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Service Performance Quality Evaluation and Satisfaction in a USA Wine Festivalscape: Buying Behavioural Effects

ABSTRACT

Purpose: The study examined the links between perceived festival service performance quality, satisfaction, buying wine at the event, and the first-time/repeat tourist dynamic.

Design/methodology/approach: The research was conducted on 368 attendees at a major wine festival in the northeast USA using intercept face-to-face interviews.

Findings: The facility-related quality aspects are a stronger predictor of buying behaviour than activity-related aspects and amenities. A relationship between performance quality perception and satisfaction could not be found.

35-year and older repeat visitors are the highest yielding festival visitor group from a financial viewpoint. First-timers are far more short-term oriented than repeat visitors when making the final decision to attend the festival event.

Research implications: It is very important to achieve a high degree of repeat festival attendance as this directly influenced the financial gains in selling more wine. The nature and types of activities offered at a festival must be cohesive with the theme of the event. The festival activities offered should be continually evaluated for signs of wearout, and renewed, or replaced if necessary.

Originality/value: The research provides a new perspective to festivalscape knowledge in that it identifies the first-time and repeat visitor dynamic as a strong predictor of actual buying behaviour at a festival. The higher the proportion of repeat visitors, the higher the likelihood of (wine) buying.

Keywords: Servicescape; Festivalscape; Performance quality perception; Behavioural intention; Repeat tourist; First-time tourist

1. INTRODUCTION

Wine tourism is an extension of the rather complex relationship between wineries, wine region, and the tourist-consumer (Bruwer and Alant, 2009). Wine tourism has not yet been greatly endowed with in-depth theory and definitions related to main

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research field(s), namely tourism and leisure (Alant and Bruwer, 2010; Sparks, 2007). In addition, despite an increased interest in this special-interest tourism field, no cohesive theory of wine tourist behaviour has so far been postulated (Bruwer and Lesschaeve, 2012a).

To date, most wine tourism research has focused on what motivated tourists to taste and buy wine when visiting regional wine destinations (Bruwer and Johnson, 2010; Cohen and Ben-Nun, 2009). Most often these destinations were wineries, and more specifically their tasting rooms where staff directly interacted with tourists. Researchers concentrated far less on special events such as wine festivals; however, this is rapidly changing. A recent analysis of the nature and scope of 423 research studies concluded that the level of scholarship has improved considerably over the past decade or two (Getz, 2010). Three of the identified festival-related research themes were economic impact (132 citations), marketing (57 citations), and evaluations (36 citations), which all assessed quality or satisfaction (Getz, 2010).

Festivals, events generally short in duration, vary widely from “a sacred or profane time of celebration, marked by special observances” (Falassi, 1987, p.2) to “themed public celebrations” (Getz, 2005, p.21) to being “unique travel attractions" (Gursoy *et al*., 2004, p.171). Festivals are often credited with playing a role in sustainable tourism of the local area by facilitating learning about the region’s customs, residents’ ethnic backgrounds, and unique cultural heritage (McKercher *et al*., 2006). It has been widely touted that festivals have profound economic benefits for local communities. The supposed beneficial economic impact on the host community is one of the most important reasons for arranging a festival in the first place, resulting in a higher proportion of the literature devoted to understanding the economic

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benefits and strategies for increasing consumer involvement and spending (Jackson *et al*., 2005).

Festivals can also be used as a means to brand destinations and create an identity that appeals to consumers and encourages them to visit. Perceived brand image may differ between smaller city or county-based wine festivals and larger and more prestigious events held in major metropolitan areas. Differences are not only due to size of the region where the festival is held but also the level of local community involvement (Lee and Arcodia, 2011). Attracting tourists from outside the local area has led to a change in how different stakeholder groups view festivals (Shanka and Taylor, 2004). Demographic factors such as gender, income, and family life cycle stage may affect distance travelled to destinations where festivals are held (Bagley and Mokhtarian, 2002).

2. LITERATURE REVIEW

Wine tourism has been described simplistically as visiting a winery to taste and make a purchase to an activity that involves travelling to wine trails and wine regions to gain exposure to the local lifestyle. More specifically, Hall et al. (2000, p.3) use a market-based definition to define wine tourism as visitation to vineyards, wineries, wine festivals and wine shows for which grape wine tasting and/or experiencing the attributes of a grape wine region are the prime motivating factors for visitors". Getz (2000) in his demand-based definition stated that "wine tourism is special-interest travel based on the desire to visit wine-producing regions, or in which travellers are induced to visit wine-producing regions, and wineries in particular, while travelling for other reasons". The Winemakers' Federation of Australia (1998) adopted a product-

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based definition: “visitation to wineries and wine regions to experience the unique qualities of contemporary Australia lifestyle associated with enjoyment of wine at its source - including wine and food, landscape and cultural activities”. The fact that wine tourism can be defined from these different perspectives was first highlighted by Carlsen and Charters (2006). Dodd and Beverland (2001) identified five lifecycle stages in the development of wine tourism: winery establishment, winery recognition, regional prominence, maturity, and decline. In the maturity stage, the wine tourism offering is enhanced by festivals and special events. The topic of our research, namely wine festivals, hence clearly fits squarely within the ambit of wine tourism.

2.1 Service Quality and Satisfaction within the Servicescape of Festivals

A servicescape is defined as “the environment in which the service is assembled and in which the seller and customer react, combined with tangible commodities that facilitate performance or communication of the service” (Booms and Bitner, 1981, p.36). According to Bitner (1992) the servicescape is assembled by three distinct dimensions, namely, ambient conditions, space/function and signs, symbols and artifacts and that the physical environment in which a service response was experienced affected consumer’s perception of service quality and satisfaction. Reimer and Kuehn (2005, p.785) asserted that “the servicescape has a direct and an indirect effect on perceived service quality, which leads the servicescape to have a high overall effect.” The servicescape context has been likened to what has been described as ‘festivalscape’ (Lee *et al*., 2008), and to “the general atmosphere experienced by festival patrons” (Lee *et al*., 2008: p.57).

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It is appropriate to adapt the servicescape approach to wine festival event research, as supported by a recent study executed by Siu *et al*. (2012). The researchers concluded that servicescape elements positively influenced consumers' perceived quality of the service provided. Furthermore, perceived service quality has a positive effect on customer satisfaction within the servicescape (Wakefield and Blodgett, 1996). Figure 1 depicts the interrelationships between quality perception, satisfaction, and behaviour within the servicescape. A festivalscape encompasses several cues and it is the tangible ones that affect attendees' attitudes and behaviour, just as in the classical retailing and service environments (Lee *et al*., 2008).

