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Spiritual attitudes and visitor motivations at the Beltane Fire Festival, Edinburgh



Catherine M. Matheson a,1, Russell Rimmer b,c,1,2, Ross Tinsley b,*

- ^a Division of Business, Enterprise and Management, School of Arts, Social Sciences and Management, Queen Margaret University, Edinburgh, Oueen Margaret University Drive, Musselburgh, East Lothian EH21 6UU, UK
- ^b HTMi, Hotel and Tourism Management Institute Switzerland, 6174 Soerenberg, Kanton Luzern, Switzerland
- ^cSchool of Arts, Social Sciences and Management, Queen Margaret University, Edinburgh, Queen Margaret University Drive, Musselburgh, East Lothian EH21 6UU, UK

HIGHLIGHTS

- At Winter's end, BFF recreates a Celtic festival with spiritual aspects.
- Spiritual attitude and the motivations cultural adventure and escape are key factors.
- The research involved EFA and CFA to test constructs in distinct sub-samples.
- There are management implications for BFF professionalisation and growth.
- Implications extend to the host city's festival strategy and beyond.

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ABSTRACT

Outside the peak season for tourism to Edinburgh, Scotland, during the evening of April 30th, visitors attend a festival with ancient Celtic overtones. Frequently, the evening is cold and windy. Our objectives are to: identify motivations for attending the festival; trial questionnaire items on spiritual attitude; and assess whether spirituality might be relevant in assessing visitor intentions. The method of investigation involved exploration and confirmation phases to test structures in distinct subsamples. Further, a strict approach was applied to identify factors that had theoretical value. Spirituality attitude is found to be a factor, as well as the motivations of cultural adventure and escape. Given the nature of the event, the time of year and composition of the audience, encouraging repeat visitation and using this to develop and manage Edinburgh's tourism strategy has potential. Recommendations are made to management.

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1. Introduction

Commentators have suggested that festivals and events can enhance destination image, diversify the attractions base and promote and stimulate tourism development (Reid, 2006; Richards & Palmer, 2010; Richards & Wilson, 2004; Quinn, 2007, 2010). For example, Getz (2008: 403) argued that "events are an important motivator of tourism, and figure prominently in the development and marketing plans of most destinations". This is exemplified by Edinburgh in Scotland, which stages no fewer than twelve major festivals annually (Festivals Edinburgh, 2013), as well as smaller

scale festivals such as the Beltane Fire Festival (BFF). In the context of competition for tourist visits, it is crucial that destination managers comprehend how potential visitor needs might be met, how potential visitors form decisions on destinations to visit and whether, having decided to visit, they could be satisfied to the point of making return visits. This is of central interest to managers of tourism destinations, and an understanding of this area is important in making contributions to theory.

Despite the substantive literature on visitor motivation, which is reviewed in the next section, there are challenges pertaining to the complexity and heterogeneity of tourist needs and the interrelationship between motivation and other constructs, such as attitudes. With regard to the latter, there are calls to include visitor attitudes in studies of motivation and behaviour prediction. Gnoth (1997) suggested that attitudes are the foundation of understanding motivation and behaviour. Nonetheless, limited attention has been accorded to attitudes in many studies of tourist behaviour and

^{*} Corresponding author. Tel.: +41 (0) 41 488 11.

E-mail addresses: cmatheson@qmu.ac.uk (C.M. Matheson), russell.rimmer@htmi.ch, rrimmer@qmu.ac.uk (R. Rimmer), rtinsley@htmi.ch (R. Tinsley).

¹ Tel.: +44 (0) 131 474 0000.

² Tel.: +41 (0) 41 488 11.

decision making. From the perspective of tourism management, our starting point is that an examination of visitor attitudes, in tandem with motivations provides a rounded means to comprehend visitor intentions and consumption.

In the current research, visitor motivations and attitudes are investigated in the context of one Edinburgh festival, the BFF, which is held on the evening of April 30th. Frequently, this evening is cold with a chilling wind. The end of April is out of the most popular season for Scottish tourism, which spans the months July to September (VisitScotland, n.d.). In fact, the majority of the major Edinburgh festivals occur in August. Despite the timing of the event the BFF attracts tourists, as an earlier survey indicated that approximately a third of the audience are tourists (Gonzalez, 2007). BFF has spiritual roots emerging from its Celtic history and which relate to the passage of the seasons and the coming fecundity of Spring and Summer (Frazer, 1922). There are aspects of the BFF which relate to Bakhtin's (1984) conceptualisation of the carnivalesque. The current study focuses specifically on spiritual attitudes as earlier qualitative work on BFF (Matheson & Tinsley, 2010) indicated that spirituality could be important in consumer decision-making.

The research objectives are to: identify motivations for attending the festival; trial questionnaire items on spiritual attitude; and, assess whether spirituality might be relevant in assessing visitor intentions. To achieve these objectives, a quantitative methodology, involving principal components analysis (PCA) and confirmatory factor analysis (CFA), is employed. As part of the method, commonly used approaches to determining the numbers of components (such as, the eigenvalue-one criterion and scree plots) are rejected, as set out in Section 3, in favour of more parsimonious approaches to deciding how many components should be included. Adopting this course means a more rigorous examination is possible of whether spirituality has a role among the BFF audience. This is documented in Section 4. In Section 5, the fulfilment of the research objectives are discussed. This is done in three ways: first, by providing an insight into tourism motivation and attitudes to spirituality within the milieu of an unorthodox event; second, by extending an understanding of motivation to incorporate the under-researched area of spiritual attitudes in the tourism management literature; and third, by informing management as they develop the city's tourism calendar.

2. Motivation, attitude and spirituality

In this section, a review is provided of the literature on festival motivation, attitudes, spirituality, tourism and events.

2.1. Festival motivation

Backman, Backman, Uvsal, and Sunshine (1995: 17) suggested that "motivation refers to a state of need, a condition that serves as a driving force to display different kinds of behaviour toward certain types of activities, developing preferences, arriving at some expected satisfactory outcome". Crompton and McKay (1997) identified three motivational frameworks to explain tourist behaviour: push-pull factors, Iso-Ahola's escape-seeking dichotomy and Maslow's needs hierarchy. These tourism-motivation frameworks have been used in the development of motivation scales by festival and event researchers. Uysal, Gahan, and Martin (1993) adopted Mannel and Iso-Ahola's (1987) framework, which pivots on "escape" and "seeking" motivational forces. Crompton and McKay (1997) drew on the escape-seeking dichotomy and push-pull frameworks. In doing so, both Uysal et al. (1993) and Crompton and McKay (1997) broke new ground in motivation studies. This can be exemplified by the frequent adoption, often with adaptations, of their respective motivational scales by subsequent researchers (Chang, 2006; Formica & Uysal, 1996, 1998; Lee & Beeler, 2009; Yolal, Çetinel, & Uysal, 2009; Yolal, Woo, Çetinel, & Uysal, 2012). Other researchers drew on the festivals and events literature to develop scales (Chang & Yuan, 2011; Lee, 2000; McDowall, 2010; Schofield & Thompson, 2007; Thompson & Schofield, 2009).

Empirical studies have pursued overlapping "themes", ranging from demographics (Backman et al., 1995; Chang & Yuan, 2011; Mohr, Backman, Gahan, & Backman, 1993; Park, Reisinger, & Kang, 2008; Uysal et al., 1993; Van Zyl & Botha, 2004), satisfaction and behavioural intention (Lee & Beeler, 2009; Schofield & Thompson, 2007; Thompson & Schofield, 2009), cross-cultural comparisons (Dewar, Meyer, & Li, 2001; Schneider & Backman, 1996) to segmentation and visitor type (Formica & Uysal, 1996, 1998; Lee, 2000; Lee, Lee, & Wicks, 2004). Some of this empirical work indicates that there are common or similar motivations, for example, cultural exploration, family togetherness, socialisation, escape/equilibrium recovery, excitement and novelty (Chang, 2006; Crompton & McKay, 1997; Formica & Uysal, 1996; Li, Huang, & Cai, 2009; Mohr et al., 1993; Scott, 1996; Thompson & Schofield, 2009; Van Zyl & Botha, 2004; Yolal et al., 2012). Perhaps this might be expected, given the adaptation of existing scales associated with the factors listed above to a range of contexts. Such is the recurrence of certain motives that Lee et al. (2004) emphasised the pervasiveness of a core set of motivations, irrespective of themes or locations. In contrast, Nicholson and Pearce (2001: 460, italics added) concluded that "there is little evidence vet of generic event motivations". Moreover, "...the broad pattern is clearly that people go to different events for different reasons and that the majority are going to a particular event for what it offers rather than to an event in general" (Nicholson & Pearce, 2001: p. 458). In fact, changes in motivation according to event and visitor type are found in research involving more than one event. For example, Scott (1996) found that different levels of importance were attached to motivational factors at three festivals: at one, visitors rated nature appreciation as the most important motive, while those at the other two considered family togetherness to be the most significant factor. Similarly, Nicholson and Pearce's (2001) comparative study of four events highlighted variations in motivations, including the occurrence of event-specific factors, in addition to common factors.

Differences in motivation are also evident according to visitor type. In Scott's (1996) study, differences emerged between motivations of first-time and repeat visitors. Key differences have also been identified between domestic and international visitors. Lee (2000) identified significant differences between these visitor types to a Cultural Expo on five out of seven motivation factors. Furthermore, Lee (2000: 174) concluded that "for all motivation factors, the mean scores of foreign visitors were found to be consistently higher than those of domestic visitors". In Formica and Uysal's (1996) study on the Umbria jazz festival they classified visitors as being either out-of-the-region visitors or Umbria-region visitors. They found that Umbria-region visitors attached greater significance to socialisation, while out-of-the-region visitors placed more importance on entertainment (Formica & Uysal, 1996). Faulkner, Fredline, Larson, and Tomljenovic (1999) identified subtle differences in motivations for locals and non-locals. Schofield and Thompson (2007) suggested that cultural variables were more important to international visitors while sports and family aspects were more significant for domestic visitors. These comparative studies convey the heterogeneity of visitors and, taken together with variations in motivating factors by event type, provide a case for investigating what influenced attendance among the BFF's mixed audience of tourists and local visitors.

There are preliminary considerations in undertaking such an investigation. First, there may be event-specific motivations, perhaps arising as additional factors or in place of motivations known to occur frequently. Examples are to be found in studies that identified the factors of sports attractions, local special events (Thompson & Schofield, 2009), taste and social status (Park et al., 2008), music (Bowen & Daniels, 2005), self-esteem (Van Zyl & Botha, 2004), food and beverage (Van Zyl & Botha, 2004), event attractions (Lee, 2000; Lee et al., 2004) and the appreciation of nature (Scott, 1996). In addition, push dimensions, for example, change (Park et al., 2008) and relaxation (Backman et al.1995), have been observed.

Second, there is a degree of variation in the structure of motivations (Thompson & Schofield, 2009). As Nicholson and Pearce (2001: 456) noted in their comparative study, "it should be recalled that similarly labelled factors are not necessarily identical in terms of their groupings, and that the individual motivations do not load uniformly on the factors across the four events". Indeed, this variation is seen in other studies. For example, a commonly used item "change of pace from everyday life" has loaded onto different factors, such as, socialisation and entertainment (Formica & Uysal, 1998) and escape (Lee, 2000; Lee et al., 2004), illustrating Nicholson and Pearce's (2001) assertion that factors are not uniformly constructed.

There is a third preliminary consideration regarding not only common motives but also different theoretical perspectives. Perhaps the doubts of researchers such as Li and Petrick (2006) and Nicholson and Pearce (2001) on the existence of generic motivations arise because additional constructs and unidentified mechanisms have relevance in the contexts of at least some festivals. If so, investigations are required that draw on other theories in addition to tourist motivation frameworks. Potentially, sociology, psychology, marketing and sports marketing offer such an avenue (Li & Petrick, 2006). Gyimóthy (2009) advocates the inclusion of cultural consumption theory and the sociology of leisure as means to develop the area. To date, responses to developing the field have tended to centre on incorporating behavioural constructs, such as, satisfaction and behavioural intention (Lee & Beeler, 2009; Schofield & Thompson, 2007; Thompson & Schofield, 2009). An area which both tourism and festivals scholars have promoted is attitudes (Gnoth, 1997; Hsu, Cai, & Li, 2010; Lee et al., 2004; Thompson & Schofield, 2009; Zhou, Zhang, & Edelheim, 2013). In the following sub-sections, first attitudes and then spiritual attitudes are considered.

