Does sport event satisfaction remain stable over time?

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Abstract
Very little scholarly research analyzes sports event visitors’ satisfaction using longitudinal study designs. Thus, this study investigates whether or not satisfaction with event services and products among sports event visitors is constant over time. Data were collected during the 2017 Crankworx Mountain Bike Festival staged in Innsbruck (Austria) and 6 months later, on an individual level (n = 161). The analyses showed no significant differences in satisfaction with the majority of event aspects during and after the festival. It is hoped that this research note will fuel the discussion within the sports tourism community with respect to satisfaction gained from sports events.

KEYWORDS
event satisfaction, longitudinal research, local event spectators, event tourists

1 INTRODUCTION

Questions relating to customer satisfaction are without doubt a relevant research field in tourism (e.g., Song, van der Veen, Li, & Chen, 2012). The same applies to the analysis of visitor satisfaction within sports event research. Several theoretical models such as the Sport Spectator Satisfaction Model (cf. basically Van Leeuwen, Quick, & Daniel, 2002), the Sporting Event Experience Search scale (cf. Bouchet, Bodet, Bernache-Assollant, & Kada, 2011), or the Sport Experience Design framework for sport consumer behavior research (Funk, 2017) have been introduced to understand the event experience by spectators and consequently measure and explain associated latent variables. Based on their recently conducted systematic review of consumer satisfaction studies, however, Prayag, Hassibi, and Nunkoo (2018) came to the conclusion that the competing views on the definition of satisfaction makes it hard to measure.

One of the central claims for investing in and striving for a high degree of visitor satisfaction is based on the more or less observational assumption that a high degree of visitor satisfaction influences visitors’ future behavior in a positive way for a destination’s stakeholders (e.g., revisiting destinations). Until today, however, such positive correlations have not been empirically demonstrated with sufficient reliability in tourism in general (Dolnicar, Coltman, & Sharma, 2015) and for sports events in particular (Osti, Disegna, & Brida, 2012). Furthermore, (sports) event satisfaction studies are very often conducted in a cross-sectional design. This means that researchers see just a snapshot of the visitors’ perceptions (often measured during the event), implicitly assuming that the level of perceived satisfaction at an event remains temporally constant over a longer period of time.

Although some studies do take a longitudinal approach (e.g., Gallarza, Arteaga, & Gil-Saura, 2013) by analyzing sports events with different outcome variables (cf. Table 1), to the best of our knowledge, none of these have analyzed visitors’ event perceptions leading to potential satisfaction or dissatisfaction in the long run. Furthermore, the population investigated in the longitudinal studies included only residents.

Longitudinal studies in other areas of research offer interesting insights, where retrospectively assessed tourism experiences were rated better compared to assessments given during the services offered. Mitchell, Thompson, Peterson, and Cronk (1997) described this phenomenon as “rosy view.” In their study, tourists were surveyed before, during and after a 3-week bicycle tour in California. The researchers’ conclusion was that the expectations of “[...] personal events are more positive than their actual experience during the event...”

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© 2019 The Authors International Journal of Tourism Research Published by John Wiley & Sons Ltd
| Authors                        | Research focus                                                                 | Event                                                                 | # Waves                                                                 | Sample (N) | Main results                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Pfitzner and Königstorfer     | Quality of life (QOL) of residents in Rio de Janeiro                            | FIFA World Cup 2014 (FWC 2014), Brazil                               | (1) first week before FWC 2014, (2) week after FWC 2014, (3) 3 months after FWC 2014 | 498, 361, 281 | No positive effect by hosting mega-sport event on residents’ QOL domains. Individual changes in QOL vary by perception of domain of QOL and by atmosphere. |
| Leng, Kuo, Baysa-Pee, and Tay  | National pride of Singaporeans                                                   | Youth Olympic Games 2010 (YOG 2010), Singapore                       | (1) 2 months before YOG 2010, (2) 2 months after YOG 2010              | 1653, 679   | Significant increase in the level of national pride. Increase of national pride was stronger among males and those who were more involved in sports. |
| Karadakis and Kaplanidou      | Legacy perceptions of host-city residents (Vancouver) and nonhost-city residents (Ottawa) | Winter Olympic Games 2010 (WOG 2010), Canada                          | (1) 6 months before WOG 2010, (2) during WOG 2010, (3) 6 months after WOG 2010 | 102, 90, 84 | Evaluation of legacy outcomes changed over time from pre-event to post-event but less from during to post-event. Environmental legacies most important across cities and over time followed by economic respective sociocultural legacies. |
| Balduck, Maes, and Buelens     | Impacts on host-city residents in Ghent                                         | Tour de France 2007 (Tdf 2007), France                               | (1) 1 week before Tdf 2007, (2) 1 week after Tdf 2007                  | 396, 235    | Perceptions of impacts have changed over time. Residents are concerned with impact that hosting major sport events has on their personal lives. (positive: cultural and image benefits, negative: excessive spending and mobility problems). |
itself, and their subsequent recollection of that event is more positive than the actual experience (Mitchell et al., 1997, p. 421). In festival literature, this phenomenon was also discussed and reconfirmed by Lee, Kyle, and Scott (2012), focusing on festival consumption, emotions, and emotional experiences. Another fruitful theoretical approach to consider in this context is the "peak-end rule" (e.g., Fredrickson & Kahneman, 1993), in which people judge their experience based on their feelings at its peak and at its end rather than on an average of every moment of their experience. This memory-based assessment may also be relevant in judging retrospectively experiences gained during a sports event.