[TAKE FIGURE 1 IN HERE]

2.2 Wine Festivalscape

A wine festivalscape encapsulates the servicescape concept first identified by Bitner (1992). Although wine festivals are often transient and of a short duration these two factors have the potential to create intense tourist experiences (Yuan *et al*., 2008). This provides further rationale for focusing research on the assessment of service (performance) quality of various festivalscape elements. Tourist characteristics and their perception of wine festival quality have also rarely been investigated (Bruwer, 2003). Within the tourism and special event literature there are a number of studies that have identified festivals as a distinctive type of special event that encompasses a set of attributes that, when combined, offer a unique experience (Axelsen and Swan, 2010; Bruwer, 2002, 2004; Getz, 2005).

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Wine festivals can be described as events highlighting regional wines and/or offering wine-themed activities and programmes (adapted from Lee and Arcodia, 2011, p.357). In many cases, wine festivals have become a popular way for towns, both large and small, to express their unique character and distinctiveness (Lee and Arcodia, 2011). This type of event is not only an important marketing tool for the region where it is held but also for individual wineries that exhibit, thus assisting them with creating brand awareness and loyalty, educating, entertaining, and encourage future visitation, and encouraging wine sales (Bruwer, 2002, 2003; Famularo *et al*., 2010; Getz and Cheyne 2002; Houghton 2001; Johnson and Bruwer, 2007; Yoon et al., 2010; Yuan *et al*., 2006).

Within a specific wine region, a wine and food festival event not only attracts tourists, but is also instrumental in developing and/or reinforcing consumers' beliefs that quality wines can be produced in the region. On the other hand, if regional recognition is lacking, a thriving wine industry could provide an important catalyst in developing a regional cuisine and culinary identity. Many wine festivals are hosted at central locations within wine regions with good infrastructure or in major cities, such as New York or San Francisco. Holding a festival in a conveniet location may attract consumers who not able to or do not intend to visit a winery or wine region (Park *et al*., 2008).

Yuan *et al.* (2005a: p.54-55) stated that although wine tasting was the most important reason for attending a festival, wines, escapism, and socialisation motivated consumers to attend, and provided an opportunity for 'family togetherness.' Since wine festival attendees' motivations and needs vary, segmentation should be used to develop consumer profiles that can be targeted with specific marketing strategies

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(Yuan *et al*., 2005b). In some cases, it is the actual destination (destination hub) where the event is held that motivates consumers to attend (Alant and Bruwer, 2004). In other cases, it is the actual activity, for example, the actual wine and food festival that is the primary attractant (Bruwer, 2002). Nicholson and Pearce (2001) found little evidence that generic motivations exist that encourage festival attendance; rather, they concluded that event-specific factors are especially important. Furthermore, evidence exists that wine tourists who attend wine and food festivals in Australia regularly consume wine (Bruwer, 2002; Taylor, 2006).

2.3 Perceived Service and Performance Quality

Although there is little agreement on how to best define quality, service quality has been described as a "global judgment or attitude relating to the superiority of the service (Parasuraman *et al*., 1988, p.16). Cunnell and Prentice (2000) point to its importance because of rising competition, increased consumer choice, and other forces and distinguish between researcher-defined and consumer-defined conceptualisations. The literature (Getz, 2010; Tkaczynski and Stokes, 2010), reveals that researcher-defined conceptualisations are by far the most common of the two approaches. O'Neill *et al*. (1999) emphasize the fact that service quality is a customer issue and if the service experienced meets consumers' expectations they will be satisfied. Following this, it has been shown that both service quality and tourist satisfaction influence the future behavioural intentions of festival attendees (Baker and Crompton, 2000; Cole *et al*., 2002; Lee *et al*., 2007), while Cole and Illum (2006) found that experience quality had a direct impact on attendees' future behavioural intentions.

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Perceived service quality refers to the consumer's evaluation of a service experience (Parasuraman *et al*., 1988). Researchers have generally supported the premise that expectation is an essential component of the measurement of service quality (Akama and Kieti, 2003; Alexandris *et al*., 2002; Parasuraman *et al*., 1994); a notion also referred to as the disconfirmation measure of service quality (Lee and Beeler, 2007). There has been an ongoing debate about how to measure service quality and a distinction has also been made between service quality and performance quality. The soundness of the disconfirmation measure of service quality has also been questioned by some (Bruwer, 2012; Cronin and Taylor, 1992; Lee and Beeler, 2007). Specifically, Crompton and Love (1995) found that the performance-based measure is the most valid service quality measure and also has the best predictive validity (Lee and Beeler, 2007). It should also be noted that only after attendees assessed the performance quality of a festival, an appraisal of the experience quality occurs (Cole and Illum, 2006).

From a managerial viewpoint, performance quality is the attribute(s) of a service controlled by a tourism supplier (Baker and Crompton, 2000) within its servicescape environment. Satisfaction, on the other hand, refers to the "tourist's emotional state after exposure to the opportunity" (Baker and Crompton, 2000, p.785) and hence the moderating effect of expectations. Baker and Crompton (2000, p.787) define performance quality as "a measure of a provider's output, whereas level of satisfaction is concerned with a tourist's outcome." The quality of the experience that pertains to a festivalscape, can be controlled and manipulated by the service provider (Lee *et al*., 2007), for example the wineries who host the event and the management committee.

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There is widespread acceptance of the need to measure service quality and at least some consensus on two aspects of its conceptualisation, namely that service quality relates to tourists' perceptions of the (festival) provider's performance and that their perceptions of experience quality defines the satisfaction construct (Childress and Crompton, 1997). However, the debate about conceptualisation of performance quality and satisfaction constructs rages on, as does the nature of their interrelationships (Baker and Crompton, 2000). Not surprising, festival research (36 studies) abound that evaluate service quality and performance as per a recent macro-analysis conducted by Getz (2010). Among these studies, Baker and Crompton (2000) used four dimensions: 1) generic festival features, 2) specific entertainment features, 3) information sources, and 4) comfort amenities to measure the relationship between quality and satisfaction. This conceptual platform has since been used by other researchers to evaluate attendees' perception of festival quality (Cole and Chancellor, 2009; Lee *et al*., 2008; Lee *et al*., 2007). It should be recognised; however, that the measurements used to evaluate service quality at festivals have more often than not been situation-specific (Park *et al*., 2011).