2.2. Attitude

For Ajzen (2005) attitude involves cognitive, affective and conative aspects. Cognition refers to a knowledge element involving belief or disbelief about an "object", which can be people, products or services, but can also be a cause, issue or concept, such as striving to understand the ultimate truth of human existence. An emotional or affective response to an object can be positive or negative, such as feeling elated or disappointed, happy or sad. Subsequently, the pre-disposition to or likelihood of taking action in relation to an object is the conative aspect of an attitude (Ajzen, 2005). In a review of research on attitude, Ajzen and Fishbein (2000) conclude that most investigators assess attitudes via the evaluative element along dimensions determined by, for example, "approval or disapproval of a policy, liking or disliking of a person or group of people, and judgments of any concept" (Ajzen & Fishbein, 2000: 3). However, according to Ajzen and Fishbein (2000), in contemporary research affective states are measured in physiological terms or by using lists of mood adjectives or inventories. That is, they perceive a distinction in measurement between assessing attitude and affective states. In terms of the current research, as explained below, we had little time in which to administer an instrument to the BFF audience and so pursued the evaluation of spiritual attitudes only.

Attitudes are learned predispositions and are thought to be relatively consistent with the behaviour they reflect (Schiffman & Kanuk, 2010). However, while consistency is a common characteristic of attitudes, this does not imply permanence necessarily. Attitudes can change over time and, further, events or situational influences may affect the relationship between attitude and behaviour (Schiffman & Kanuk, 2010). There is research in the tourism area that explores behavioural intention, such as the studies of Lam and Hsu (2004, 2006) and Sparks (2007) on the behavioural intentions of wine tourists and potential travellers. In addition, there are tourism studies examining the attitudes of business owners (Frey & George, 2010), residents (Lepp, 2007; Vargas-Sánchez, Porras-Bueno, & Plaza-Mejía, 2011) and tourists (Chang, Kiela, & Mak, 2010). Despite these advances, there are gaps in the tourism and events fields, particularly in the joint study of motivations and attitudes.

Gnoth (1997: 286) advocated a holistic approach to tourist motivation and argued that "attitudes have to be...captured and categorised within a completed and multidimensional system that reflects their structural diversity regarding expectations and experiences of attitude objects and... presented within a theory permitting a straightforward application for tourism planning and management of resources and experiences". As such this would allow festival organisers to tackle attitude dimensions together with the motivations that influence attendance and experience. There is evidence of a relationship between motivation and attitudes (Luo & Deng. 2008) and that attitude, motivation and image can significantly predict future behaviour and tourist satisfaction (Lee, 2009). Hsu et al. (2010) found that motivation had a moderating influence on the relationship between attitude and expectation and, further, that motivation has an effect on attitude to visiting a destination. However, for visitors to calligraphic sites in China, Zhou et al. (2013) found no evidence that motivation and attitude were related, although this may be associated with fading awareness of traditional cultural pursuits such as calligraphy. It would seem then that in the tourism literature there is uncertainty about whether attitudes matter and what form this influence might take, even though the theory of consumer behaviour emphasises attitudes.

Existing work is primarily located within the tourism field and limited attention has been accorded to festivals with mixed audiences of tourists and locals. This being the case there is considerable value in acquiring an insight into festival-visitor attitudes. For as Gursoy, Spangenberg, and Rutherford (2006: 280) argued, visitors' perceptions, "attitudes towards festivals and their corresponding attendance, formation of future attendance intentions, and likelihood of suggesting that others attend are logically linked". In the current study, motivation is investigated in concert with spiritual attitudes, which are considered next. This study of BFF is undertaken in its Western cultural setting, where it is recognised personalised spirituality appears to be rising as expressions of spirituality through formalised religious observance decline (Hill et al., 2000). This will mean that attitudes investigated at BFF reflect underlying societal values, culturally bound notions (de Mooij, 2010) and the changing role of spirituality.

2.3. Spirituality and religion, tourism and events

To understand spiritual attitude it is important to define the concept of spirituality. To do this we follow Hill et al. (2000: 52) who argued that "both spirituality and religion are complex phenomena, multi-dimensional in nature, and any single definition is likely to reflect a limited perspective or interest". They point to increasing secularisation in Western societies and a major cultural

shift in the Western landscape, with the importance of religion decreasing, while expressions of spirituality in a more private and personal context are increasing. In line with this perspective, Elkins, Hedstrom, Hughes, Leaf, and Saunders (1988) cautioned that defining spirituality is a difficult task due to its complex, multidimensional and constructed nature. Ashley (2007) concurred, suggesting a broad approach be taken to spirituality thus allowing for individual interpretation or self-definition and which permits defining characteristics to be observed such as search for meaning, connection and inter-relationship, self-transcendence, and compassion. Kale (2004: 93) pointed towards the increasingly individualised nature of spirituality among consumers, "the engagement to explore — and deeply and meaningfully connect one's inner self — to the known world and ... Beyond".

However, Hill et al. (2000) caution that consideration of the sacred is central to an understanding of spirituality. Drawing on the works of Principe (1983), Titmuss (2000) and Kumar (2000), Ashley (2007) reported the word religion denoted being bounded by a certain belief system, whereas we adopt Hill et al.'s (2000: 66) definition of spirituality as "the feelings, thoughts, experiences, and behaviours that arise from the search for a sacred", where "the term 'search' refers to attempts to identify, articulate, maintain or transform" and "sacred' refers to a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual".

This definition of spirituality by Hill et al. (2000) incorporates the aspects of cognition (in the form of thoughts or beliefs), affects (in the form of feelings) and conation (behaviours that arise) identified by Ajzen (2005) in defining attitude. Therefore, in this paper the term "spiritual attitude" refers to this interpretation of Hill et al.'s (2000) definition of spirituality in the form of the three-aspect definition of attitude. However, in terms of implementation, we concentrate on evaluation, which reflects contemporary research practice (Ajzen & Fishbein, 2000). For instance, in terms of a statement in the instrument (Appendix 1), if an individual thinks or believes strongly that all life is interconnected then this would be a judgement or evaluation of a spiritual attribute as envisaged by Ajzen and Fishbein (2000).

Spirituality has been investigated in a variety of contexts including the New Age movement, pilgrimage tourism, and festivals and events. Zinnbauer, Pargament, and Scott (1999) found those with an interest in the New Age identified with the term spirituality but not religiousness. Timothy and Conover (2006) pointed to the New Age movement's growth as a reflection of dissatisfaction with more traditional religion and with the pace of contemporary Western society. The movement is complex with an assortment of practices, borrowing and interpreting from a wide range of ancient beliefs, with particular reverence for nature, which can also be seen in the ancient reverence of the Beltane ritual for the fecundity and healing powers of nature. Additionally, the New Age movement lacks a central authority, emphasising instead the individual's own spiritual quest (Timothy & Conover, 2006). Willson (2011) found travel, perhaps to a spiritual centre, acted as an instrument of healing from the excesses of secular and materialistic environments, so assisting in quests for inner peace. While the emphasis is on inner journeys of discovery and transformation, these journeys are often physically manifested as pilgrimage to sites relating to ancient cultures, nature and healing (Willson, 2011).

Spirituality is considered widely in pilgrimage tourism (Cohen, 1998; Digance, 2003; Fleischer, 2000; Murray & Graham, 1997; Nolan & Nolan, 1992; Olsen & Timothy, 2006; Shuo, Ryan, & Liu, 2009; Vukonić, 1992). Pilgrimage is recognised as the earliest form of tourism and there is a conceptualisation of contemporary tourism as secular pilgrimage (Graburn, 1989; Rinschede, 1992). Drawing on Van Gennep (1960), Graburn (2001) considered tourism as a metaphorically sacred and liminal experience,

particularly rites of passage style tourist experiences. However, he acknowledged that most tourists are, in general, not changed by their experience and seek a lifestyle not too dissimilar to home. Perhaps visitors to BFF are changed by their experiences — or alternatively seek or embrace lifestyles that other tourists do not. If so, they may be more open to spiritual centres and spirituality, as propounded by Willson (2011), Manzo (2003) and Cohen (1979).

Collins-Kreiner (2010: 446) argued that "differences between tourism and old-fashioned pilgrimage are narrowing", citing New Age travel as "a growing market for pilgrimage, personal growth and non-traditional spiritual practices" (Collins-Kreiner, 2010: 445). For Sharpley and Jepson (2011: 55), working in the contexts of the rustic and tourism, spirituality is "a connection between the self and the 'this world', implying that a spiritual or emotional relationship exists or is sought between people, 'this world' and specific places...within it". Given the bucolic origins of the BFF and the concentration of authors highlighting interconnectedness, self-transcendence and growing spiritually, we used an instrument that draws on spiritual maturity to obtain items for the current investigation (Astin, Astin, & Lindholm, 2011).

In terms of festivals and events, those with spiritual aspects that have been analysed (Gallarza, Arteaga, Floristán, & Gil, 2009; Misetic & Sabotic, 2006) tended to concentrate on approaches in the existing motivation literature. For example, McDowall's (2010) work on attendance at a Hindu-Buddhist festival in Thailand did not consider the role of spirituality or religion. Studies have highlighted the significance of spirituality, as in Partridge's (2006) and St John's (2011) studies of alternative music festivals and Sherry and Kozinet's (2007) study of the carnivalesque Burning Man festival. Nevertheless, Sharpley and Jepson's (2011: p. 53) remark that "few attempts have been made to verify the claim that individuals seek or experience spiritual fulfilment through tourism" can also be extended to quantitative studies in festivals and events.

Given the paucity of relevant research involving spirituality, tourism and festivals, we turned to another source, the project Spirituality in Higher Education (SHE) at University of California. For more than a decade, SHE researchers have evaluated undergraduate and staff attitudes to religion and spirituality at colleges and universities across the USA. As part of their endeavours, they reviewed definitions and approaches in a range of disciplines including business, education, psychology and measurement theory, health and sociology. Two researchers at SHE, Lindholm and Astin (2008: 64), wrote that "while the semantic interpretation of the word spirituality is clear, its meaning in operational terms is more ambiguous". In Section 3.2 on instrument design, we concentrate on their notion of "spiritual maturity" (Bryant, 2007: 839) or "ecumenical worldview" (Astin et al., 2011: 58), in which life is interconnected, everybody is spiritual, love underpins the main religions, and personal spiritual growth does not depend on being religious or actively involved in a religion. In operational terms, we adopt the contemporary approach of evaluating attitudes to statements on these aspects of spirituality.

3. Research setting and method

3.1. Beltane Fire Festival

The BFF dates to pre-Christian Irish and Scottish festivals. Similar festivals were celebrated in other European nations (Frazer, 1922). The name "Beltane" is thought to originate from a Gaelic-Celtic word meaning "bright/sacred fire" (BFS, 2007). Manson (2006) suggested that three types of rituals are celebrated by neo-pagans: first, rites of passage which can comprise ceremonies marking, for example, the move from adolescence to adulthood; second, initiation rites which could engender a spiritual awakening in the individual and provide a



Fig. 1. Beltane Fire Festival performance.

connection to the group; and, third, seasonal festivals which are linked to changes in nature, of which there are seven (Samhain, Yule, Imbolc, Ostara, Midsummer, Lughnasadh and Mabon) in addition to Beltane. Of these, the Samhain and Beltane festivals are most important to neo-pagans (Manson, 2006). In the case of Beltane, its origins lie in the celebration of spring and the fertility of land, livestock and people (BFS, 2007; Frazer, 1922). A common feature of Beltane festivals was the 'Need-Fire', which was lit by a spiritual figurehead (BFS, 2007). From this source, communal bonfires were lit and individual home fires were re-lit (BFS, 2007). They were perceived to have a symbolic fertilising influence (Frazer, 1922). It was known that, "plenty of beer and whisky" might be brought along (Frazer, 1998: 719) and consumed (Livingstone, 2000). It appears such festivities, namely fire festivals and Need Fires, were discouraged and almost all were discontinued in the 19th century: "The history of the custom can be traced from the early Middle Ages, when it was denounced by the Church as a heathen superstition, down to the first half of the nineteenth century, when it was still occasionally practised in various parts of Germany, England, Scotland, and Ireland" (Frazer, 1922: 638). In Scotland, of those that remained into the nineteenth century, only the Edinburgh Beltane survived into the early twentieth century (BFS, 2011).

Historically, the festival date was probably determined from the astronomical calendar to fall between the Spring equinox and the Summer solstice (Dames, 1992). The festival now occurs annually on the 30th April (BFS, 2012) on Calton Hill, Edinburgh. A community cultural group resurrected the festival in the late 1980s, providing a contemporary reinterpretation. Initially, the event was free but festival growth and increasing pressure from external regulatory bodies led to a paid ticketing model. In effect, the audience numbers grew from a few hundred to thousands. Approximately 300 performers take part and, in 2011, approximately 8500 people attended (see Fig. 1). It takes place outdoors and there are uninhibited aspects of the performance, which includes a procession, fire rituals, drumming and performance groups. The BFS (Beltane Fire Society), a charitable organisation consisting almost entirely of volunteers, oversees the event, which it promotes primarily through press coverage, flyers and the web. The festival takes place in the low season in Edinburgh's events calendar. Nevertheless, it attracts tourists (Gonzalez, 2007).

