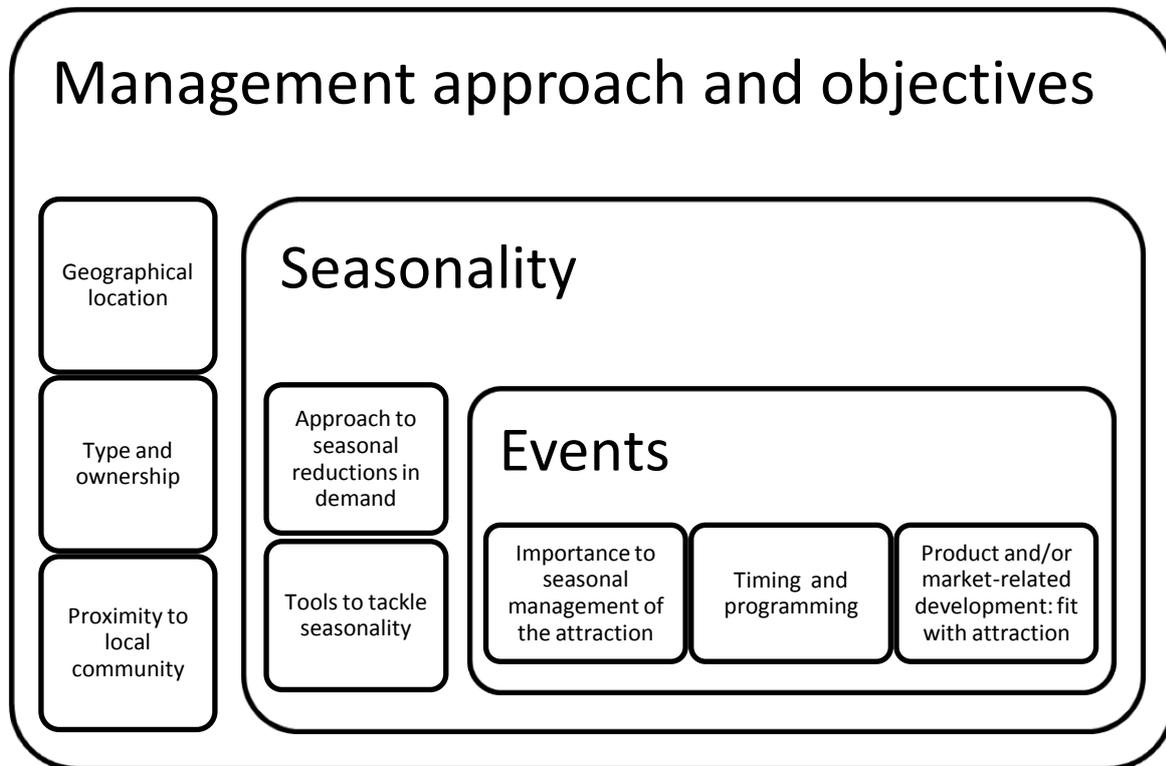