2.4 Service Quality Satisfaction

Although service quality perception and satisfaction are linked, it is important to make a distinction between service quality and service satisfaction. Cronin and Taylor (1992, p.65) suggested that "service quality is an antecedent of consumer satisfaction." Satisfaction is in turn, believed to affect post-purchase (consumption) perceptions and future decisions (Getz *et al*., 2001). Quality perception is the cognitive response to a service experience whereas satisfaction is the affective response to it (Petrick, 2004). Although one would logically assume a causal

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relationship between positive service performance quality perception and satisfaction, this cannot always be assumed. As a consequence, there has been several attempts to define satisfaction, for example “satisfaction is the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer’s prior feelings about the consumption experience” (Oliver, 1981, p.27). In our study we operationalized festival satisfaction for practical reasons as overall satisfaction. This is analogous to the definition of Anderson et al. (1994, p.54) who defined it as “an overall evaluation based on the total purchase and consumption experience with a good or service over time”. Therefore, an attendee’s overall festival satisfaction is more of a holistic attitude towards the event (Cole *et al*., 2002).

Baker and Crompton (2000) concluded that perception of festival service quality satisfaction indirectly influenced tourists’ behavioural intentions. Cole and Scott (2004) suggested that in order to better understand satisfaction, it was best to assess it in the context of the total cumulative experience. Although there is broad consensus that service quality and satisfaction were indeed different constructs, there appears to be little agreement about the nature of their relationship (Cole and Crompton, 2003). Our study did not focus on defining the relationship between service quality and satisfaction, and hence satisfaction was operationalized as overall satisfaction and only its relationship with the service quality dimensions was explored.

2.5 (Buying) Behavioural Intentions

Both the disconfirmation (Servqual) and performance-based approaches to the assessment of service quality assume an effect on behavioural intentions of

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customers. The mediating role of satisfaction in the relationship between service quality and behavioural intentions has also been confirmed (Cole and Crompton, 2003). Whereas this by no means guaranteed that actual buying behaviour would occur, Zeithaml *et al*. (1996) contended that behavioural intentions were desirable behaviour or actions that tourists anticipate they would exhibit in future and developed a thirteen-item scale to measure behavioural intention. Cole and Crompton (2000) found that the impact on behavioural intentions was indirect through overall service quality and overall satisfaction. Others (Baker and Crompton, 2000; Cole and Scott, 2004) found that both service quality and satisfaction had a direct impact on behavioural intentions, while Yuan and Jang (2008) asserted that satisfaction was an intermediate variable that might link perceived quality and behavioural intentions.

It was not long before the behavioural intentions aspect was examined in a few wine festival studies. This research measured behaviour in terms of likelihood of visiting local wineries and likelihood of buying locally-produced wines (Yuang and Jang, 2008), intention to revisit the festival, and positive word-of-mouth (Cole and Illum, 2006). Significantly none of these studies attempted to measure whether perceived service quality and satisfaction played a role in festival attendees' actual behaviour, specifically wine they purchased at festivals. Our study attempted to establish whether service performance quality perception and overall satisfaction influenced wine buying and whether previous festival attendance had a moderating effect on this action.

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2.6 First-time and Repeat Tourist Dynamic

As far as the service performance quality measure of a festival is concerned, there may be differences between first-time and repeat tourists (Lee and Beeler, 2007). Not surprising, the first-time and repeat tourist dynamic plays an important role in wine tourism participation (Bruwer *et al.,* 2012). Tourism decisions for both first-time and repeat tourists are influenced by a number of antecedents (Um *et al*., 2006). Lee and Beeler (2007) found that the future intentions and level of satisfaction of first-timers were based on their perception of the service quality, while repeat tourists were motivated by other factors such as socializing with family and friends or their need for having fun. The incidence of a high percentage of first-time or repeat wine tourism visitation could in some instances be attributed to the spatial relationship (or lack thereof) of the region with a big source market, as well as through product-related experiences (Bruwer and Lesschaeve, 2012b; Dodd, 1999). A high incidence of repeat visitation in wine tourism has been confirmed in studies conducted in Canada (Bruwer *et al*., 2012), and Australia (Bruwer, 2002). The need to distinguish between first-time and repeat wine festival tourists has also been emphasized (Bruwer *et al*., 2012; Shanka and Taylor, 2004).

It is generally accepted that a high level of service (performance) quality will result in satisfied festival attendees who are then more likely to communicate these positive experiences by word-of-mouth (WOM) and eventually become repeat tourists (Cole and Chancellor, 2009; Cole and Illum, 2006; Lee and Beeler, 2007). Yuan *et al*. (2008) made one of the only attempts to determine whether previous wine festival visits had an impact on perceived value and tourist satisfaction. They found that previous visits influenced the intention to attend the festival again, but had no effect

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on the level of satisfaction, while perceived value positively affected the intention to attend again. Studies conducted by Shanka and Taylor (2004) and Houghton (2001) found that while many annual festivals rely heavily on repeat tourists it is worthwhile identifying and analysing the attributes that significantly distinguish first-time attendees from repeat tourists. A recent wine and food festival study conducted in the U.S. by Park *et al*. (2008) focused only on first-time attendees. Identifying antecedents specific to the first-time and repeat tourist dynamic is thus relevant in our study as it is crucial to determine what aspects attract consumers that will have the greatest economic impact on wineries, festivals, and the surrounding community. Following the earlier discussion of the relevant constructs, Figure 2 represents a conceptual model of the expected interrelationships between all aspects discussed pertaining to the servicescape of a wine festivalscape.

[TAKE FIGURE 2 IN HERE]

3. METHODOLOGY

Operationalizing the service performance quality assessment of a festivalscape environment presents an ongoing challenge for researchers. Whereas most previous studies adopted the disconfirmation approach, in our study we used a three-step performance quality-based approach which included: 1) a literature review, 2) interviewing key informants, and 3) consulting with festival organisers. Following this, a symmetrical Likert scale consisting of 16 service quality and three satisfaction items was designed. The study's overall aim was to examine the links between perceived festival service performance quality, satisfaction, buying wine at the event, and the first-time/repeat tourist dynamic.