Central to the BFF are the May Queen and the Green Man, with the May Queen being the personification of "purity, strength and the potential for growth" and "the energy of the earth"; whereas the Green Man is in "a dormant and inactive state" until his re-birth as a young man, representing vibrancy and the coming of a new summer (BFS, 2007). The procession of the May Queen and her White Guard of warriors acts as a vehicle to tell the story of the BFF ritual (Fig. 2), which includes the re-birth of the Green Man.

A variety of other characters are involved. For example, the Blues are the elders of the festival and have both practical and spiritual responsibilities. They ensure order on April 30th; and during preparations they give practical guidance and assistance to performers and organisers (BFS, 2007). Another group, the Reds, are "spirits of chaos and disorder" and embody the carnivalesque as they represent "the world Turn'd Upside Down — the one night of the year where fools become kings...and a personification of the need in all of us to let loose and go wild just once in our lives" (BFS, 2007). The Reds seek to "disrupt the procession with their lewd and lascivious behaviour" (BFS, 2012). Musical accompaniment is provided by the Red Beastie Drummers.

3.2. Instrument design and data collection

Instrument design was constrained by the nature of the event and the available timescale for data collection. BFF is a single evening event characterised by a fluid performance structure executed after dark with little lighting. Consequently, there was a limited timeframe for data collection. Furthermore, it was difficult to conduct a pilot with an audience at this "short-duration event" (Raybould, Digance, & McCullough, 1999: 205), although an initial round of spirituality statements was tested with members of BFS, many of whom first encountered the BFF as audience members in earlier years.



Fig. 2. The May Queen.

A questionnaire was constructed drawing on previous studies (Appendix 1). Sixteen relevant motivation statements were included. These were drawn from the festival literature such as, Crompton and McKay (1997) and Lee et al. (2004) and adapted for the context. For example, the statement, "When at Beltane, I like to 'let my hair down'" was adapted from Crompton and McKay's (1997) statement "When at Fiesta, I like to 'let my hair down'". For both audience and performers, the festival can provide a temporary period of release from social mores. Spirituality statements were drawn from the SHE project in the USA (Astin et al., 2011; Astin & Keen, 2006; Bryant & Astin, 2008).

The SHE team designed questions that respondents could answer meaningfully regardless of their belief systems, in which references to "God", "Supreme Being" and such like terms were minimised (allowing respondents to conceptualise what the concepts meant for them) and in which "specific denominational or sectarian terminology would be avoided (for example, 'sacred texts' was used instead of 'Bible' or 'Koran')" (Astin et al., 2011: 41). Given this care in wording statements and, in addition, accommodating the possibility that searching for the sacred might occur separately from religious belief and practice, it seemed the work of the SHE team afforded a means of measuring spiritual attitude among the Beltane audience. This was decided after considering the results of a small survey by Gonzalez (2007), in which it was found the BFF audience was young and well-educated, providing at least demographic parallels in terms of age, socio-economic classifications and occupations with those of the students and staff of colleges and universities in the US. On this basis and given the care at SHE in framing statements, it seemed that an initial attempt to use items from the SHE at BFF was warranted, notwithstanding the possibility of differences in the spiritual landscapes of the US and the BFF audience.

SHE researchers identified seven components measuring spirituality and related qualities, for which they established reliability and validity (Astin et al., 2011; Lindholm & Astin, 2008). An instrument for BFF would be too long, given the available time for surveying respondents, if all seven were included. However, an important component was noted as "the process of continually transcending one's current locus of centricity" (Astin et al., 2011: 58; Love & Talbot, 2005: 365). That is, "recognising concerns beyond oneself" (Bryant, 2007: 835) which is "in essence a manifestation of spiritual maturity" (Bryant, 2007: 836) or "ecumenical worldview" (Astin et al., 2011: 54). For the current investigation, four statements devised by SHE researchers (Spirituality in Higher Education, 2004) were used in the principal-components and confirmatory factor analyses, namely:

All life is interconnected Love is at the heart of all great religions We are all spiritual beings Most people can grow spiritually without being religious

The BFF instrument contains other items derived from the SHE project, such as *Nonreligious people can be just as spiritual as religious people* and *Pain and suffering are essential to becoming a better person.* As can be seen in Table 1b of Section 4, the patterns of responses to them at BFF were polarised compared with responses to other SHE items and so they were not used in constructing a spirituality component. Also included in the instrument were statements about being on a quest, searching for meaning and purpose, self-ratings on spirituality along with "qualities that highly spiritual people would be expected to exemplify" (Astin et al., 2011: 52). These also were not included in the current investigation because, on the evidence from Astin et al. (2011), some of them may be assigned to a component with the four above or they may occur in another spirituality component. Not including those means we can

test the existence of a role for spirituality using close to a minimum number of indicators. Our intention is to use the omitted spirituality items in other research on the BFF audience and its segmentation.

Twenty eight trained surveyors undertook onsite administration of the survey on 30 April 2011. Surveyors approached every seventh to tenth person, endeavouring to alternate between genders and to approach only one person per group. Surveyors were distributed around the performance area and stationed at the two main entry points to the festival site. The time available to administer the survey — from the gates being opened prior to festival commencement until darkness fell — was limited. Even so, 378 questionnaires were collected, of which 375 could be used.

3.3. Analytical approach

The surveys were coded and each given a numeric identifier. In 33 surveys, small numbers of responses to motivation and spirituality statements were missing (see Table 1b). Values were multiply imputed for missing fields to maintain sample size at 375. The Amelia package was used, in line with its designers' recommendations, to produce five imputed samples (Blackwell, Honaker, & King, 2012; King, Honaker, Joseph, & Scheve, 2001). With Amelia, small samples, high correlations, discrete variables, the presence of covariates, and the possible violations of assumptions on homoskedasticity and measurement error are treated rigorously (Blackwell et al., 2012; King et al., 2001). The distributional assumption is that variables are approximately multivariate normal. To attain this, responses to motivational and spirituality statements were subjected to natural log transformations and these were standardised. Skewness and kurtosis are not excessive in the transformed data, being bounded above by the value 1.4 for all the items across the imputed datasets. It is recommended that skewness should not exceed 2.0 and kurtosis should not exceed 7.0 (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Therefore the transformed items can be regarded as approximately normal for multiple imputation and for subsequent applications of CFA.

Given the nature of the research objectives, in particular whether there is a role for spirituality in the assessment of audience behaviour, exploratory analysis followed by a round of confirmation was undertaken. To carry this out, each imputed sample was divided randomly into two sub-samples: an "exploratory sub-sample" was allocated 176 instruments; and a "generalisable sub-sample" was allocated 199. Overall, the approach consists of three main stages, illustrated in Fig. 3.

- 1. Allocate each survey case to one of the sub-samples.
- Apply PCA to extract components: first using only motivation items, determine the number of components to extract, then extract them; and second, using both the motivation and spirituality items determine number and extract components.
- 3. Assess whether the structures found in Stage 2 generalise in the corresponding generalisable sub-sample by: (i) applying PCA again; and (ii) undertaking CFA.

The reason for allocating numbers of respondents as we have to exploration and generalisation relates to the literature on sample size. Using an exploratory sub-sample and all 16 motivational items, there would be 11 responses per item. This exceeds the common requirement of 10, while being more than twice the oftenmentioned minimum of five (Fabrigar et al., 1999). If subsequently all 16 motivational statements as well as all four spirituality items were included, the number of survey responses per item would be 8.8, somewhat below the benchmark of 10, but still above the minimum of five. As will be seen below, all 20 items were not

Table 1a) Percentage distribution of characteristics. b) Summary responses to motivation and spirituality statements.

a)									
Female		53.3			How often have you atten	ded before?			
Ethnicity					Never	-		80.4	
White		95.1			Once	6.9			
Other		4.9			Either two or three times	6.6			
Activity					More than three times	6.1			
Employed		55.2			How much do you know a	bout Beltane?			
Unemployed		4.1			Understand the significan			23.3	
Retired or homemaker		4.1			Know a little	43.2			
International student		12.9			Heard informally			33.4	
Local student		23.6							
Age	25.0				Faith None			37.8	
Younger than 30	59.3				Christian			28.6	
30–39	20.8				Agnostic, atheist, humani	st		16.0	
40 and over		19.9			Faith not classified elsew			10.5	
Place of residence		13,3			Wiccan or pagan	iicic		7.0	
Edinburgh		51.9			With whom did you attend	12		7.0	
					•	41		9.5	
Rest of Scotland		18.6			Alone				
Rest of UK		12.5			Family group			10.3	
Europe		11.2			Friends			54.2 21.7	
Other	5.9				Partner				
Birthplace					Colleagues, other	4.3			
Scotland		27.0			Non-residents' reason for l				
Europe		30.5			Attend Beltane	38.0			
Rest of UK & Ireland		22.6			Visit family/friends	17.0 31.6			
USA or Canada		11.9			Leisure				
Other		8.1			Other			13.5	
b)	Percentages					Mean	Std dev	Number missi	
	Strongly agree	Agree	Neither	Disagree	Strongly disagree				
New experience	55.3	36.2	4.8	2.1	1.6	1.6	0.81	1	
Know about	34.6	44.1	14.1	4.8	2.4	2.0	0.95	0	
Enjoy performance	65.1	29.6	3.5	0.8	1.1	1.4	0.70	0	
Increase cultural	38.9	37.6	14.9	7.2	1.3	1.9	0.97	0	
Let hair down	28.5	31.7	22.1	13.3	4.3	2.3	1.2	0	
Seek adventure	28.7	32.2	24.2	13.6	1.3	2.3	1.1	0	
Unpredictable things	27.9	32.2	23.6	12.3	4.0	2.3	1.1	2	
Wild behaviour	24.6	24.3	22.5	21.1	7.5	2.6	1.3	1	
Relieve boredom	13.9	20.3	16.3	33.7	15.8	3.2	1.3	1	
Escape routine	18.1	28.1	17.6	25.1	11.1	2.8	1.3	5	
Change of pace	16.3	34.1	17.9	24.8	6.9	2.7	1.2	0	
Relieve stress	12.0	24.3	19.5	31.6	12.6	3.1	1.2	1	
Be with friends	42.1	35.8	5.2	11.5	5.5	2.0	1.2	9	
Attend with group	40.2	34.3	13.4	9.7	2.4	2.0	1.1	2	
Meet new people	38.3	44.8	8.8	7.0	1.7	1.9	0.91	2	
People enjoying	53.9	38.6	5.6	1.3	0.5	1.6	0.71	2	
Interconnected	37.3	38.9	16.1	5.6	2.1	2.0	0.71	2	
Grow spiritually	47.4	38.8	8.1	4.9	0.8	1.7	0.87	4	
All spiritual beings	27.9	29.2	23.2	13.7	5.9	2.4	1.2	2	
Love is at the heart	21.7	26.5	21.7	18.8	11.3	2.7	1.3	2	
Nonreligious people	73.1	20.4	5.4	0.27	0.81	1.4	0.67	3	
Pain and suffering	11.6	25.5	22.3	22.6	18.0	3.1	1.3	3	

retained in PCAs, raising the number of responses per item well above the benchmark of 10. However, researchers have criticised guidelines on sample size because acceptable sample size is affected by component overdetermination and the communalities of items (Fabrigar et al., 1999). In the analysis that follows, overdetermination and communalities are monitored carefully. For CFA, the question arises of whether the generalisable sub-sample size of 199 is appropriate. Preliminary calculations for distinguishing between RMSEA (root mean square error of approximation) of zero and the conventional "stringent" (Hooper, Coughlan, & Mullen, 2008: 54) upper bound of 0.07 result in a sample size of 132, less than the allocated 199 (Preacher & Coffman, 2006).

Depending on how many components are extracted, PCA may generate structures in which "minor components appear to be major" (Fabrigar et al., 1999: 278). In particular, the inclusion of spirituality — if it is only of minor concern — is to be avoided. Commonly, number of components to extract is decided using

either scree plots or the eigenvalue-one criterion. The first can be ambiguous and the second is known to overestimate the number to extract (Fabrigar et al., 1999). Alternatively, researchers could unilaterally decide how many components to extract. Because such a decision might introduce a measure of researcher bias, there would again be scope for the unjustified extraction of a spirituality component. We rely instead on three approaches that are parsimonious in deciding the number of components. These are Horn's parallel analysis (PA) (Dinno, 2011; Hayton, Allen, & Scarpello, 2004), which is frequently held to be the most accurate method (Basto & Pereira, 2012; Fabrigar et al., 1999; Schmitt, 2011); Velicer's MAP (minimum average partial correlation) approach (Basto & Pereira, 2012); and the VSS approach (very simple structure, Revelle & Rocklin, 1979).