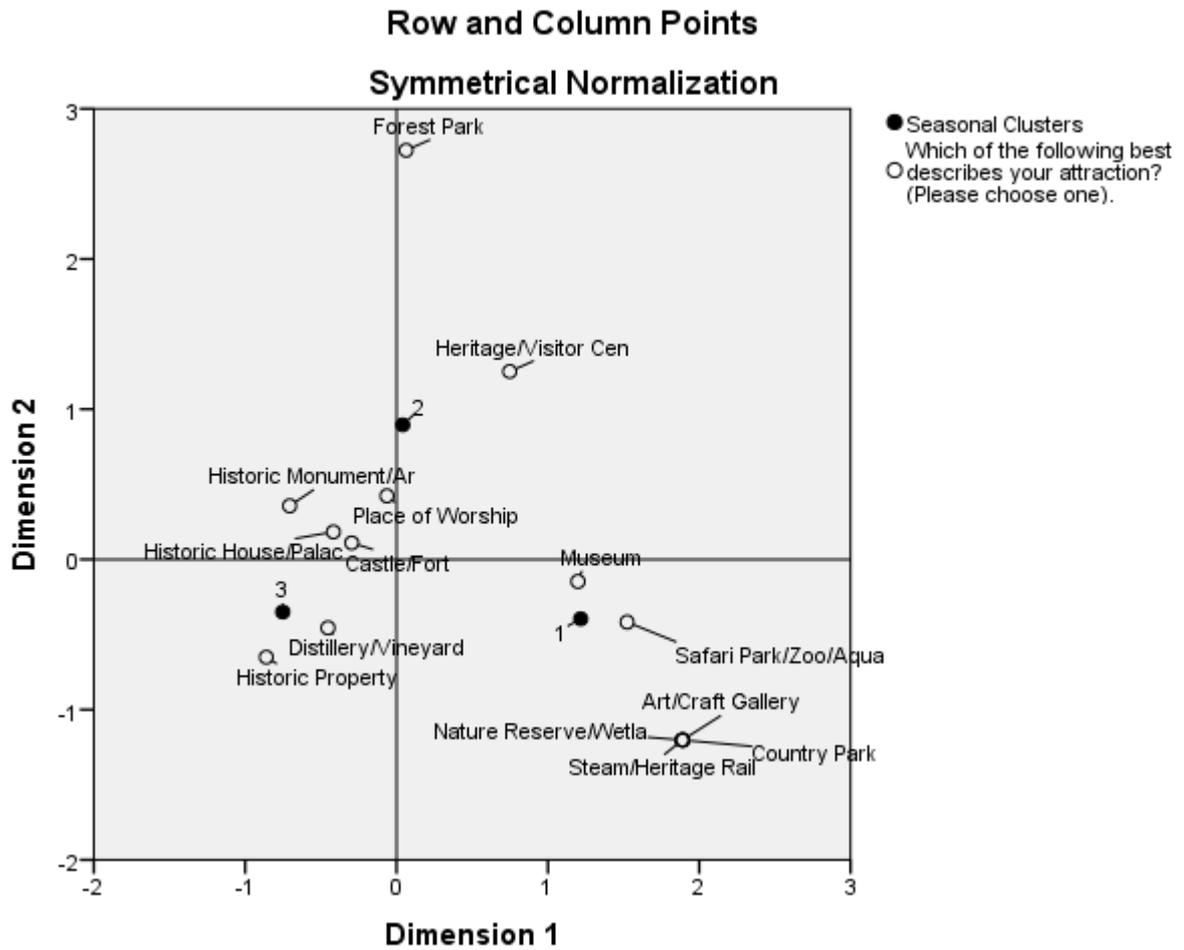