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To give direction to the research study, three research questions were developed: 1) What are the nature and number of dimensions of service performance quality of the wine festival servicescape; 2) is there a relationship between and influence exerted by the dimensions of service performance quality individually and collectively, and by satisfaction within the wine festival servicescape and the first-time and repeat tourist dynamic on wine sales (actual behaviour); and 3) What are the differences between first-time and repeat tourists in terms of antecedents that could influence their perception of service performance quality, satisfaction and wine buying at the wine festival?

The study was conducted at the annual Finger Lakes Wine Festival held at the Watkins Glen International, in Watkins Glen, New York. With around 80 wineries participating, the three-day July event attracts non-winery vendors and around 15,000-20,000 attendees. Recently it was named one of the Top 100 Events hosted in the U.S. by the American Bus Association (2011), underlining its status as a major wine festival. The event offers a range of wine and other culinary experiences, handcrafted product vendor booths, a variety of entertainment activities, and support services/ amenities.

A wine festival, with its large crowds, lots of activities and noise levels, presents a challenging environment to conduct research and hence a highly structured questionnaire was developed. The service attributes of the festival were identified in the questionnaire based on discussion with the event organizers and the existing service quality literature. A total of 16 scale-type items were developed to measure

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the service performance quality perception of the festival. Furthermore, three statements were developed to measure attendees' satisfaction with the festival. Information was also sought about attendees' socio-demographics, normal wine consumption behavior, and consumption of wine, food, and other products sold at the festival.

Researchers used random selection by asking every fifth person, age 21 years and older, who bought a ticket for the wine tasting to participate in the research. If a tourist declined to participate he/she was replaced with the next fifth person, and so on. Each respondent received a questionnaire that took between five to eight minutes to complete. Research administrators were available to respond to participants' questions regarding the questionnaire. No incentives were offered, but participants were offered a written guarantee of the confidentiality of their personal information. The response rate was satisfactory at just below 70% with a total of 368 respondents completing the survey. Responses were analyzed and statistically manipulated using SPSS 21.0 statistical software package.

4. RESULTS AND DISCUSSION

4.1 Socio-demographic Characteristics of Festival Tourists

Table 1 provides an overview of socio-demographic characteristics that individually or collectively could impact the festival tourists' behaviour. There is a predominance of female participants (68%) compared with males (32%) although this is not uncommon in wine tourism studies (Bruwer and Lesschaeve, 2012a). The age distribution of festival tourists; however, was fairly evenly spread between generational groups;

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Millennials (21-34 years) accounted for 33% of participants, Generation-X (35-44 years) for 27%, and Baby Boomers (45-65 years) for 38%, while Traditionalists (age 66 and older) were represented by only 2% of participants.

[TAKE TABLE 1 IN HERE]

The average median annual household income level in the U.S. was $46,071 (U.S. Census Bureau, 2010) yet by comparison, festival household income was noticeably higher with nearly 72% of households responding that they had an annual income in excess of $50,000. This is in all likelihood attributable to the high level of participants with a post-secondary education (73%). The small household size could also be a contributing factor to their relative affluence with the mean number of persons per household only 2.5, a figure which meant participants had very few dependent children younger than 21 years of age. It is insightful to note that a very high incidence of both adults, in multi-person households, were wine consumers. Finally, the ratio of in-state (New York) versus out-of-state tourists was roughly 2:1. The fact that the festival attracted 36% of tourists from other states provided further credence that it is a well-established and significant event.

4.2 Prior Festival Attendance Patterns and Decision to Attend by Tourists

The prior festival attendance levels and frequency of attendance are shown in Table 2. Festival participant responses indicated that 53% were repeat tourists. Some festival 'loyalty' was evident in that 38% of participants had attended the event the previous year. Moreover, 38% attended both days of the festival during which this study was conducted, with a significantly greater percentage of out-of-state tourists doing so

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compared to in-state tourists. It was insightful that almost all out-of-state repeat tourists had attended the event the previous year, another indication of some event 'loyalty'.

[TAKE TABLE 2 IN HERE]

The research also investigated whether first-time and repeat tourists differed regarding how long (days or weeks) before the event they made the decision to attend, as this would indicate level of familiarity with the event and of risk perception (Table 3). There was a highly significant difference ($\chi^2 = 78.355$, $p = .000$) in terms of this decision timeframe for first-time and repeat tourists. Repeat tourists decided significantly earlier than first-time tourists to attend the event, once again an indication of their involvement with and likely festival 'loyalty'.

[TAKE TABLE 3 IN HERE]

4.3 Festival Wine Buying Activity-related Factors

Finally, pertaining to base variables, Table 4 exhibits the wine festival wine buying activity-related factors for different attendee groups/segments. This analysis provides context to the core evaluation of the study which was to determine the relationship between service performance quality perception of festival elements and overall satisfaction and their influence (or not) on wine purchasing at the event. First-time and repeat tourists differed significantly as far as having bought the same wine at the festival as they did in retail outlets during the six month period that preceded the festival. Whereas slightly more repeat tourists (66%) bought wine to take home at the festival that first-time tourists (62%), the difference of having an established

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connection with the brand(s) between repeat (49%) and first-time tourists (33%) was significant (p = .009). Furthermore, repeat tourists bought significantly more bottles of wine (13.2) and spent significantly more money on wine ($137.29) than their counterparts. Overall, repeat tourists also spent significantly more on everything they purchased at the festival ($181.27) than first-time tourists. These findings clearly underline the differences between first-time and repeat tourists and the rationale for using them in the first place as predictor variables in the festivalscape service quality model, specifically the economic value of repeat tourists.

[TAKE TABLE 4 IN HERE]

Gender is intertwined with many aspects of human behaviour (Meyers-Levy and Maheswaran, 1991) and differences have been detected between male and female wine consumers (Bruwer *et al*., 2011), yet this study did not identify any significant differences among festival attendees based on gender. Slightly more females (66%) bought wine at the festival compared to males (61%), but differences relating to other activities such as number of bottles bought and amount spent were insignificantly small (Table 4). When considering the age demographic, differences were far more profound, as has been the case in other studies (Bruwer *et al*., 2011). Incidence of wine purchases was slightly greater for participants who were older than 35 year of age (66%) than participants who identified with the Millennial generation (60%). However, when a comparison was made between the wine buying factors specific to what occurred at the festival, the older group bought significantly more wine (12.8 bottles), spent significantly more money on wine ($132.24), and overall on everything they purchased at the festival ($176.65).