Beyond taking decisions on numbers of components, validity should be considered. Researchers across a range of disciplines apply PCA for this purpose, for example Hsu et al. (2010), Mohamad,

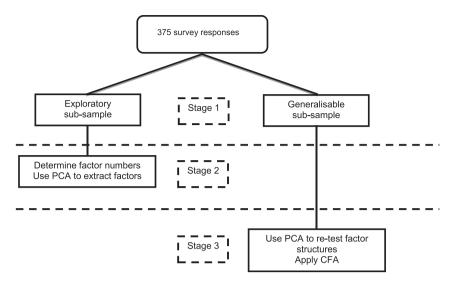


Fig. 3. The analytical approach.

Lo, Songan, and Yeo (2012) and Perera and Vlosky (2013) in tourism; Evans et al., (2002) in psychotherapy; Gau (2011) in criminology; Astin et al., (2011) and Jordan (2001) in ethics, education and spirituality; Damitz, Manzey, Kleinman, and Severin (2003) and Nako and Barnard (2012) in management assessment, leadership and HRM; and Reimers, Jekauc, Mess, Mewes, and Woll (2012) in public health. Typically, items are entered into a PCA with no information provided on the agglomerations of items into constructs. Taking candidate constructs from PCAs, CFA provides a "strong" approach to validity (Braun, Woodley, Richardson, & Leidner, 2012: 4) compared with relying solely on PCAs. With CFA it is possible to test hypotheses regarding factor structure (Hsu et al., 2010; Kolar & Zabkar, 2010; Yu, Chancellor, & Cole, 2011) and assess validity. Following a number of researchers in the area we investigate convergent validity which is "the extent to which responses from alternative measurements of the same construct share variance", and discriminant validity which "refers to the degree to which two measures designed to measure similar, but conceptually different constructs are related" (Slavec & Drnovšek, 2012: 62).

On the surface, it appears that the PCAs in this investigation depart from accepted practice by involving both motivations and attitudes. However, as argued by Kline (1994), an important feature is the inclusion of items that load onto relevant constructs (in our case, motivations) and that are likely to differ from the target of study (spiritual attitude).³ To decide the composition of components, items were deleted if:

- their communalities were less than 0.5:
- loadings onto components were less than 0.5;
- there were cross-loadings greater than 0.4; and
- differences were detected in loadings for the same item of less than 0.2 (Fabrigar et al., 1999; Field, 2009; Harrington, 2008).

Thereafter, varimax rotation was applied. Choosing PCA with varimax rotation is consistent with many endeavours in the festivals and tourism literature (Bowen & Daniels, 2005; Chang, 2006; Dewar et al., 2001; Hsu et al., 2010; McDowall, 2010; Mohamad et al., 2012; Perera & Vlosky, 2013; Scott, 1996; Van Zyl & Botha, 2004). It might be objected that rather than apply PCA, EFA should be used. However, the intention was to remain in contact with the tourism literature that quantitatively explores dimension reduction with PCA.

In Stage 3 of Fig. 3, the generalisable sub-samples are used for two analytical steps. First, PCA is performed using the structures determined in Stage 2. Second, CFA is carried out. The background to this is that PCA is a dimension-reduction approach that attempts to capture a substantial and meaningful amount of the variance among items, without using all possible components. CFA provides an opportunity to test the PCA structure and further to assess factor and error covariation and seek cross-loadings. In the CFA, it was decided that if a cross-loading or covariance were tested for inclusion, then it would be retained only if it were significantly different to zero at five per cent or better.

4. Results

In this section, results are presented for the PCAs and CFAs of Fig. 3. Before this, descriptive statistics are presented in Table 1a and 1b for the 375 questionnaires included in the analysis.

4.1. Descriptive statistics

Table 1a contains background information on the audience. Note that over 95% of the respondents were white and more than half were younger than 30. Of the 375 respondents, 51.9% were Edinburgh residents and 18.6% had travelled from elsewhere in Scotland. This means just fewer than 30% of those sampled travelled from outside Scotland. For this group, similar proportions travelled from elsewhere in the UK (12.5% in Table 1) and Europe (11.2%). As shown in Table 1a, the remainder (5.9%) were citizens of more distant places, such as the US, Canada and Australia.

Among the Scottish residents were 37 international students, most of whom had travelled from the USA or Canada to study in Scotland. They raised the proportion at BFF who were travellers

³ Kline (1994: 103) further demonstrated why different scales should be included in the analysis of a target construct, using the example of a published study "where the inclusion of other scales radically transformed the interpretation of results" to the extent of demonstrating an instrument's lack of validity. He provides other examples of studies where the validity of a target construct is verified when additional, relevant, but different constructs are included. The literature cited in the current paper provides other examples from across a range of disciplines.

Table 2Number of principal components to extract.

	PA	MAP	VSS	Eigenvalues exceeding one
Exploratory sub-sets (176 cases)				
Motivations only	2	2	2	4
Motivations and spirituality	3	3	3	5
Un-imputed data (165 cases)				
Motivations only	2	2	2	4
Motivations and spirituality	3	3	3	5

(WTO, n.d.) and not "normally" resident in Scotland to 40% approximately (in fact 39.5%). Among non-Scottish residents, most said they came for leisure, to attend BFF and visit family and friends, with more being in Scotland for leisure than the other two reasons. In Table 1a, it can be seen also that only 27.0% of people at Beltane were born in Scotland. Thus while about 70% of respondents *resided* in Scotland, many fewer than half of them were *born* there. Overall, 80.4% of all respondents are shown in Table 1a as not attending BFF previously. Also in the table, it can be seen that the majority of respondents came with friends. Somewhat more than a fifth attended with partners and about half of this proportion attended as part of a family group.

Those surveyed were asked to nominate their religious faith. More than a third (37.8%) replied 'none', with a further 16% responding agnostic, atheist or humanist (this last category including only a few respondents). That is, more than half of respondents rejected religious practice. Seven per cent said they were wiccan or pagan, affiliations having a special association with Beltane and its origins. Also, in total 76.6% of respondents only 'knew a little' (43.2%) or had 'heard informally' (33.4%) about Beltane. That is, less than a quarter, but more than three times the proportion of wiccans and pagans, claimed to understand the significance of what happens at BFF.

Table 3 Average values over exploratory sub-samples of size 176.

Two Three 0.0454 0.0154 Determinant 531.4*** 713.1*** Bartlett KMO sampling adequacy 0.803 0.757 Residuals >0.05 9 (42.9%) 15.4 (34.2%) Total explained variance 70.4 69.2 Sampling adequacy Communality C1 C2C3 Cronbach a 0.761 0.839 0.900 0 171 0.877 Escape from routine life A change of pace 0.788 0.755 0.847 0.194 0.707 0.823 0.175 Relieve daily stress 0.875 Relieve boredom 0.870 0.634 0.795 0.0554 0.741 Increase cultural knowledge 0.702 0.0738 0.835 0.725 Enjoy new experiences 0.737 0.669 0.113 0.810 To seek adventure 0.830 0.619 0.242 0.749 Variance explained 41.6 28.8 Average communality 0.734 0.663 Escape from routine life 0.762 0.839 0.902 0.0390 0.153 0.877 0.851 A change of pace 0.769 0.757 0.0502 0.176 Relieve daily stress 0.841 0.707 0.822 0.0409 0.167 0.869 0.0589 Relieve boredom 0.636 0.793 -0.0565 We are all spiritual beings 0.676 0.680 0.0405 0.795 0.214 0.744 All life is interconnected 0.619 0.761 0.0420 0.864 0.113 Grow spiritually 0.652 0.643 -0.0303 0.801 0.0154 0.741 Increase cultural knowledge 0.719 0.711 0.0827 0.123 0.830 0.802 0.749 0.661 0.122 0.0547 Enjoy new experiences To seek adventure 0.829 0.614 0.250 0.106 0.735 Variance explained 290 205 198 0.735 0.695 0.662 Average communality

4.2. Principal components analyses

Tables 2–5 contain results for Stages 2 and 3 of the method. In Table 2 on number of components, the PA, MAP and VSS methods are compared with the eigenvalue-one criterion and also the results of applying the four methods to the data for the 165 individuals for whom imputation of missing data was not required. Across the exploratory and un-imputed sub-sets, PA, MAP and VSS agree that two components are required to explain the variation in motivation statements; when spirituality items are added, three components are required. Using the eigenvalue-one criterion always suggests extracting a larger number. To report PCA results across the five exploratory and generalisable sub-samples, averages are presented in Tables 3 and 4 (King et al., 2001).

Summary indicators are provided at the tops of Tables 3 and 4, beginning with the determinant values, which are indicators of inter-item correlation. They are small, but not so small as to introduce concerns about multicollinearity between item responses (Field, 2009). That is, the determinant values are consistent with the presence of substantial correlations between a number of items. The determinant becomes smaller when spirituality items are introduced. The reason can be seen in Fig. 4 where correlations multiplied by 100 are presented for the first exploratory subsample. Darker 'squares' (one of size 4 cells \times 4 cells and two of size 3×3) edged in black straddle the diagonal. They represent correlations between items in the extracted components. While the two components involving motivation items are represented by relatively dark squares, spirituality items contribute another dark square and further bands of low item correlations, accounting for the reduction in the determinant. Additionally, the reported statistics for Bartlett tests of sphericity provide evidence that correlation matrices are not identities, and so are suitable for dimension reduction. Also shown are the overall Kaiser-Meyer-Olkin sampling adequacy statistics (KMO in the tables). Values greater than

^{***}Significant at better than 0.001. Bold entries indicate primary loadings.

Table 4Averages over generalisable sub-samples of size 199.

		Two compo	onents			Three components
Determinant Bartlett KMO sampling adequacy Residuals >0.05 Total explained variance		0.0576 553.1*** 0.738 17.8 (39.6%) 62.8				
	Sampling adequacy	Communality	C1	C2	C3	Cronbach α
Escape from routine life A change of pace Relieve daily stress Relieve boredom Increase cultural knowledge Enjoy new experiences To seek adventure Variance explained Average communality	0.711 0.760 0.861 0.763 0.706 0.617 0.801	0.789 0.649 0.633 0.604 0.573 0.624 0.446	0.883 0.760 0.796 0.768 0.163 -0.0570 0.196 37.9 0.669	0.0957 0.266 0.00087 0.117 0.739 0.788 0.639 23.9 0.548		0.829 0.570
Escape from routine life A change of pace Relieve daily stress Relieve boredom	0.718 0.761 0.853 0.751	0.795 0.646 0.634 0.626	0.886 0.755 0.770 0.782	0.0466 0.114 0.201 -0.0183	0.0881 0.253 -0.0237 0.115	0.829
We are all spiritual beings All life is interconnected Grow spiritually Increase cultural knowledge Enjoy new experiences To seek adventure	0.638 0.700 0.748 0.719 0.658 0.830	0.750 0.634 0.549 0.562 0.630 0.451	0.0826 0.174 -0.0111 0.157 -0.0430 0.204	0.853 0.776 0.715 0.192 0.0240 0.0635	0.126 -0.0346 0.194 0.707 0.792 0.636	0.710 0.570
Variance explained Average communality			26.6 0.675	19.4 0.644	16.7 0.548	

^{***}Significant at better than 0.001.
Bold entries indicate primary loadings.

0.6 are acceptable (Kaiser, 1970). These are not smaller than 0.738 across Tables 3 and 4. Individual-item sampling adequacies (shown in the lower panels of Tables 3 and 4) are greater than the accepted benchmark of 0.6. Two further indicators of overall performance are provided. The first is the number (and percentage) of *estimated*

Table 5CFA results in the first generalisable sub-sample of size 199.

Diagnostic	Benchmar	Value	
Chi-square			35.7
Degrees of freedom			30
Probability of Chi-sq	>0.05		0.219
RMSEA	< 0.06		0.0310
CI upper limit	≤0.07		0.0647
Tucker-Lewis NNFI	≥0.95		0.984
Bentler CFI	≥0.95		0.989
SRMR	< 0.08		0.0475
Factor	Item	Loading	Z
Escape	Relieve boredom	0.718	10.47**
	Escape routine	0.865	13.86**
	Change of pace	0.724	10.24**
	Relieve stress	0.665	10.04**
Spirituality	Interconnected	0.626	8.12**
	Grow spiritually	0.539	7.07**
	All spiritual beings	0.871	10.72**
Cultural adventure	New experience	0.498	5.75**
	Seek adventure	0.487	5.64**
	Increase cultural	0.686	7.47**
Factor ^a	Covariance with		
Spirituality	Escape	0.219	2.68**
	Cultural adventure	0.394	4.23**
Escape	Cultural adventure	0.335	3.56**
Error correlation	Change of pace &		-3.26**
	Relieve boredom	-0.152	
Cross-loading			
Cultural adventure	Change of pace	0.173	2.40*

^{**, *} Denotes significance at better than one (five) per cent.

correlations that depart by more than 0.05 in value from *observed* values. Fewer than half of the non-redundant residuals are greater than 0.05 in Table 3, with the proportion for the three-component structure being smaller. In Table 4, the proportion of non-redundant residuals exceeds the benchmark of 50% for the two-motivation structure. The remaining overall indicator is the proportion of total variance explained. In Table 3, the values are close to 70%; while in Table 4 they exceed 60%.