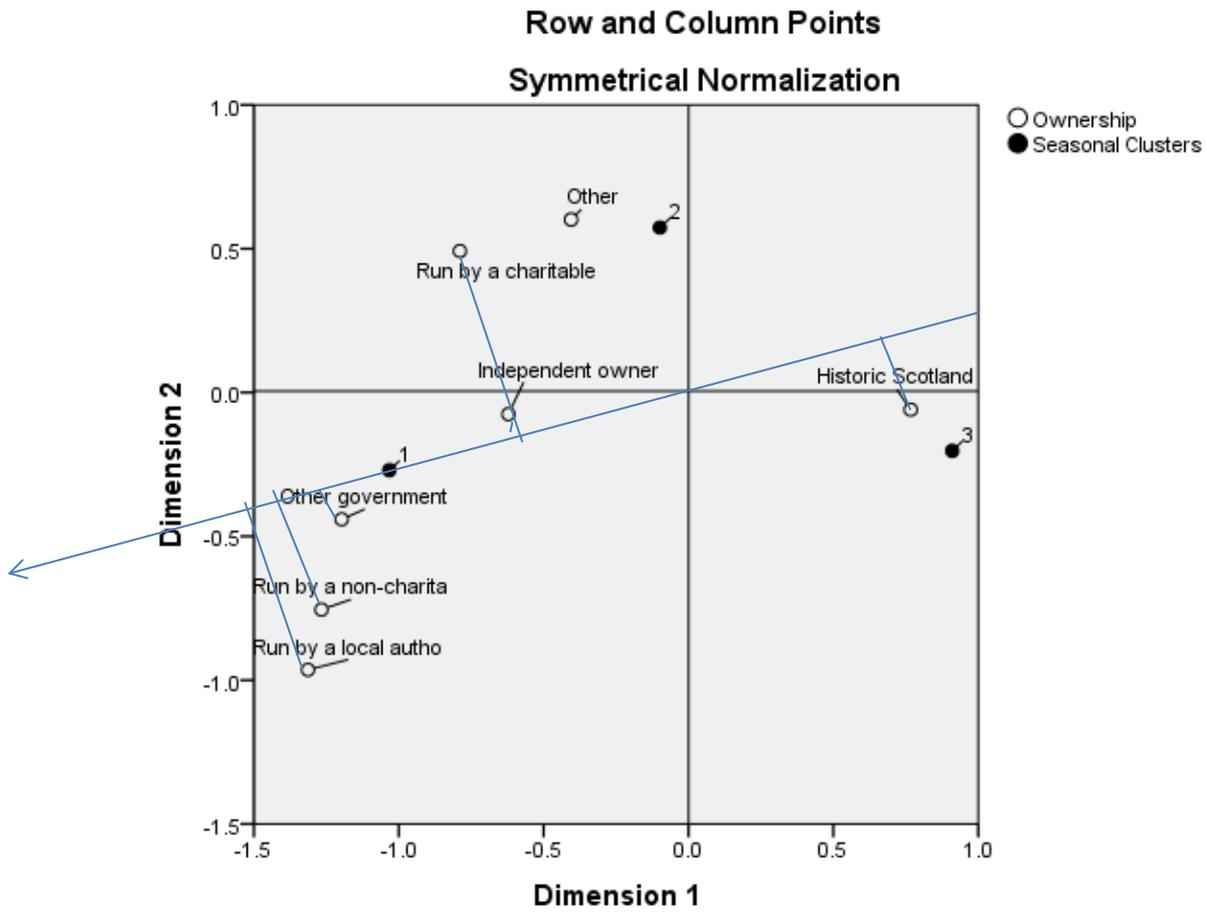