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4.4 Festivalscape Factor Analysis and Structural Model

Next, the research examined the nature of the wine festivalscape in the context of servicescape theory using perceived service performance quality of the festival and satisfaction with the festival as predictors of wine buying at the event. As a first step, data obtained from the service performance quality measurement was examined. There were few outliers and data was found to be fairly normally distributed (Table 5). The levels of perceived quality with the pre-identified 16 festival service elements are also exhibited in Table 5. A five-point Likert scale was used for this purpose. The Cronbach alpha value for the scale overall of 0.913 is considerably above the minimum acceptable level of 0.70. This was also the case with each of the factors extracted (Tables 6 and 7), hence it was concluded that the scale yielded sufficiently reliable results to warrant further testing using these responses.

[TAKE TABLE 5 IN HERE]

The first step in the process was assessing the suitability of the data for factor analysis. First, two main issues were considered: 1) strength of the relationship among items, and 2) sample size. Tabachnick and Fidell (2001) indicated that a sample size of at least 300 is required for factor analysis which this study exceeded (n = 368). The vast majority of items in the dataset have correlation coefficients in excess of 0.5 as per the directive provided by Tabachnick and Fidell (2001). Next, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's statistical test of sphericity were used to help assess the factorability of the data.

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Although three of the communalities after extraction were below 0.5 (Table 6), which could suggest that a sample size above 500 was required (MacCallum *et al*., 1999), the KMO measure of sampling adequacy was 0.904 which was way above the recommendation of 0.5 (Kaiser, 1974). In fact, this value falls within the category (>0.900) that can be regarded as 'marvellous' according to Hutcheson and Sofroniou (1999). Bartlett's test to examine whether the correlations between scale items were sufficiently large for factor analysis to be appropriate yielded: (χ^2 (120) = 901.639, p < .000) and indicated that correlations within the R-matrix were sufficiently different from zero to warrant factor analysis. All the evidence therefore suggests that the sample size (n = 368) was adequate and the strength of the relationships among items was sufficient to yield distinct and reliable factors from the analysis. To investigate the underlying structure of the scale items in the questionnaire, data collected from respondents was subjected to principal component (PCA) analysis as an extraction method, utilising oblimin as the rotation method with Kaiser normalization. Oblimin rotation was considered appropriate as it could not be assumed that all scale items were not correlated.

[TAKE TABLE 6 IN HERE]

Results in Table 6 show that two factors with eigenvalues exceeding 1.0 were identified as underlying scale items measuring festival quality perception. In total, these factors accounted for around 49% of variance. The screeplot showed a break between the second and third components in the process, also pointing to the existence of two factors. Finally, to be confident about the number of factors extracted, parallel analysis was conducted using the Monte Carlo PCA technique.

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The parallel analysis yielded random eigenvalues above 1 of respectively 1.3758 (0.0379 SD) and 1.2927 (0.0308 SD) also confirming there were two components to the factor matrix, the same result obtained in both the screeplot and by means of oblimin rotation with Kaiser normalization. It was therefore decided that a two-factor solution was indeed optimal in the circumstances. Separate factor analysis was conducted for tourist satisfaction with the festival (three items) and this revealed one factor. Reliability analysis showed acceptable alpha levels of > 0.70 for each of the factors extracted and confirmed that the scale used to measure festival quality perception and satisfaction was indeed reliable (Table 6).

[TAKE TABLE 7 IN HERE]

Table 7 provides an exposition of the pattern matrix plus information on correlations among the factors. Latent variables (wine buying and tourist type) were categorical in nature and hence multiple regression was not suitable for the structural model. This necessitated the use of logistic regression to assess the impact of a set of predictors such as perceived quality and overall satisfaction on a dependent variable (wine buying). Ideally predictor variables will be strongly related (above r = 0.9) otherwise multicollinearity may exist.

Logit analysis results are reflected in Table 8. To determine how well the regression model performs the goodness-of-fit test (Hosmer and Lemeshow test) supported the model as being worthwhile ($\chi^2 = 8.188$, 8 df, $p = 0.415$) as good fit was indicated by a significance value greater than 0.05 which was the minimum allowed. The pseudo R square statistics were 0.023 and 0.033, respectively, indicating that between 23%

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and 33% of the variability was explained by the set of variables. The positive predictive value of the model was 71.3% indicating that of the people predicted to buy wine at the festival, the model accurately predicted 71.3% of them.

[TAKE TABLE 8 IN HERE]

The variables in the equation (Table 8) reflected the contribution or importance of each of the predictor variables. The values of the Wald test indicated the variables that contribute significantly to the predictive ability of the model. It can be seen that only the first-time repeat tourist dynamic ($p = 0.004$) contributed significantly to the predictive ability of the model. Examination of the odds ratios (Exp B) for each of the independent variables revealed facility-related festival quality aspects and first-time repeat tourist status were significant predictors with values >1. The upper level of the 95% confidence interval of the odds ratios shows a narrow spread (1.650 to 4.257) and indicates a 95% certainty that the actual value of the odds ratio lies somewhere between 1.650 and 4.257. The negative values for activity-related features, and satisfaction overall indicate that, the more satisfied overall and the higher visitors perceive those two festival dimensions, the lower the likelihood they will buy wine at the event.

[TAKE FIGURE 3 IN HERE]

Figure 3 shows the values and directions of the various relationships identified by the statistical procedures discussed. Results obtained by the logit regression model indicated that actual buying behaviour was influenced by service quality perception albeit not to the same degree by each dimension. This is akin to previous studies

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(Lee *et al*., 2008; Cole and Illum, 2006; Baker and Crompton, 2000, etc.) where only behavioral intentions were confirmed. The first-time/repeat tourist dynamic played a moderating role in the buying behaviour outcome with repeat tourists exhibiting the greatest positive influence.