Component structures are shown in the second and third panels of Tables 3 and 4. The ordering of components in columns C1 to C3 reflects the variance explained by each. The main loadings in bold exceed 0.7 in Table 3, while in Table 4 the loading of the item "to seek adventure" is less than 0.7, having value 0.636 in the lower panel. The motivation shown in C1 includes four large loadings and is named "escape" in the literature while another consists of three items, two from a component frequently named "cultural exploration" and one from another often named "novelty" in the literature. As the items involved are acquiring cultural knowledge, enjoying new experiences and seeking adventure, this component is named "cultural adventure". In component C2 in the third panels of Tables 3 and 4 only spirituality items have loadings that exceed 0.7.

Guidelines on sample size are met. In the three-component structures, 10 items are involved, so for the exploratory subsamples there are more than 17 responses per item. In the generalisable sub-samples, responses per item are greater still. Drawing on Fabrigar et al. (1999), the two- and three-component structures meet benchmarks on overdetermination. Also, average communalities over the main loadings are 0.548 or greater in Tables 3 and 4. While smaller than the average communality of 0.7 declared appropriate for factor extraction in samples of size 100, our sub-sample sizes are closer to 200, which is desirable when average communalities are smaller (Davidson, Tripp, Fabrigar, & Davidson, 2008; Fabrigar et al., 1999).

Overall, Tables 3 and 4 suggest that there is a role for spirituality in concert with motivations in understanding the BFF audience.

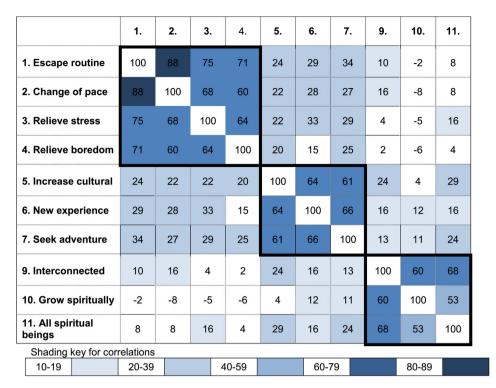


Fig. 4. Patterns of correlations ($\times 100$) in the first of the exploratory sub-samples.

Further, tests conducted to check congruence (reported in Appendix A, Table A2) verify that the motivation components are not similar to each other and neither of these is similar to the spirituality construct.

4.3. Are loadings generalisable?

The results of Tables 3 and 4 suggest a three-component structure for the BFF audience, consisting of spirituality attitude and the motivations of escape and cultural adventure. However, inspection of Fig. 5 for the first generalisable sub-sample makes clear that the pattern of item correlations for cultural adventure are smaller than shown in Fig. 4 for the first exploratory subsample. Also, two forms of evidence on this motivation in Table 4 are weaker than for the other components. First, the communality of the item "to seek adventure" is below 0.5. Had this occurred in the exploratory sub-samples, the item would have been omitted. However, in line with the analytical plan laid out in Section 3, it is retained to aid in assessing generalisability of findings. Consequently, average communalities in the two panels of Table 4 for the component containing it, cultural adventure, fall below 0.6. If the seek-adventure item were removed, the component would rely on only two items for its integrity and would not satisfy the minimum requirement for over determination (Fabrigar et al., 1999). Second, the values for Cronbach's α in Table 4 for cultural adventure falls below 0.6, suggesting the component should not be included in the structure for generalisable subsamples. On the other hand, the spirituality component meets benchmarks for its inclusion in the exploratory and the generalisable sub-samples. To study whether this conclusion is warranted, confirmatory factor analysis is reported next.

4.4. Confirmatory factor analysis

The three components emerging in PCAs were postulated as latent dimensions (factors) for a CFA study (Brown, 2006) in which

it is possible to study linkages among measurement errors and assess cross-loadings from latent dimensions onto items assigned initially to other factors. Moreover, it is possible to analyse convergent and discriminant validity. The approach taken to CFA was to first run the model with the three factors from PCA allowing for correlations between them, so as to assess model fit and validity. Having done this, some fit statistics did not satisfy benchmark criteria. Hence, modification indices were used to seek ways of improving the model. Two rounds of calculating these indices were undertaken, from which an error correlation and one cross-loading improved model fit. This is the model reported in Table 5, showing at the foot of the table, the correlation of -0.152 between the statements "change of pace" and "to relieve boredom" and the loading 0.173 of cultural adventure onto the change-of-pace item. The model of Table 5 was estimated for the first generalisable sample. All goodness-of-fit benchmarks are satisfied. Those obtained with the other generalisable sub-samples agree closely on loadings, correlations, cross-loadings and fit statistics.

The loadings of escape and spirituality items are greater than 0.5, are significantly different to zero at better than 1% and the two item collections satisfy the criterion of having Cronbach's α greater than 0.7. This suggests convergent validity for these constructs (Anderson & Gerbing, 1988; Hair, Black, Babin, & Anderson, 2010; Kolar & Zabkar, 2010; Slavec & Drnovšek, 2012; Yu et al., 2011). While the loadings of cultural adventure items are significantly different to zero, two loadings are smaller than 0.5, suggesting nonconvergence (Hair et al., 2010; Slavec & Drnovšek, 2012). Also, as reported above, Cronbach's α for cultural adventure is low in the generalisable sub-sample, again suggesting lack of convergence. In terms of discrimination, the covariances between factors are all significantly greater than zero at better than 1%, but they are around 0.4 or smaller. As a check on this, following Kolar and Zabkar (2010), the approach of Anderson and Gerbing (1988) was applied, in which pairs of latent factors were tested to see if their correlation might actually be one. These hypotheses were not supported for any pair, consistent with the factors having

	1.	2.	3.	4.	5.	6.	7.	9.	10.	11.
1. Escape routine	100	72	60	67	17	10	19	14	4	10
2. Change of pace	72	100	52	43	28	23	27	24	18	14
3. Relieve stress	60	52	100	48	11	-3	7	19	12	23
4. Relieve boredom	67	43	48	100	22	-2	27	14	-2	3
5. Increase cultural	17	28	11	22	100	45	31	19	23	32
6. New experience	10	23	-3	-2	45	100	30	8	19	13
7. Seek adventure	19	27	7	27	31	30	100	13	19	19
9. Interconnected	14	24	19	14	19	8	13	100	37	62
10. Grow spiritually	4	18	12	-2	23	19	19	37	100	52
11. All spiritual beings	10	14	23	3	32	13	19	62	52	100
Shading key for correlations										
10-19	20-39			40-59		6	0-79			

Fig. 5. Patterns of correlations (\times 100) in the first of the confirmatory sub-samples.

discriminant validity. Yet, finding a cross-loading from cultural adventure onto an escape item suggests that discrimination may not be as strong for cultural adventure. The cross-loading is less than 0.2, which is small compared with the primary loading of the escape factor onto change of pace. However, the cross-loading should be retained (Matsunaga, 2010).

The results of this section are discussed more fully in the next section on implications for future research and management. Before moving to the discussion of results, the findings on motivations and spiritual attitude can be summarised as follows: to begin our rounds of PCA and CFA, we avoided the possibility of minor components arising and appearing to be prominent by using parsimonious approaches to determination of the number of constructs to extract and further in allowing only a small number of spirituality items into the analysis, as discussed in Section 3.2. Doing this still allowed spiritual attitude to emerge as important for the BFF audience. Next, we investigated the structure and consistency of the motivational and attitudinal constructs across samples. These were found to arise in holdout (our generalisable) samples under PCA and to be confirmed as latent factors using CFA, with some qualification on the generalisability of one motivational construct. In undertaking these steps in the analysis we have followed accepted practice throughout Sections 3 and 4 (For reference see Basto & Pereira, 2012; Braun et al., 2012; Brown, 2006; Davidson et al. 2008; Fabrigar et al. 1999; Kline, 1994; Schmitt, 2011; Slavec & Drnovšek, 2012; Yu et al. 2011). That is, we have robustly established evidence in support of our objectives.

5. Conclusions and implications

5.1. Theoretical implications and future research

In summary, the BFF audience are characterised by young, highly educated and first-time visitors. More than half of the respondents

were not affiliated with formal religious practice. There is some evidence that the festival attracts pagans and wiccans, reflecting the spiritual roots of the festival. In common with other festival studies, the audience comprised a mixed range of visitors, including tourists, residents of Edinburgh, other Scottish residents and first-time and repeat visitors. It is evident that residents and domestic visitors make up a sizeable proportion of the audience, but 30% of the audience are normally resident outside Scotland and this percentage rises to nearly 40% when temporary residents of Edinburgh are taken into account. Also Gonzalez's (2007: 20) study on visitors to BFF found that "just under a third were tourists", suggesting a tourist component of the audience year on year. At other events and festivals, domestic visitors are a key market segment (Chang & Yuan, 2011; Formica & Uysal, 1996; Yuan, Cai, Morrison, & Linton, 2005) as is the local market (Nicholson & Pearce, 2000), meaning in the current study Scottish residents including those who did not reside in Edinburgh. The presence of tourists and other travellers, notably international students in Scotland to study, indicates that potentially BFF has wide appeal as a component of Edinburgh's events calendar. Indeed, travellers residing beyond Edinburgh, both domestic and international, visited the city specifically for the festival. That this is the case is not unusual as local festivals are regularly used to promote tourism as well as to contribute to economic development (Felsenstein & Fleischer, 2003). Edinburgh festivals and events serve economic development in that they make Scotland even more attractive as a destination (SQW Ltd/TNS Travel and Tourism, 2005) for a variety of reasons including, as demonstrated in our BFF data, for those international travellers who arrive for periods of study, so helping to sustain Scotland's educational sector and the businesses that cater to the additional consumption that occurs (Richards & Palmer, 2010).

In the preceding sections it was shown that two motivations and one attitudinal construct had relevance in the context of the Beltane Fire Festival. The motivations mapped onto four "escape" items and three "cultural adventure" items. Escape reflects a desire

to relieve stress and boredom and change routine aspects of life. Such a factor is reported in studies spanning the past twenty years (McDowall, 2010; Mohr et al., 1993; Uysal et al., 1993; Yolal et al., 2012). The factor cultural adventure includes items reflecting respondents' desire to enhance their cultural knowledge, attain a new experience and find adventure. Earlier studies identified the factor cultural exploration (Chang. 2006; Crompton & McKay, 1997; Lee. 2000: Lee et al., 2004: Schofield & Thompson, 2007), with which cultural adventure has similarities; however, in the current study it is labelled "cultural adventure" in order to capture the inclusion of the measured item "to seek adventure", which in other studies loads on another factor. While the two motivations have parallels in earlier research, the construct involving spiritual attitudes, encompassing interconnectedness and individuals being or becoming spiritual, appears to be little known. However, its emergence is consistent within the context of BFF and the SHE project outcomes.

Initially, we explored with PCA in one collection of datasets and found there was a role for two motivational factors to which the addition of a construct based on spiritual attitude was justified. Using PCA in generalisable or holdout datasets, this same structure persisted. To confirm the factor structure, CFA was performed in the holdout samples, with extremely good outcomes indicated by the values obtained for fit indices. As noted by Schreiber, Stage, King, Nora, and Barlow (2006: 327) "in general, if the vast majority of the indexes indicate a good fit, then there is probably a good fit". Thus, on this basis we conclude that spiritual attitude figures as a factor for the BFF audience. As noted earlier, the objectives were to: identify motivations for attending the festival; trial questionnaire items on spirituality; and, assess whether spirituality might have a role in visitor intentions. With our approach, the first and third of these have been attained in that the spirituality and escape factors were extracted in PCAs and found to be valid constructs in CFA. In relation to the second, there are caveats on the instrument, not regarding spiritual-attitude items, but regarding the motivations arising from the covariation of escape-item errors, a motivation cross-loading, the weakening of discriminant validity for cultural adventure and the failure of that motivation to display convergent validity. Overall, on the second objective we can conclude that the trial of spiritualattitude items was successful in providing evidence in support of the other study objectives, but in other respects, relating to motivations, the instrument might be refined for further application.