Figure 2: Correspondence analysis of types of attraction and seasonal clusters



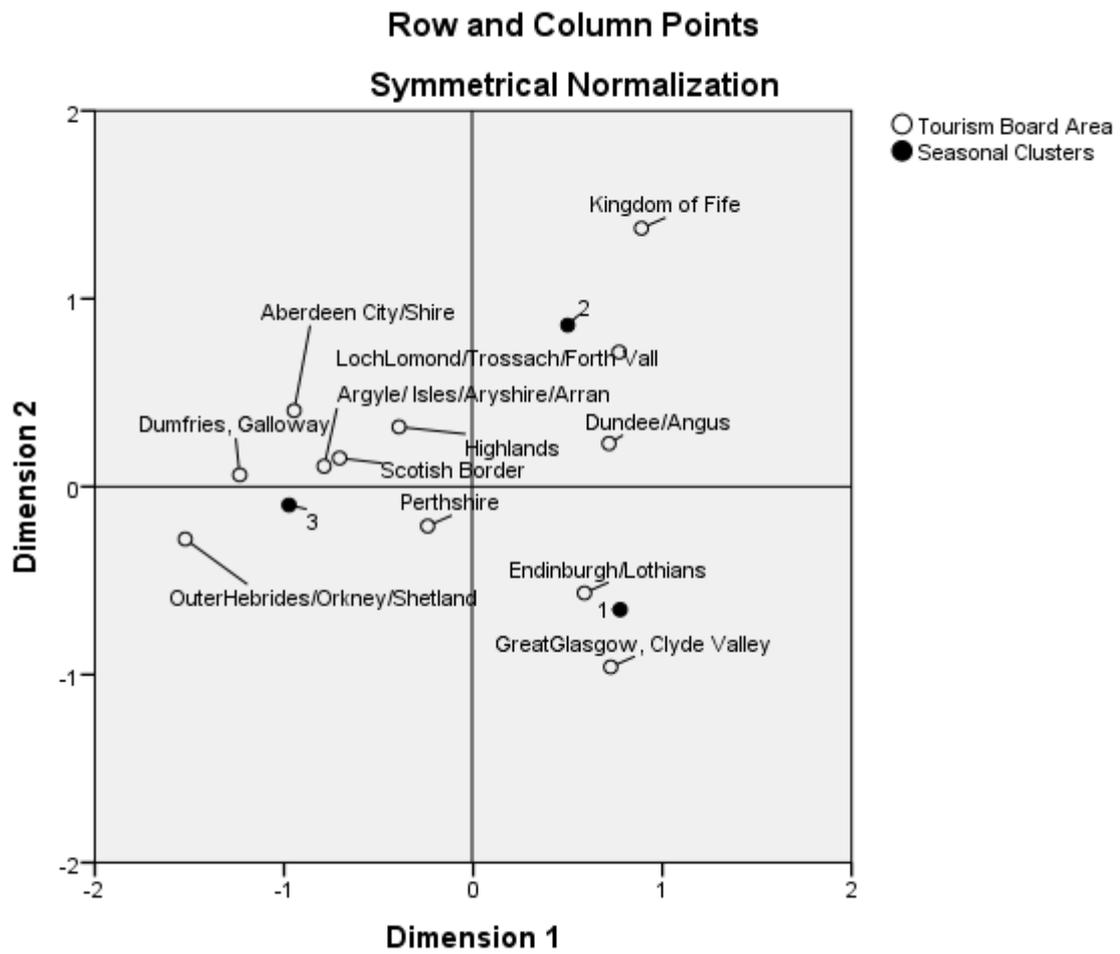
The results of the analysis are statistically significant ($\chi^2 = 72.720$, $DF = 28, P = 0.000$)

Figure 3: Correspondence analysis of ownership and seasonal clustering



The results are statistically significant ($\chi^2 = 65.590$, $DF = 12$, $P = 0.000$).

Figure 4: Correspondence analysis of regional tourist board location and seasonality



The results are statistically significant ($\chi^2 = 70.677$, $DF = 22$, $P = 0.000$).