5. CONCLUSIONS

Whereas most previous research on service quality used the disconfirmation approach, our study adopted the service performance quality-based approach which arguably produces more robust results as per Lee and Beeler's findings (2007). As a consequence, our study did not confirm the four festivalscape dimensions identified by Baker and Crompton (2000), instead it identified two strongly grounded dimensions: 1) festival facility-related aspects, and 2) festival activity-related aspects and amenities as indicators of service performance quality perception. As in some other studies, a strong relationship between performance quality perception and satisfaction could also not be found. This study also provided a new perspective to the festivalscape knowledge base in that the first-time and repeat tourist dynamic was a strong predictor of wine purchasing behaviour at festivals. The greater proportion of repeat tourists, the greater the likelihood that wine will be purchased. Facility-related quality aspects were a stronger predictor of wine purchasing behaviour than activity-related aspects and amenities. In all, there were relatively strong correlations between the first-time/repeat tourist dynamic, festival quality perception, and wine buying behaviour.

The festival attendees' profile is mainly female, 35 years and older, highly educated (73% hold a post-secondary qualification), and in high income with 75% of their

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households earning above the national median annual income. They are mainly (64%) based in the festivals' home state (NY). Previous attendance of the festival (53%) is almost on an equal basis with first-time attendance (43%) with 38% having also attended the festival in the previous year.

Our study differs from previous ones in that contrary to the common approach of attempting to link behavioural intentions to quality perception and satisfaction of a festival, it provided new insights on the link with actual (buying) behaviour and how this is moderated by the first-time/repeat festival tourist dynamic. As such it provided a direction based upon which further research can be conducted. The study provides evidence that repeat tourists plan much more in advance to attend an event than first-time tourists, with 46% of the former deciding six months or more in advance to attend. First-time tourists were more likely to decide within the month prior to the event (58%). Pertaining to responses regarding income generated during such events, repeat tourists bought more bottles of wine, spent more money on wine, and also spent more money overall on everything they purchased at the festival than their counterparts. Tourists from out-of-state (whether first-time or repeat tourists) were more likely to have attended both days of the festival than in-state tourists. There was also a strong indication that older participants (35 years age or older) spent more money than Millennials (<35 years old).

From a practical implications viewpoint, if an objective of the festival is to sell as much wine as possible, it is of the utmost importance to encourage repeat attendance as this correlates with financial gains from selling more wine. This also aligns with studies conducted in Canada (Bruwer *et al*., 2012), and Australia (Bruwer, 2002) which

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confirmed the importance of repeat visitation in wine tourism. With 64% of repeat attendees originating from in-state locations, advertising and promotion of the event can be focused on media such as local newspapers, cinemas and billboards. The vast majority (77%) of the repeat visitors made the final decision to attend two months or longer before the event, and therefore when the event is advertised the advert should be of a reminder/reinforcement nature. Another interface opportunity the festival event has with prospective attendees is in liquor retails stores where wines from the region are sold. As these locations are relatively easily traceable en reachable, the event can also be advertised in-store using flyers, brochures, etc. This strategy is likely to reach more repeat visitors since 49% of repeat visitors (vs. 33% first-timers) bought wines from the region in the 6-month period prior to the festival.

Whereas it is possible to retain festival attendees on the one hand, it is on the other hand also important that new visitors be attracted to the event each year as many attendees attend once, and not again. This is why ongoing monitoring is essential as it will provide insights as to why people attend and whether they intend to attend the event again. Using the servicescape approach as developed in this study, the service performance quality evaluation of both facility- and activity-based aspects can be assessed against benchmarks set, gaps in service quality identified, and steps taken to address shortcomings as they arise. The fact that activity-related aspects and amenities did not have the same positive effect on buying behaviour, as facility-related aspects, does not mean these are relatively unimportant. From a managerial viewpoint it is clear that the nature and types of activities offered at a festival must be cohesive with the theme of the event, for example, wine seminars 'fit' well with a wine festival. To increase wine buying at the festival, information of an easy-to-understand

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nature about the wines should be available and education provided, for example in the form of seminars and from the staff selling wine at the booths. The wine pick-up service transporting wine bought to the attendees' vehicles should be efficient and either cost free or at minimal charge. It is also important that the activities offered at a wine festival should be continually evaluated for signs of wearout, and renewed or replaced, if necessary.

The measures of service quality and satisfaction were not developed using formal procedures and hence are a limitation of this study. The benchmarking of a festival against others of a similar nature, for example food and wine, would be difficult in reality as much variability exists between events. Events have different key features and the location of the wine region where such a festival is held would impact on the atmosphere created, while attendee socio-demographics will also introduce further variability.

The performance-based evaluation of service quality approach should be tested in a variety of festival environments to build further on the notion that it delivers more robust results than the more 'popular' disconfirmation approach. Research studies should also explore the difference(s) between behavioural intention (as in several past studies) and actual behaviour (as in our study) and their respective relationships with perceived service performance quality and satisfaction of a festival in the wine tourism field. Finally, the influencing effect of positive word-of-mouth (WOM) communication on repeat attendance of festivals and its relationship with performance-based evaluation of service quality and overall satisfaction should be further explored.

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Table 1: Socio-demographic Characteristics of Wine Festival Tourists			
Characteristic	**Male (%)** (n =118)	**Female (%)** (n = 250)	**Total (%)** (n = 368)
Gender:	32.1	67.9	100.0
Age Group:			
21 - 24 years	5.9	8.0	7.3
25 - 34 years	24.6	25.6	25.3
35 - 44 years	28.8	26.8	27.4
45 - 54 years	23.7	30.8	28.6
55 - 65 years	13.6	7.2	9.2
65 + years	3.4	1.6	2.2
Education Level:			
No post-secondary qualification	25.7	27.1	26.6
Undergraduate post-secondary qualification	57.5	55.4	51.9
Postgraduate post-secondary qualification	16.8	17.5	25.8
Annual Household Income* Level:			
≤ $50,000 per year	25.4	29.9	28.5
$50,001 - $75,000 per year	20.8	24.4	23.2
$75,001 - $100,000 per year	33.1	22.2	25.7
$100,001 - $150,000 per year	16.0	17.6	17.1
$150,001 - $200,000 per year	2.8	4.5	4.0
$200,000 + per year	1.9	1.4	1.5
Origin - Place of Permanent Residence			
In-state (New York)	64.4	63.2	63.6
Out-of-State (Outside of New York/Overseas)	35.6	36.8	36.4
Number of Persons in Household:	**Means**	**Means**	**Means**
Persons under 21 years old	0.53	0.63	0.60
Persons ≥21 years old who drink wine	1.94	1.94	1.94
Persons in household (minimum size)	2.47	2.57	2.54