With regard to the correlation of errors in the escape items change of pace and relieve boredom two explanations are usually offered, as noted by Brown (2006). First, another latent factor, which was not included in the model, is responsible for a common part of the error variances. Conceivably, another aspect of spiritual attitude, not covered by our concentration on spiritual maturity, is responsible. Equally, some other construct may be responsible. However, having said this, it becomes a matter for further research as to the nature of the latent factor that might account for the error covariance. A second explanation is the presence of a method factor that is, a factor explaining variability to different methods of assessing constructs. Frequently, such a factor is thought to arise where combinations of negatively and positively stated items are used. The full items that have correlated errors were "I came to relieve boredom" and "I came for a change of pace from everyday life". It may be possible in the minds of the Beltane audience that the boredom item contains negative connotations that are reversed by the positive association of relieving boredom with a change of pace. This change of pace might be associated with the changing season, the possibility of the carnivalesque, the licentious nature of aspects of BFF, or the possibility of being spiritually uplifted. To assess if a method effect is involved, further investigation is required.

In relation to the cross-loading of cultural adventure onto the item "change of pace" in the escape factor there appears to be a consistency about this cross-loading. The reason being that cultural adventure is primarily associated with items about *change* in the form of *increasing* knowledge, *new* experience and *seeking* adventure. Whether such a cross-loading arises in CFAs generally is another area for further investigation. That this may be possible is demonstrated by a qualitative finding of Noy (2004) that backpackers speak of self-change and spirituality (see also Timothy & Conover, 2006; Willson, 2011). On the other hand, as reported in Section 2, change of pace appears to have a diversity of potential interpretations, as it loads onto yet a different factor — socialisation and entertainment — in the work of Formica and Uysal (1998).

The CFA includes the correlations between the spiritual-attitude construct and motivations (for example, escape), which while small, are significantly different to zero. Similarly, there is a significant correlation between the motivational factors. Thus, to understand, for example, repeat attendance, a model might include paths linking motivations; but, in addition, there is evidence that either or both the linkages from motivation onto attitude and from attitude to motivation should be involved. For some commentators, motivation influences attitudes (Hsu et al., 2010; Huang & Hsu, 2009; Nyaupane, Paris, & Teye, 2011) and for others it is the reverse, although explanations of the influence of attitudes on motivation are less frequent. Nonetheless, Gnoth's (1997) conceptual model suggests that motivation affects attitudes and that attitudes link back or feedback to motivation via expectations and effect. That attitudes influence motivation can be seen in other research, for example, Kotchen and Reiling (2000) and Luo and Deng (2008). Overall, the current research makes four contributions to tourism management. First, it contributes to the current body of knowledge about visitor motivations to attend unorthodox events as well as shedding light on visitors' spiritual attitudes. Second, in keeping with earlier work, this paper confirms the value of existing motivation scales and their applicability in this unorthodox context, although raising qualifications on their use. Third, it contributes to an understanding of the interplay between motivations and attitudes. Finally, this paper points to the value of undertaking empirical research in unusual environments to identify constructs which have not been noted previously. The current BFF research further raises the possibility of including attitudes in studies of motivation in the context of managing festivals and tourism.

With regard to future research, there are a variety of avenues to explore. From a methodological perspective, it would be useful to extend the approach undertaken in this study to other tourism management contexts. Specifically, a three step approach was undertaken comprising an exploratory analysis of principal components, conditioning with parallel analysis, very simple structure and minimum average partial correlation to arrive at the number of factors to seek. Thereafter, factors identified in the exploratory phase were then subjected to re-examination in other samples, one of which was the application of confirmatory factor analysis and, subsequently, a search for relevant cross loadings and factor correlations. Given the strength of the results, it is suggested the deployment of such re-testing in future studies will be valuable. Another avenue to investigate is the significance of spiritual attitudes to understanding visitors' decision-making processes. In light of our results, there is scope to investigate spiritual attitudes within a range of festivals and tourism experiences, including other unconventional experiences that travellers seek. With regard to festivals, there are a variety of contexts in which the significance of spiritual attitudes, as well as motives, can be explored, for example, pre-Lenten carnivals as well as festivities operating in non-formal religious contexts and which may offer a transcendent experience to the audience. Another line of enquiry relates to the type of visitor

and whether potential differences exist in terms of spiritual attitudes and motives. Previously, commentators have identified differences between motivations for first-time and repeat visitors (Scott, 1996) and identifying differences or similarities in terms of spiritual attitudes would be equally fruitful in informing market segmentation.

5.2. Managerial implications

Major and mega events have long been recognised as a vehicle for destination branding and generating tourism revenue as well as contributing to the cultural and social vitality of a city. However, destinations require a balanced portfolio of events that contribute to tourism development. For as Getz (2012: 178) argued: "portfolios of events can be designed for maximum impact, especially to overcome seasonality of demand and appeal to multiple target segments". Major festivals held in Edinburgh are not only internationally renowned but have a significant economic impact, particularly given their role in attracting domestic and international visitors to the city (BOP Consulting, 2011). In recognition of the value of a balanced portfolio of events, the city has adopted a strategy which advocates this (City of Edinburgh Council, 2007) and, furthermore, a core objective of Edinburgh's tourism strategy is to achieve balance and reduce seasonality in the tourism sector (ETAG, 2012). The BFF is one event contributing to the cultural economy and tourism development. Managerial implications emanating from the current study of BFF relate to tourism development, balancing the portfolio, marketing strategies and repeat visitation, all of which impinge on developing the visitor market, particularly tourist visits.

In terms of contributing to further development of the tourism market and overcoming seasonality, the festival is at a strategic crossroads. In the last quarter of a century, the contemporary BFF has developed on an organic base from its grassroots origins with little in the way of external support. Although the festival occurs in a low period for tourism to Edinburgh, takes place on a site with capacity constraints and is not extensively marketed, it attracts an audience of approximately 8500, of which a sizeable proportion are tourists. This suggests there is not only a market for the festival but that there is potential to further expand its audience. This might be achieved with the judicious investment of funds by the City of Edinburgh in the development and marketing of Beltane. Such investment would be in line with Edinburgh's strategy to achieve balance and reduce seasonality, as the BFF occurs out of the main tourist season (ETAG, 2012). Experience with the BFF further suggests there may be scope to promote more widely some of the other seven important events in the Celtic calendar, some of which are public but rather lesser scale, while others are conducted privately.

In general, the BFF can be characterised as self-reliant, independent of external sponsorship and maintaining a grassroots or community oriented ethos. Nevertheless, in order to meet changing health and safety requirements, the Beltane Fire Society (BFS) has professionalised to an extent. A possibility would be for BFS to professionalise further with the aim of augmenting the audience base and raising repeat attendance. This would require the BFS to broaden the appeal of the festival to the visitor market and address issues that may deter repeat visits. Broadening the audience base may involve greater dialogue with tourism and cultural policy makers to obtain funding to target marketing communication channels, so as to exploit our findings that spiritual attitudes were pertinent and the audience motivations of escape and cultural adventure had relevance. This could be in the form of promoting more widely the nature of the event, its deep-seated history in the broader European context, and how it might satisfy desires for cultural understanding, escape from the cares of everyday life, and attainment of transcendent experience. Also, it may be that specific aspects could be emphasised and developed in promotional material to capture more international and domestic tourists with interests in aspects of the festival, such as its origins in ancient Scottish history.

Further, a significant proportion of the audience knew little about the event (43.2%) or heard about it informally (33.4%). This again suggests marketing communications could be more focused on the nature of Beltane. In so doing, this could contribute to greater customer satisfaction, thereby encouraging repeat visits, as well as potentially garnering further visitors. As we reported earlier, the audience are characterised by young and highly educated visitors and in order to encourage and develop repeat visitation, appropriate marketing channels need to be sought and sustained, such as, social media as well as conventional communication channels. The Edinburgh BFF has unique features, such as occurring in the heart of the city, being the largest fire festival in Europe, being conducted in an English-speaking environment and reflecting the fecundity, licentiousness and content of rituals that previously were practised widely in Europe. As such, a more focused and targeted marketing strategy could assist in attracting a wider range of visitors and tourists.

The study results also indicate the majority of the audience are first time visitors (80.4%). It is commonly perceived that, at an economic level, repeat visitors can be more beneficial compared to first-time visitors, although the evidence is mixed (Shani, Rivera, & Hara, 2009). Undoubtedly, repeat visitors are critical in ensuring festival sustainability as illustrated by Crompton and McKay (1997: p. 426) who argued that "most festivals draw from a relatively local area, so their continued viability is likely to be dependent on a high level of repeat visitation". Hence, the lack of repeat visitation requires investigation. A variety of reasons could potentially explain non-repeat visits. First, the festival experience may be such that it induces a one-off visit but does not engender a sense of loyalty to return again. Second, although the proportion of first-time visitors is high it should be noted that there is a group who are unlikely to attend again because they are transient international students from as far afield as North America, who came to Edinburgh for reasons other than tourism or to visit BFF. Endeavouring to retain a substantial number of individual members of this particular group lacks feasibility. However, it is arguable that even though they might not attend again, a focussed marketing strategy might attract even more first-time visitors of this type. Also, it is possible that such itinerant residents might return to their home countries and suggest that studying in Edinburgh has advantages, beyond the quality of education and the benefits of the city, which are associated with a diversity of festival experiences. This would have positive ramifications for private-sector business growth and expansion of educational services. Finally, there may be a relationship between visitors being dissatisfied with the festival and choosing not to attend again. Understanding satisfaction and dissatisfaction among the majority of non-returners would inform future development and customer retention strategies.

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Appendix A. Supplementary data

Supplementary data related to this article can be found at http://dx.doi.org/10.1016/j.tourman.2014.01.023.

Appendix 2. Congruence coefficients

Table A2aCongruence for factors obtained in the same sub-samples

MI sample	Which sub-samples?		Cultural adventure		Spirituality	Cultural adventure
1	E & E	Escape	0.350	Escape	0.106	0.340
				Spirituality		0.244
1	G & G	Escape	0.269	Escape	0.220	0.258
				Spirituality		0.244
2	E & E	Escape	0.344	Escape	0.108	0.338
				Spirituality		0.246
2	G & G	Escape	0.273	Escape	0.224	0.259
				Spirituality		0.241
3	E & E	Escape	0.349	Escape	0.110	0.339
				Spirituality		0.247
3	G & G	Escape	0.269	Escape	0.212	0.258
				Spirituality		0.243
4	E & E	Escape	0.349	Escape	0.101	0.339
				Spirituality		0.241
4	G & G	Escape	0.282	Escape	0.209	0.268
				Spirituality		0.234
5	E & E	Escape	0.349	Escape	0.104	0.340
				Spirituality		0.241
5	G & G	Escape	0.281	Escape	0.208	0.270
				Spirituality		0.239
Average		Escape	0.348	Escape	0.106	0.339
				Spirituality		0.244
		Escape	0.275	Escape	0.215	0.263
		-		Spirituality		0.240

E: exploratory sub-sample; G: generalisable sub-sample.

Table A2bCongruence for components across exploratory and generalisable sub-samples

MI sample	Sub-sample		Generalisable			Generalisa	ble	
			Escape	Cultural adventure		Escape	Spirituality	Cultural adventure
1	Exploratory	Escape	0.993	0.308	Escape	0.989	0.167	0.298
		CA	0.318	0.986	Spirituality	0.157	0.992	0.241
					CA	0.311	0.264	0.962
2	Exploratory	Escape	0.993	0.324	Escape	0.983	0.170	0.289
	. ,	CA	0.301	0.986	Spirituality	0.160	0.992	0.238
					CA	0.310	0.264	0.964
3 Ext	Exploratory	Escape	0.993	0.308	Escape	0.983	0.168	0.299
	1 3	CA Î	0.317	0.986	Spirituality	0.155	0.992	0.239
					CA	0.309	0.265	0.965
4	Exploratory	Escape	0.992	0.320	Escape	0.982	0.161	0.303
	. ,	CA	0.318	0.986	Spirituality	0.148	0.992	0.232
					CA	0.314	0.261	0.963
5	Exploratory	Escape	0.993	0.316	Escape	0.982	0.461	0.305
	1 3	CA	0.322	0.987	Spirituality	0.151	0.992	0.235
					CA	0.315	0.260	0.965
Ave	Exploratory	Escape	0.993	0.315	Escape	0.984	0.225	0.299
	3	CA	0.315	0.986	Spirituality	0.154	0.992	0.237
					CA	0.312	0.263	0.964

Critical values at the five per cent level of significance for the congruence coefficients are 0.973 for five degrees of freedom (that is, testing structures with seven items in two components) and 0.817 for eight degrees of freedom (that is, testing structures with 11 items in three components). See Bedeian, Armenakis, and Randolph (1988). Coefficients in bold type are significant at five per cent or better.

References

Ajzen, I. (2005). Attitudes, personality and behavior. New York: Open University Press.

Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: reasoned and automatic processes. *European Review of Social Psychology*, 11, 1–33.

Anderson, J., & Gerbing, D. (1988). Structural equation modelling in practice: a review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423.

Ashley, P. (2007). Towards an understanding and definition of wilderness spirituality. *Australian Geographer*, 38, 53–69.

Astin, A. W., Astin, H. A., & Lindholm, J. A. (2011). Assessing students' spiritual and religious qualities. *Journal of College Student Development*, 52, 39–61.

Astin, A. W., & Keen, J. P. (2006). Equanimity and spirituality. *Religion and Education*, 33, 1–8.

Backman, K. F., Backman, S. J., Uysal, M., & Sunshine, K. M. (1995). Event tourism: an examination of motivations and activities. Festival Management and Event Tourism, 3, 15–24.

Bakhtin, M. (1984). *Rabelais and his world*. Bloomington: Indiana University Press (trans. Hélène Iswolsky).

Basto, M., & Pereira, J. (2012). An SPSS R-Menu for ordinal factor analysis. *Journal of Statistical Software*, 46, 1–29.

Bedeian, A., Armenakis, A., & Randolph, W. (1988). The significance of congruence coefficients: a comment and statistical test. *Journal of Management*, 14(4), 559–566.

efficients: a comment and statistical test. *Journal of Management*, 14(4), 559–566. BFS (Beltane Fire Society). (2007). *Beltane*. http://staging.beltane.org/festivals/beltane Accessed 8.12.12.

BFS (Beltane Fire Society). (2011). A detailed history of beltane. http://beltanefiresociety.wordpress.com/a-detailed-history-of-beltane/ Accessed 19.12.13.

BFS (Beltane Fire Society). (2012). *The reds*. http://beltane.org/about/reds/ Accessed 24.11.12.

- Blackwell, M., Honaker, J., & King, G. (2012). Multiple overimputation: a unified approach to measurement error and missing data. http://gking.harvard.edu/publications/multiple-overimputation-unified-approach-measurement-error-and-missing-data Accessed 21.10.12.
- BOP Consulting. (2011). Edinburgh festivals impact study. BOP Consulting.
- Bowen, H. E., & Daniels, M. J. (2005). Does the music matter? Motivations for attending a music festival. *Event Management*, 9, 155–164.
- Braun, E., Woodley, A., Richardson, J. T. E., & Leidner, B. (2012). Self-rated competences questionnaires from a design perspective. *Educational Research Review*, 7(1), 1–18.
- Brown, T. (2006). Confirmatory factor analysis for applied research. New York: Guildford Press.
- Bryant, A. N. (2007). Gender differences in spiritual development during the college years. Sex Roles, 56, 835–846.
- Bryant, A. N., & Astin, H. A. (2008). The correlates of spiritual struggle during the college years. *Journal of Higher Education*, 79, 1–27.
- Chang, J. (2006). Segmenting tourists to Aboriginal cultural festivals: an example in the Rukai Tribal Area, Taiwan, *Tourism Management*, *27*, 1224–1234.
- Chang, R. C. Y., Kiela, J., & Mak, A. H. N. (2010). Food preferences of Chinese tourists. Annals of Tourism Research, 37, 989–1011.
- Chang, W., & Yuan, J. (2011). A taste of tourism: visitors' motivations to attend a food festival. *Event Management*, 15, 13–23.
- City of Edinburgh Council. (2007). *Inspiring events strategy*. Edinburgh: City of Edinburgh Council.
- Cohen, E. (1979). A phenomenology of tourist experiences. Sociology, 13, 179-
- Cohen, E. (1998). Tourism and religion: a comparative perspective. *Pacific Tourism Review*. 2. 1–10.
- Collins-Kreiner, N. (2010). Researching pilgrimage: continuity and transformations. Annals of Tourism Research, 37, 440–456.
- Crompton, J. L., & McKay, S. L. (1997). Motives of visitors attending festival events. Annals of Tourism Research, 24, 425–439.
- Dames, M. (1992). Mythical Ireland. London: Thames and Hudson.
- Damitz, M., Manzey, D., Kleinman, M., & Severin, K. (2003). Assessment center for pilot selection: construct and criterion validity and the impact of assessor type. *Applied Psychology*, 52, 193–212.
- Davidson, M. A., Tripp, D. A., Fabrigar, L. R., & Davidson, P. R. (2008). Chronic pain assessment: a seven-factor model. *Pain Research and Management*, 13, 299–308.
- Dewar, K., Meyer, D., & Li, W. M. (2001). Harbin, lanterns of ice, sculptures of snow. *Tourism Management, 22,* 523–532.
- Digance, J. (2003). Pilgrimage at contested sites. *Annals of Tourism Research*, 30, 143–159.
- Dinno, A. (2011). Package 'Paran' Version 1.4.3. http://cran.r-project.org/ Accessed 21.10.12.
- Elkins, D. N., Hedstrom, L. J., Hughes, L. L., Leaf, J. A., & Saunders, C. (1988). Toward a humanistic-phenomenological spirituality: definition, description, and measurement. *Journal of Humanistic Psychology*, 28, 5–18.
- ETAG (Edinburgh Tourism Action Group). (2012). Edinburgh 2020: The Edinburgh tourism strategy. Edinburgh: ETAG.
- Evans, C., Connell, J., Barkham, M., Margison, F., McGrath, G., Mellor-Clark, J., et al. (2002). Towards a standardised brief outcome measure: psychometric properties and utility of the CORE-OM. *British Journal of Psychiatry*, 180, 51–60.
- Fabrigar, L., Wegener, D., MacCallum, R., & Strahan, E. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4, 272–299.
- Faulkner, B., Fredline, E., Larson, M., & Tomljenovic, R. (1999). A marketing analysis of Sweden's Storsjöyran musical festival. *Tourism Analysis*, 4, 157–171.
- Felsenstein, D., & Fleischer, A. (2003). Local festivals and tourism promotion: the role of public assistance and visitor expenditure. *Journal of Travel Research*, 41, 385–392
- Festivals Edinburgh. (2013). Edinburgh's festivals: Defining Scotland's cultural identity on the global stage. Edinburgh: Festivals Edinburgh.
- Field, A. (2009). *Discovering statistics using SPSS*. Los Angeles: Sage.
- Fleischer, A. (2000). The tourist behind the pilgrim in the Holy Land. *International Journal of Hospitality Management*, 19, 311–326.
- Formica, S., & Uysal, M. (1996). A market segmentation of festival visitors: Umbria jazz festival in Italy. Festival Management and Event Tourism, 3, 175–182.
- Formica, S., & Uysal, M. (1998). Market segmentation of an international culturalhistorical event in Italy. Journal of Travel Research, 36, 16–24.
- Frazer, J. (1922). The golden bough: A study in magic and religion. New York:
 Macmillan.
- Frazer, J., & Fraser, R. (1998). The golden bough: A study in magic and religion. Oxford: Oxford University Press.
- Frey, N., & George, R. (2010). Responsible tourism management: the missing link between business owners' attitudes and behaviour in the Cape Town tourism industry. *Tourism Management*, 31, 621–628.
- Gallarza, M. G., Arteaga, F., Floristán, E., & Gil, I. (2009). Consumer behavior in a religious event experience: an empirical assessment of value dimensionality among volunteers. *International Journal of Culture, Tourism and Hospitality Research*, 3, 165–180.

- Gau, J. (2011). The convergent and discriminant validity of procedural justice and police legitimacy: an empirical test of core theoretical propositions. *Journal of Criminal Justice*, 39, 489–498.
- Getz, D. (2008). Event tourism: definition, evolution, and research. Tourism Management, 29, 403–428.
- Getz, D. (2012). Event studies: discourses and future directions. *Event Management*, 16. 171–187.
- Gnoth, J. (1997). Tourism motivation and expectation formation. *Annals of Tourism Research* 24, 283–304
- Gonzalez, R. (2007). Beltane Fire Festival: Inaugural economic impact and audience profile assessment. Edinburgh: Beltane Fire Festival.
- Graburn, N. (2001). Secular ritual: a general theory of tourism. In V. Smith, & M. Brent, Brent (Eds.), Hosts and guests revisited: tourism issues of the 21st century (pp. 42–50). New York: Cognizant Communication Corporation.
- Graburn, N. H. H. (1989). Tourism: the sacred journey. In V. L. Smith (Ed.), *Hosts and guests: the anthropology of tourism* (pp. 21–36). Philadelphia: University of Pennsylvania Press.
- Gursoy, D., Spangenberg, E. R., & Rutherford, D. G. (2006). The hedonic and utilitarian dimensions of attendees' attitudes toward festivals. *Journal of Hospitality and Tourism Research*, 30, 279–294.
- Gyimóthy, S. (2009). Casual observers, connoisseurs and experimentalists: a conceptual exploration of niche festival visitors. *Scandinavian Journal of Hospitality and Tourism*, 9, 177–205.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). Multivariate data analysis: a global perspective. Upper Saddle River: Pearson.
- Harrington, D. (2008). Confirmatory factor analysis. Online: Oxford Scholarship.
- Hayton, J., Allen, D., & Scarpello, V. (2004). Factor retention decisions in exploratory factor analysis: a tutorial on parallel analysis. *Organisation Research Methods*, 7, 191–2005
- Hill, P. C., Pargament, K., Hood, R. W., McCullough, M. E., Swyers, J. P., et al. (2000). Conceptualising religion and spirituality: points of commonality, points of departure. *Journal for the Theory of Social Behaviour*, 30, 51–77.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: guidelines for determining model fit. The Electronic Journal of Business Research Methods, 6, 53–60. www.ejbrm.com Accessed 09.06.13.
- Hsu, C., Cai, L. A., & Li, M. (2010). Expectation, motivation and attitude: a tourist behavioural model. *Journal of Travel Research*, 49, 282–296.
- Huang, S., & Hsu, C. H. C. (2009). Effects of travel motivation, past experience, perceived constraint, and attitude on revisit intention. *Journal of Travel Research*, 48, 29–44.
- Jordan, A. (2001). College student cheating: the role of motivation, perceived norms, attitudes and knowledge of institutional policy. *Ethics and Behavior*, 11, 233–247.
- Kaiser, H. (1970). A second generation Little Jiffy. Psychometrika, 35, 401–415.
- Kale, S. (2004). Spirituality, religion, and globalization. *Journal of Macromarketing*, 24, 92–107.
- King, G., Honaker, J., Joseph, A., & Scheve, K. (2001). Analyzing incomplete political science data: an alternative algorithm for multiple imputation. *American Political Science Review*, 95, 49–69.
- Kline, P. (1994). An easy guide to factor analysis. London: Routledge.
- Kolar, T., & Zabkar, V. (2010). A consumer-based model of authenticity: an oxymoron or the foundation of cultural heritage marketing? *Tourism Manage*ment, 31, 652–664.
- Kotchen, M., & Reiling, S. (2000). Environmental attitudes, motivations and contingent valuation of nonuse values: a case study involving endangered species. *Ecological Economics*, 32, 93–107.
- Kumar, S. (2000). Reverential ecology. Kyoto Journal, 43, 46-58.
- Lam, T., & Hsu, C. H. C. (2004). Theory of planned behaviour: potential travelers from China. Journal of Hospitality and Tourism Research., 28, 463–482.
- Lam, T., & Hsu, C. H. C. (2006). Predicting behavioural intention of choosing a travel destination. *Tourism Management*, 27, 589–599.
- Lee, C.-K. (2000). A comparative study of Caucasian and Asian visitors to a cultural expo in an Asian setting. *Tourism Management*, 21, 169–176.
- Lee, T. H. (2009). A structural model to examine how destination, image, attitude, and motivation affect the future behaviour of tourists. *Leisure Sciences*, 21, 213, 236
- Lee, J., & Beeler, C. (2009). An investigation of predictors of satisfaction and future intention: links to motivation, involvement, and service quality in a local festival. *Event Management*, 13, 17–29.
- Lee, C.-K., Lee, Y.-K., & Wicks, B. E. (2004). Segmentation of festival motivation by nationality and satisfaction. *Tourism Management*, 25, 61–70.
- Lepp, A. (2007). Residents' attitudes towards tourism in Bigodi village, Uganda. Tourism Management, 28, 876–885.
- Li, M., Huang, Z., & Cai, L. A. (2009). Benefit segmentation of visitors to a rural community-based festival. *Journal of Travel and Tourism Marketing*, 26, 585-598.
- Li, X. R., & Petrick, J. F. (2006). A review of festival and event motivation studies. Event Management, 9, 239–245.
- Lindholm, J. A., & Astin, H. S. (2008). Spirituality and pedagogy: faculty's spirituality and use of student-centered approaches to undergraduate teaching. *Review of Higher Education*, *31*, 185–207.
- Livingstone, S. (2000). Scottish customs. Edinburgh: Birlinn.