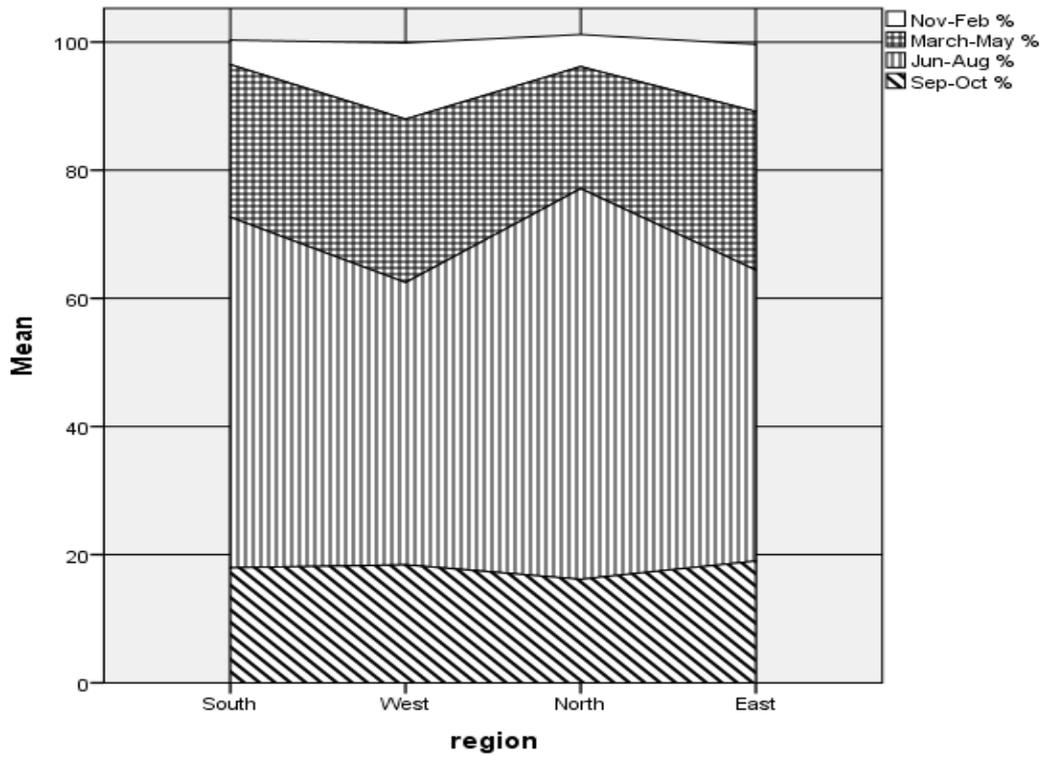


Figure 5: Seasonal Variation Across Regions

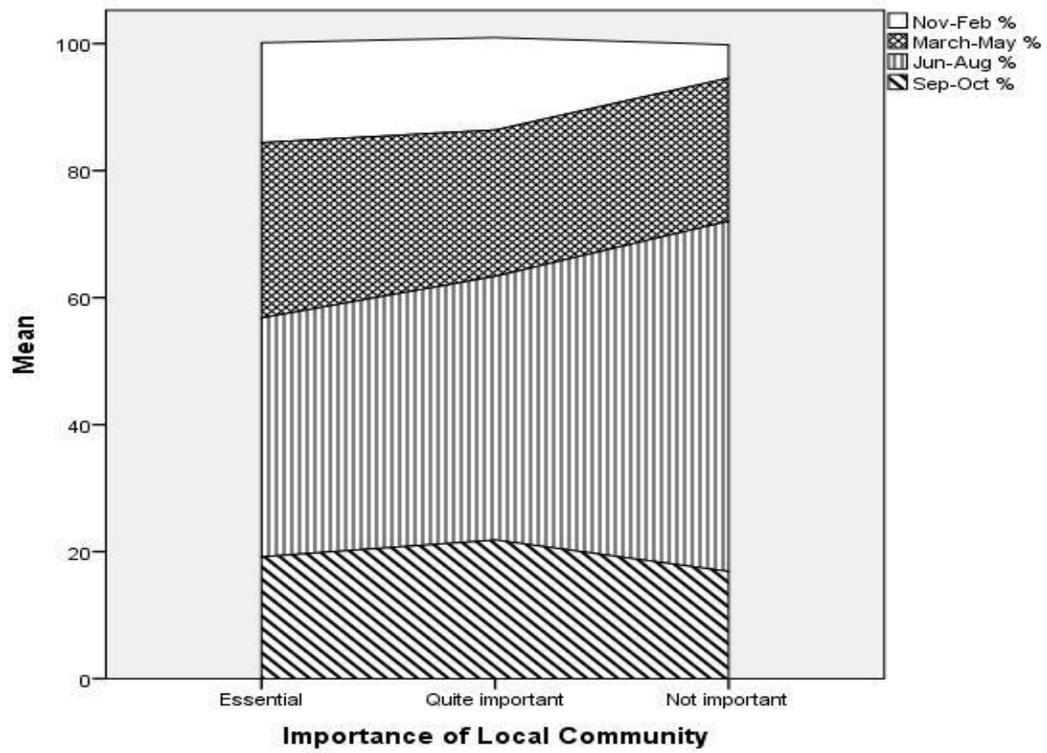


Figure 6: Seasonal Variation Across Importance of Local Community

Table 1: Perspectives on tourism and seasonality that inform events research

- Hartman (1986) argued that the complexity of seasonality is created by the interplay of factors in both origin and destination areas where flows of tourism are conditioned by a wide range of social and cultural factors (e.g. imagery), economic (e.g. price) and physical factors (e.g. the availability of skiing in winter periods).
- Seasonality has both a distinct time-based element and a more neglected spatial component. Hartman (1986:12) defined tourism seasonality as “temporal variance in the phenomenon of tourism activities” and acknowledged the existence of a spatial element.
- Butler (2001: 5) argued that “little research has addressed the problem of whether seasonality varies in nature and intensity on a spatial basis either within or between destination areas”. The point is further reaffirmed by Baum and Lundtorp (2001) who argue that there is no concept or theory of tourism seasonality.
- Butler and Mao (2003) recognise that urban tourism is often the least seasonally affected form of tourism, seasonal spatial patterns within destinations are not readily charted and understood.
- Seasonal variations in destination characteristics can act as a magnet for visitors seeking ephemeral experiences linked with climate or nature, such as the fall market (Spencer and Holecek 2007), as well as economic-driven destination experiences such as Christmas markets (see Haid 2006).

Table 2: Off-peak seasonal theming of visitor attractions

<ul style="list-style-type: none"> • Harvest theme, with a focus on harvest produce, local foods and traditional celebrations of food production and rural life, such as Apple Day (September/October)