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Table 2: Prior Attendance Incidence and Frequency of the Festival Tourists					
	Tourist Groups by Origin			Test-statistic	
Incidence of Previous Attendances	**Overall %** (n = 368)	**In-State %** (n = 234)	**Out-of-State %** (n = 134)	**Chi-Square χ^2**	**Sig#**
Attended the wine festival in the past	53.3	63.6	36.4	0.900	0.343
Attended the wine festival last year	38.3	39.7	35.8	0.555	0.456
Attended on both days of this year	38.1	34.4	44.8	3.722	0.048*
				Anova	
Number of Previous Attendances	**Mean**	**Mean**	**Mean**	**F**	**Sig (2-sided)**
Number of times previously attended	1.32	1.38	1.19	1.054	0.305

* significant at 0.05 level; Grouping variable: New York state-based vs. Out-of-state-based tourists
# Sig = Significance
χ^2 = Chi-square

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Table 3: When Final Decision Was Made to Attend the Festival					
	Tourist Groups by Attendance History			Test-statistic	
Timing of Decision	**Overall %** (n = 368)	**First-time %** (n = 172)	**Repeat %** (n = 196)	χ^2	**Sig**
Day of the festival	0.8 (0.8)	1.2 (1.2)	0.5 (0.5)	78.355	0.000*
Day before the festival	4.9 (5.7)	5.8 (7.0)	4.1 (4.6)		
Previous week	10.9 (16.6)	15.7 (22.7)	6.6 (11.2)		
Previous month	22.8 (39.4)	34.9 (57.6)	12.2 (23.4)		
Two to six months prior	33.2 (72.6)	35.4 (93.0)	31.1 (54.5)		
More than six months ago	27.4 (100.0)	7.0 (100.0)	45.5 (100.0)		

* significant at 0.05 level; ( ) cumulative %; Grouping variable: first-time vs. repeat tourists
χ^2 = Chi-square

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Table 4: Buying Activity-related Factors and Festival Attendee Groups					
Festival Buying Activity-related Factor	**Total** (n = 368)	**First-time** (n = 172)	**Repeat** (n = 196)	**χ^2**	**Sig (2-sided)**
Bought wine to take away	64.1	61.6	66.3	0.879	0.348
Bought same wine at retail within last 6 months	42.3	33.3	49.0	6.733	0.009*
				F-value	**Sig (2-tailed)**
Total amount spent on wine ($)	117.34	92.65	137.29	8.591	0.004*
Number of bottles of wine bought	11.19	8.68	13.24	8.267	0.004*
Average price paid per bottle ($)	12.24	12.16	12.32	0.047	0.829
Total amount spent at the festival	161.02	135.83	181.27	7.255	0.007*
Festival Buying Activity-related Factor	**Total** (n = 368)	**Male** (n = 118)	**Female** (n = 250)	**χ^2**	**Sig (2-sided)**
Bought wine to take away	64.1	61.0	65.6	0.732	0.392
Bought same wine at retail within last 6 months	42.3	43.2	41.8	0.043	0.835
				F-value	**Sig (2-tailed)**
Total amount spent on wine ($)	117.34	116.87	117.55	0.002	0.968
Number of bottles of wine bought	11.19	11.47	11.07	0.054	0.816
Average price paid per bottle ($)	12.24	11.52	12.56	1.643	0.201
Total amount spent at the festival	161.02	160.43	159.37	0.003	0.954
Festival Buying Activity-related Factor	**Total** (n = 368)	**<35 years** (n = 120)	**≥35 years** (n = 248)	**χ^2**	**Sig (2-sided)**
Bought wine to take away	64.1	60.0	66.1	1.321	0.250
Bought same wine at retail within last 6 months	42.3	46.2	40.7	0.673	0.412
				F-value	**Sig (2-tailed)**
Total amount spent on wine ($)	117.34	83.62	132.24	8.772	0.003*
Number of bottles of wine bought	11.19	7.47	12.82	9.820	0.002*
Average price paid per bottle ($)	12.24	12.79	12.01	0.937	0.334
Total amount spent at the festival	161.02	128.23	176.65	8.879	0.003*

Grouping variables: gender, age, and first-time vs. repeat visitation; * significant at 0.05 level
χ^2 = chi-square

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Table 5: Festivalscape Elements - Service Performance Quality Perception Ratings			
Festivalscape Element	**Mean***	**Standard Deviation**	**Variable**
Festival's theme	4.27	0.866	0.750
Festival brochure and poster	4.22	0.805	0.648
Music (band/s at festival)	3.91	0.951	0.904
Wine Seminars	3.81	1.038	1.078
Food Court (variety offered)	3.97	0.892	0.795
Wine pickup service	4.16	1.094	1.197
Live Demos	4.03	0.932	0.869
Restroom facilities	3.72	1.139	1.298
Access/parking arrangements	4.28	0.920	0.846
Ticketing arrangements	4.32	0.934	0.872
Event Program book	4.27	0.950	0.903
Seating quality and arrangements offered	3.98	0.874	0.764
Ease of moving around	3.83	0.984	0.969
Bus service VanGo Transport	3.78	1.046	1.094
Helpfulness of the staff	4.43	0.721	0.519
Watkins Glen International as venue	4.44	0.795	0.632

* 5-point Likert Scale: 1 = very dissatisfied to 5 = very satisfied

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Table 6: Results of Factor Analysis for Festivalscape and Overall Satisfaction Level				
Factors and Items	**Factor Loading**	**Eigenvalue**	**Variance Explained %**	**Reliability Coefficient**
F1: Festival Facility-related Aspects		6.499	40.617	.885
Festival's venue location	0.804			
Festival's theme	0.446			
Festival brochure and poster	0.443			
Access/parking arrangements	0.474			
Ticketing arrangements	0.735			
Event program book	0.729			
Seating offered	0.506			
Ease of moving around venue	0.628			
Bus service	0.546			
Helpfulness of staff	0.709			
F2: Activity-related Aspects and Amenities		1.3758	8.169	0.811
Music (bands playing at festival)	0.574			
Wine seminars	0.695			
Food court (quality and variety offered)	0.614			
Wine pick-up service	0.742			
Live demonstrations	0.703			
Restroom facilities				
Total variance % explained			48.787	
S1: Satisfaction		1.255	38.378	0.751
Expectations met overall	0.681			
Satisfied with decision to attend	0.457			
Positive feeling about attending festival	0.465			