- Love, P., & Talbot, D. (2005). Defining spiritual development: a missing consideration for student affairs. In E. Wilson, & L. Wolf-Wendel (Eds.), ASHE Reader on college student development theory. Boston: Custom Publishing.
- Luo, Y., & Deng, J. (2008). The new environmental paradigm and nature-based tourism motivation. *Journal of Travel Research*, 46, 392–402.
- Mannel, R., & Iso-Ahola, S. (1987). Psychological nature of leisure and tourism experiences. *Annals of Tourism Research*, 14, 314–329.
- Manson, B. (2006). *An examination of Samhain and Beltane rituals in contemporary*
- Manzo, L. C. (2003). Beyond house and heaven: toward a revisioning of emotional relationships with places. *Journal of Environmental Psychology*, 23, 47–61.
- Matheson, C. M., & Tinsley, R. (2010). Carnivalesque in the face of external pressures: a case study of the Beltane Fire Festival. In ATLAS annual conference and colloquium 2010: mass tourism versus niche tourism, Limassol, Cyprus, November 3—5.
- Matsunaga, N. (2010). How to factor-analyze your data right: do's, don'ts and how-to's. *International Journal of Psychological Research*, 3, 97–110.
- McDowall, S. (2010). A comparison between Thai residents and non-residents in their motivations, performance evaluations, and overall satisfaction with a domestic festival. *Journal of Vacation Marketing*, 16, 217–233.
- Misetic, A., & Sabotic, I. (2006). 'Days of Radunica': a street festival in the Croatian town of Split. In D. Picard, & M. Robinson (Eds.), Festivals, tourism and social change: remaking worlds (pp. 119–132). Clevedon: Channel View Publications.
- Mohamad, A., Lo, M.-C., Songan, P., & Yeo, A. (2012). Dimensionality of communities belief attitude toward rural tourism development. *British Journal of Arts and Social Sciences*, 6, 245–254.
- Mohr, K., Backman, K. F., Gahan, L. W., & Backman, S. J. (1993). An investigation of festival motivations and event satisfaction by visitor type. Festival Management and Event Tourism. 1, 89–97.
- de Mooij, M. (2010). Consumer behavior and culture: Consequences for global marketing and advertising. London: SAGE.
- Murray, M., & Graham, B. (1997). Exploring the dialectics of route-based tourism: the Camino de Santiago. *Tourism Management*, 18, 513–524.
- Nako, Z., & Barnard, A. (2012). Construct validity of competency dimensions in a leadership assessment and development centre. African Journal of Business Management, 6, 9730–9737.
- Nicholson, R., & Pearce, D. G. (2000). Who goes to events: a comparative analysis of the profile characteristics of visitors to four South Island events in New Zealand. *Journal of Travel Marketing*, 6, 236–253.
- Nicholson, R. E., & Pearce, D. G. (2001). Why do people attend events: a comparative analysis of visitor motivations at Four South Island events. *Journal of Travel Research*, 39, 449–460.
- Nolan, M. L., & Nolan, S. (1992). Religious sites as tourism attractions in Europe. *Annals of Tourism Research*, 19, 68–78.
- Noy, C. (2004). This trip really changed me: backpackers' narratives of self-change. *Annals of Tourism Research*, 31, 78–102.
- Nyaupane, G. P., Paris, C. M., & Teye, V. (2011). Study abroad motivations, destination selection and pre-trip attitude formation. *International Journal of Tourism Research*, 13, 205–217.
- Olsen, D. H., & Timothy, D. J. (2006). Tourism and religious journeys. In D. J. Timothy, & D. H. Olsen (Eds.), *Tourism, religion and spiritual journeys* (pp. 1–21). London and New York: Routledge.
- Park, K.-S., Reisinger, Y., & Kang, H.-J. (2008). Visitors' motivations for attending the South Beach wine and food festival, Miami Beach, Florida. *Journal of Travel and Tourism Marketing*, 25, 161–181.
- Partridge, C. (2006). The spiritual and the revolutionary: alternative spirituality, British free festivals and the emergence of rave culture. *Culture and Religion*, 7, 41–60.
- Perera, P., & Vlosky, R. (2013). How previous visits shape trip quality, perceived value, satisfaction and future behavioural intentions: the case of forest-based ecotourism in Sri Lanka. *International Journal of Sport Management, Recreation* and Tourism. 11. 1–24.
- Preacher, K. J., & Coffman, D. L. (2006). Computing power and minimum sample size for RMSEA [Computer software] http://quantpsy.org/ Accessed 11.12.12.
- Principe, W. (1983). Toward defining spirituality. *Studies in Religion, 12,* 127–141. Quinn, B. (2007). Arts festivals and the city. In R. Paddison, & S. Miles (Eds.), *Culture-*
- led urban regeneration (pp. 85–101). London: Routledge. Quinn, B. (2010). Arts festivals, urban tourism and cultural policy. *Journal of Policy*
- Research in Tourism, Leisure and Events, 2, 264–279.
 Raybould, M., Digance, J., & McCullough, C. (1999). Fire and festival: authenticity and
- visitor motivation at an Australian folk festival. *Pacific Tourism Review, 3*, 201–212. Reid, G. (2006). The politics of city imaging: a case study of the Edinburgh MTV Europe Music Awards 03. *Event Management, 10*, 35–46.
- Reimers, A., Jekauc, D., Mess, F., Mewes, N., & Woll, A. (2012). Validity and reliability of a self-report instrument to assess social support and physical environment correlates of physical activity in adolescents. *BMC Public Health*, 12. www.biomediccentral.com/1471-2458/12/705 Accessed 07.05.13.
- Revelle, W., & Rocklin, T. (1979). Very simple structure alternative procedure for estimating the optimal number of interpretable factors. *Multivariate Behavioral Research*, *14*, 403–414.
- Richards, G., & Palmer, R. (2010). Eventful cities: Cultural management and urban revitalisation. Oxford: Elsevier.

- Richards, G., & Wilson, J. (2004). The impact of cultural events on city image: Rotterdam, cultural capital of Europe 2001. *Urban Studies*, 41, 1931–1951.
- Rinschede, G. (1992). Forms of religious tourism. *Annals of Tourism Research*, 19, 51–67. Schiffman, L. G., & Kanuk. (2010). *Consumer behaviour* (10th ed.). Upper Saddle River, NJ: Prentice Hall.
- Schmitt, T. (2011). Current methodological considerations in exploratory and confirmatory factor analysis. *Journal of Psychological Assessment*, 29, 304–321.
- Schneider, I. E., & Backman, S. J. (1996). Cross-cultural equivalence of festival motivations: a study in Jordan. Festival Management and Event Tourism, 4, 139–144.
- Schofield, K., & Thompson, K. (2007). Visitor motivation, satisfaction and behavioural intention: the 2005 Naadam Festival, Ulaanbaatar. *International Journal of Tourism Research*, 9, 329–344.
- Schreiber, J., Stage, F., King, J., Nora, A., & Barlow, E. (2006). Reporting structural equation modelling and confirmatory factor analysis results: a review. *Journal of Educational Research*. 99, 323–337.
- Scott, D. (1996). A comparison of visitors' motivations to attend three urban festivals. Festival Management and Event Tourism, 3, 121–128.
- Shani, A., Rivera, M. A., & Hara, T. (2009). Assessing the viability of repeat visitors to cultural Events: evidence from the Zora! Festival. *Journal of Convention and Event Tourism*, 10, 89–104.
- Sharpley, R., & Jepson, D. (2011). Rural tourism: a spiritual experience? Annals of Tourism Research, 38, 52–71.
- Sherry, J. F., & Kozinets, R. V. (2007). Comedy of the commons: nomadic spirituality and the Burning Man festival. In R. W. Belk, & J. F. Sherry (Eds.), Research in consumer behavior, vol. 11: consumer culture theory (pp. 119–147). Oxford: Elsevier.
- Shuo, Y., Ryan, C., & Liu, G. (2009). Taoism, temples and tourists: the case of Mazu pilgrimage tourism. *Tourism Management*, 30, 581–588.
- Slavec, A., & Drnovšek, M. (2012). A perspective on scale development in entrepreneurship research. Economic and Business Review, 14, 39–62.
- Sparks, B. (2007). Planning a wine tourism vacation? Factors that help to predict tourist behavioural intentions. *Tourism Management*, 28, 1180–1192.
- Spirituality in Higher Education. (2004). Appendix A: College students' beliefs and values (CSBV) survey methodology. http://spirituality.ucla.edu/docs/reports/Spiritual_Life_College_Students_Full_Report.pdf (Accessed 04.05.13.
- SQW Ltd/TNS Travel and Tourism. (2005). Edinburgh's year round festivals 2005–2005. Economic Impact Study.
- St John, G. (2011). The Local Scenes and Global Culture of Psytrance. New York: Routledge.
- Thompson, K., & Schofield, P. (2009). Segmenting and profiling visitors to the Ulaanbaatar Naadam festival by motivation. *Event Management*, 13, 1–15.
- Timothy, D. J., & Conover, P. J. (2006). Nature religion, self-spirituality and new age tourism. In D. J. Timothy, & D. H. Olsen (Eds.), *Tourism, religion and spiritual journeys* (pp. 139–155). Abingdon: Routledge.
- Titmuss, C. (2000). Practicing with passion. In S. Kaza, & K. Kraft (Eds.), *Dharma rain:* sources of Buddhist environmentalism (pp. 257–260). Boston: Shambhala.
- Uysal, M., Gahan, L., & Martin, B. (1993). An examination of event motivations: a case study. Festival Management and Event Tourism, 1, 5–10.
- Van Gennep, A. (1960). *The rites of passage*. Chicago: The University of Chicago Press. Van Zyl, C., & Botha, C. (2004). Motivational factors of local residents to attend the Aardklop national arts festival. *Event Management*, 8, 213–222.
- Vargas-Sánchez, A., Porras-Bueno, N., & Plaza-Mejía, M. (2011). Explaining residents' attitudes to tourism: is a universal model possible? *Annals of Tourism Research*, 38, 460–480.
- VisitScotland (n.d.). Scotland: The key facts on tourism in 2011. http://www.visitscotland.org/pdf/VS Insights Key Facts 2012_Final.pdf. Accessed 02.10.13.
- Vukonić, B. (1992). Medjugorje's religion and tourism connection. Annals of Tourism Research, 19, 79–91.
- Willson, G. B. (2011). The search for inner peace: considering the spiritual movement in tourism. *The Journal of Tourism and Peace Research*, 1, 16–26.
- WTO (World Tourism Organisation UNWTO) (n.d.). Understanding tourism: Basic glossary. http://media.unwto.org/content/understanding-tourism-basic-glossary. Accessed 18.12.13.
- Yolal, M., Çetinel, F., & Uysal, M. (2009). An examination of festival motivation and perceived benefits relationship: Eskişehir international festival. *Journal of Convention and Event Tourism*, 10, 276–291.
- Yolal, M., Woo, E., Çetinel, F., & Uysal, M. (2012). Comparative research of motivations across different festival products. *International Journal of Event and Festival Management*, 3, 66–80.
- Yu, C.-P., Chancellor, H., & Cole, S. (2011). Measuring residents' attitudes toward sustainable tourism: a re-examination of the sustainable tourism attitude scale. *Journal of Travel Research*, 50, 57–63.
- Yuan, J. J., Cai, L. A., Morrison, A. M., & Linton, S. (2005). An analysis of wine festival attendees' motivations: a synergy of wine, travel and special events. *Journal of Vacation Marketing*, 11, 41–58.
- Zhou, Q., Zhang, J., & Edelheim, J. (2013). Rethinking traditional Chinese culture: a consumer-based model regarding the authenticity of Chinese calligraphic landscape. *Tourism Management*, 36, 99–112.
- Zinnbauer, B., Pargament, K., & Scott, A. (1999). The emerging meanings of religiousness and spirituality: problems and prospects. *Journal of Personality*, *67*, 889–919.



Catherine Matheson is Senior Lecturer in Events Management at Queen Margaret University. Her research interests are in event development, motivation and satisfaction, event-led urban regeneration strategies and human rights and events.



Ross Tinsley is Head of Research at the HTMi, Hotel and Tourism Management Institute (Switzerland). His research interests are in the identity and evolution of counterculture events, social anthropology and qualitative methodology. He has also researched and published on small tourism businesses and destination development within both developed and developing country contexts.



Russell Rimmer is Professor of Research Development at HTMi, Hotel and Tourism Management Institute (Switzerland) and Emeritus Professor at Queen Margaret University (UK). His research interests are in quantitative modelling in the social and management sciences, with publications on women's career development, quality of service delivery, strategic behaviour among business and management students, interventions to improve approaches to learning, income distribution in corporate economies and the dynamics of work, performance and remuneration.