<ul style="list-style-type: none"> • Hallowe'en, with a clear focus on attracting families with children for low-scare experiences (e.g. dressing-up, pumpkin carving, story-telling), and for adults/adult groups with moderate scare experiences (e.g. ghost tours, theatrical events and other entertainment) (late October, and corresponding with the half-term school holiday in UK)
<ul style="list-style-type: none"> • Christmas preparations/celebrations, often with a primary focus on shopping where attractions offer a significant retail operation, and special menus in restaurants/cafes. This can help to keep a shop and café open even if the main attraction remains closed (December). Attractions may also offer limited opening for special Christmas events e.g. in England and Wales, National Trust houses traditionally close in winter for conservation purposes but now offer limited opening with a Christmas theme such as ‘dressing the house for Christmas’

Table 3: Spatial distribution according to former VisitScotland Tourist Board areas

	No. of cases	Percent	VAM no. of visitor attractions 2009/10	Percent of total population
Aberdeen City & Shire	4	2.4	56	7.1
Argyll & the Isles, Loch Lomond, Trossachs & Forth Valley	25	15.3	60	41.7
Ayrshire & Arran	2	1.2	19	10.5
Dumfries & Galloway	9	5.5	37	24.3
Dundee & Angus	13	7.9	28	46.4
Edinburgh & the Lothians	31	18.8	56	55.4
Greater Glasgow & the Clyde Valley	18	10.9	64	28.1
Highlands	23	13.9	59	40
Kingdom of Fife	8	4.8	25	32
Orkney	6	3.6	22	27.3
Outer Hebrides	2	1.2	8	25
Perthshire	12	7.3	23	52.2
Scottish Borders	9	5.5	26	34.6
Shetland	1	0.6	19	5.3
Missing	2	1.2		

Table 4: Spatial distribution according to new VisitScotland regions

	No. of cases	Percent	VAM	Percent
North	36	22.1	156	23.1
South	18	11	63	28.6
East	64	39.3	132	48.5
West	45	27.6	143	31.5

Table 5: Major event themes (more than 10 events recorded)

	N	Percentage of attractions
Pre-Christmas events	26	52%
Events for children aged 6-16	24	48%
Events for children aged 5 or under	22	44%
Lectures/talks	20	40%
Hallowe'en	18	36%
Guided tours	17	34%
Costume/living history	17	34%
Specialist workshops	14	28%
Exhibitions (non-art/photography)	13	26%
Local community	13	26%