* Oblimin rotation used (allow for fact that items could be correlated) with correlation coefficients set at >0.40

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Table 7: Correlation Matrices, Means, and Standard Deviations of the Factor Indicators			
Indicator	**1**	**2**	**3**
Wine Festival Performance Quality Perception			
F1: Facility-related aspects	1.000		
F2: Activity-related aspects & amenities	0.491	1.000	
Wine Festival Satisfaction	-	-	-
S1: Satisfaction level overall	-0.160	-0.157	1.000
Reliability	0.885	0.811	0.713
Mean	4.1893	3.9358	1.3133
Standard Deviation (SD)	0.6076	0.7187	0.3594

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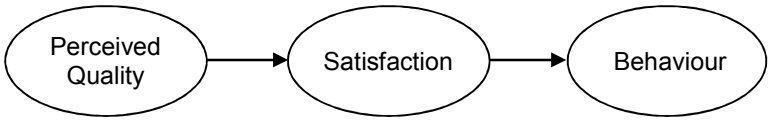
Table 8: Variables in the Logit Regression Equation

Indicator	Beta Coefficient	Standard Error	Wald Test	Degrees of Freedom	Signifi-cance	Odds Ratio	95% Confidence Interval Odds Ratio	
							Lower	Upper
First-repeat tourist	0.026	0.406	0.004*	1	0.950	0.975	0.440	2.159
Facility-related features	0.565	0.451	1.567	1	0.211	1.759	0.727	4.257
Activity-related features	-0.451	0.422	1.146	1	0.284	0.637	0.279	1.455
Satisfaction	-0.602	0.563	1.144	1	0.285	0.548	0.182	1.650
Constant[#]	1.095	1.674	0.428	1	0.513	2.989		

[#] Wine buying at the festival; * significant at 0.05 level

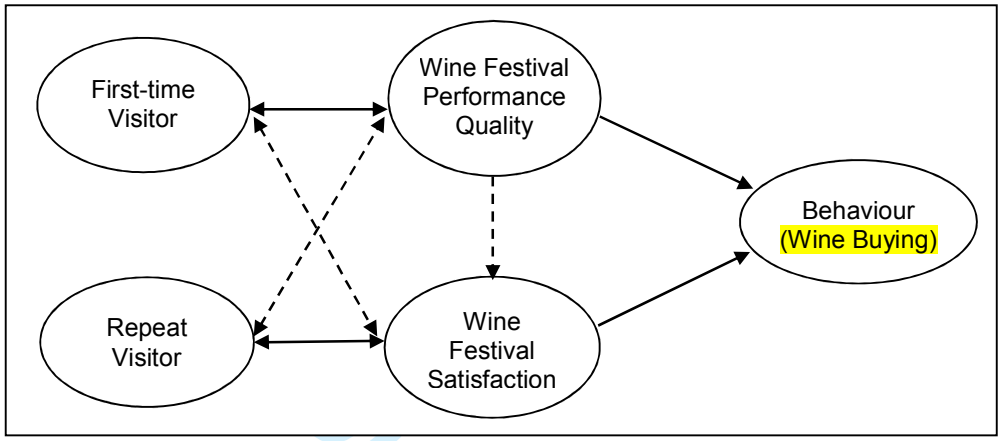
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Figure 1: Model of Interrelationships between Perceived Quality, Satisfaction, and Behaviour



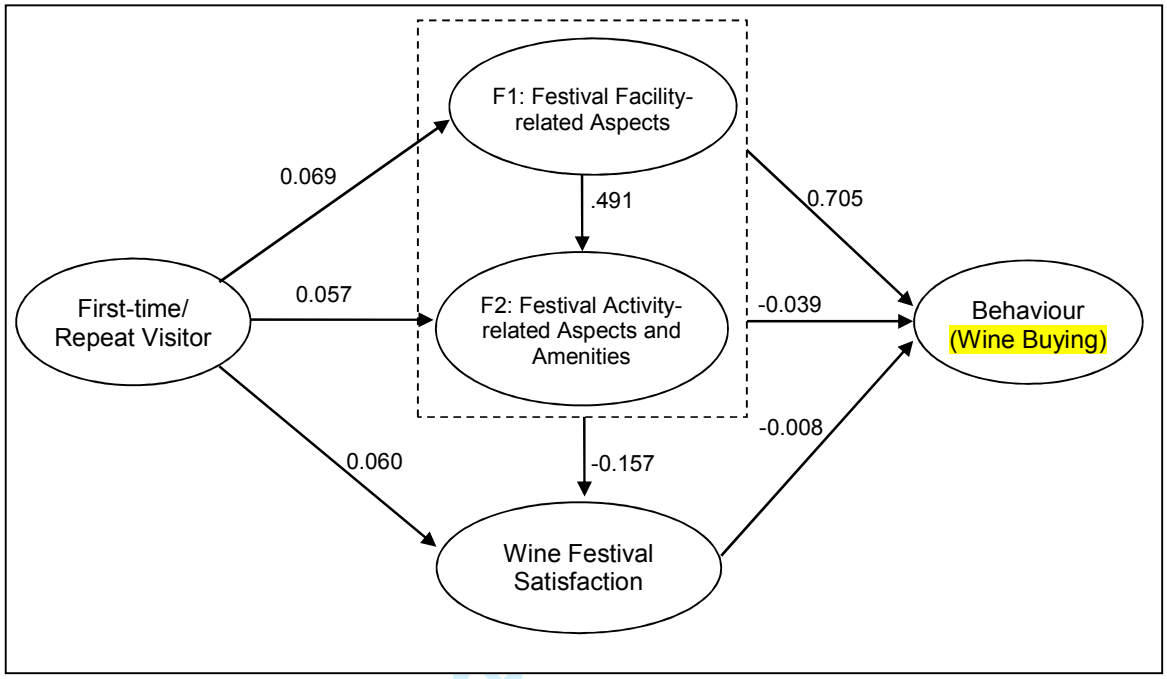
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Figure 2: Conceptual Model of Interrelationships between Tourist Type, Perceived Performance Quality, Satisfaction, and Buying Behaviour at a Wine Festival



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Figure 3: Interrelationships between Tourist Type, Perceived Performance Quality, Satisfaction and Buying Behaviour at a Wine Festival



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