Table 6: Major periods in the off-peak

Off-peak period	Percent of attractions holding events
Spring half-term (mid-late February)	15.2%
October half-term (late October)	18.8%
Pre-Christmas (1-24 th December)	20.6%
Christmas (25-29 th December)	7.9%
Hogmanay (30 th December - 2 nd January)	4.2%

Table 7: Most effective off-peak period for generating visitor numbers and generating revenue (% of attractions)

	Spring half-term	October half-term	Hallowe'en	Bonfire Night	Pre-Christmas	Christmas	Hogmanay
Generate visitor numbers	66.7	66.7	64.3	66.7	43.8	35.7	71.4
Generate revenue	33.3	33.3	35.7	33.3	56.3	64.3	28.6

Table 8: Assessing the effectiveness of events

Most successful: Why?	Least successful: Why?
Local market generated - these people may not visit in summer	Weather
Different groups attending (e.g. high spending enthusiasts with special interests)	High costs of putting on event with low numbers
'Cool' themes (appeal to kids)	Too far away from local markets
Added value (e.g. new theme in existing attraction, or exclusivity) and retail opportunities (especially pre-Christmas)	Too much competition
	Too many events the same
	Lack of publicity
	Too close to Christmas

Table 9: Cluster analysis of seasonality and events at visitor attractions

Seasonal Clusters		international %	Nov-Feb %	March-May %	Jun-Aug %	Sep-Oct %
1 (N=43)	Mean	26.47	18.12	27.58	35.26	19.14
	Std. Deviation	22.39	7.47	6.45	6.67	5.09
2 (N=39)	Mean	38.46	8.72	23.33	47.82	20.64
	Std. Deviation	17.86	3.39	3.50	4.56	5.52
3	Mean	47.55	2.02	20.85	61.23	15.66

(N=53)	Std. Deviation	17.46	2.45	5.07	6.79	3.26
Total (N=135)	Mean	38.21	9.08	23.71	49.08	18.21
	Std. Deviation	21.09	8.31	5.88	12.56	5.05

Table 10: Key variables in the cluster analysis

Variable	Category	Cluster Percentages			Total
		Year-Round	Some Off-Season market	Little Off-Season market	
Importance of Local Community to the attraction	Essential	56%	37%	0%	46%
	Important	31%	47%	40%	37%
	Not important	13%	16%	60%	17%
Number of Visitors in 2010	< 20,000	12%	39%	75%	44%
	20,000-49,999	19%	26%	15%	19%
	50,000-99,999	26%	13%	8%	15%
	100-500,000	33%	21%	2%	17%
	>500,000	12%	3%	0%	5%
Opening from October to March?	Yes	33	11	0	13
	Yes, except public holidays	54	68	51	57
	Yes, but some closure	9	13	2	8
	No	5	8	47	22
Special events off-peak season	Yes	76	37	8	38
	No	24	63	92	62
Charge for Admission	Yes	74	87	98	87
	No	21	13	2	11
	By donation	5	0	0	2

Table 11: Mean Seasonal Percentages by Region

Region	Number of Attractions	Nov-Feb%	March-May %	Jun-Aug %	Sep-Oct %	Total %
East	53	10.49	24.75	45.40	19.00	100
North	26	5.00	19.04	60.96	16.15	100
South	17	3.82	23.82	54.71	17.94	100
West	37	11.89	25.51	44.05	18.41	100
Rural	67	5.82	22.31	54.55	17.39	100
Urban	67	12.18	25.16	43.90	18.85	100

Table 12: Mean Seasonal Percentages by Ownership

Ownership	Number of Attractions	Nov-Feb%	March-May %	Jun-Aug %	Sep-Oct %	Total %
Independent manager/owner	17	10.12	25.59	45.88	19.12	100
Charitable organisation	28	13.18	24.46	41.71	21.14	100
Government body	70	4.57	22.43	56.64	16.21	100
Other	20	18.25	25.55	35.65	20.30	100