The central aim of this research is to analyze the temporal constancy of the assessment of satisfaction with event services and products among sports event visitors. Furthermore, experienced lowlights and highlights—considered as event peaks—are analyzed with regard to their constancy.

2 | METHODS

The event chosen for this case study is the Crankworx Mountain Bike Festival staged in Innsbruck (Austria) in 2017. The Crankworx Innsbruck Festival (CI-2017) is part of a world tour, taking place in New Zealand (Rotoura), Les Gest (France), and Canada (Whistler). In 2017, Innsbruck was a tour stop for the first time.

Data for this study were collected in two waves: the first data collection (N = 652) took place during the CI-2017 staged in Innsbruck from June 21 to 24, 2017. Six months later, 422 participants from the first enquiry were contacted by email and invited to participate in the second wave (December 1, 2017–January 15, 2018). Due to a codification, responses from Wave 1 could be assigned to Wave 2 on an individual level. One hundred sixty-one respondents (29.8% females) completed both questionnaires and were on average 28.3 ± 10.4 years old (age female: 31.7 ± 10.2 years; age male: 28.3 ± 10.3 years). They were divided into two groups: local event spectators (LES; N = 74) being residents watching the event on-site and event tourists (ET; N = 7) being tourists whose purpose of travel was to watch the event on-site.

In order to investigate whether event satisfaction amongst LES and/or ET changed over a period of 6 months, differences in the visitors' ratings of their satisfaction with various event aspects (e.g., food and beverage; 5-point Likert scale from 1 = not satisfied to 5 = very satisfied) during and after the CI-2017 were analyzed. By using the Wilcoxon test, the central tendencies of the two samples were compared and displayed with the z value (p < .05). For the calculation of effect sizes, the r proposed by Choene (1988) was used. For usage of the approximation of the distribution of test statistics to the z distribution and the application of r in the context of ordinal data, compare Fritz, Morris, and Richler (2012). Calculation according to Fritz et al. (2012, p. 12):

$$ r = \frac{z}{\sqrt{N}} $$

It should be stressed that we were interested in the temporal constancy of the visitors' evaluation of single aspects and not in their global evaluation that means that no correction of the significance level was performed. Significant differences (p < .05) between these two timelines are displayed with an * , and the strength of the effect is displayed with r (small effect: r = .10, middle effect: r = .30; cf. Bühner & Ziegler, 2009).

Additionally, LES and ET were asked for their perceived festival lowlights and highlights by using open questions. This allowed the LES and ET to share their experiences and to give feedback on which aspects of the event they liked and disliked. In a first step, the number

| Satisfaction with ... | Overall | LES | ET |
|-----------------------|---------|-----|-----|
| Public transport (shuttle services) | -0.637 .524 | -0.648 .517 | -0.192 .848 |
| Parking spaces/car parks | -1.018 .309 | -2.296 .022* | -0.635 .525 |
| Food and beverage | -0.353 .724 | -0.698 .485 | -0.257 .797 |
| Performance of athletes | -1.966 .049* | -1.707 .088 | -0.994 .32 |
| The festival site | -1.900 .057 | -0.093 .926 | -2.837 .005* |
| Music/entertainment | -1.552 .121 | -0.658 .511 | -1.606 .108 |
| Expo area | -0.357 .721 | -1.341 .18 | -1.100 .271 |
| Information signs/guidance systems | -1.755 .079 | -1.017 .309 | -1.489 .137 |
| Bike infrastructure at destination | -0.183 .855 | -0.287 .774 | -0.607 .544 |
| Friendliness of staff | -0.659 .510 | -0.982 .326 | -0.156 .876 |
| Kidsworx | -2.151 .031* | -1.640 .101 | -1.257 .209 |
| After-show program (parties) | -0.332 .740 | -0.377 .706 | -1.147 .251 |
| Atmosphere | -0.902 .367 | -0.869 .385 | -0.375 .707 |

| Abbreviations: ET, event tourists; LES, local event spectators. |
|---|
| *Note: Significant difference (p < .05) in visitors’ assessment of satisfaction during and 6 months after CI-2017. |
of listed lowlights and highlights were counted. In a second step, terms with similar meanings (e.g., competition and slopestyle) were merged and finally reduced inductively to a maximum of 10 categories (as a minimum each word had to be mentioned at least five times). For analysis, word clouds were used, in which the size of the words reflects how often a word was mentioned by LES and ET. Furthermore, a descriptive investigation was performed to see whether the event lowlights and highlights in each of the 161 data sets remained the same by comparing the given event lowlights and highlights in Waves 1 and 2.

3 | RESULTS

Table 2 shows the comparison of LES and ET satisfaction during and 6 months after the CI-2017.

According to Table 2, the rating of satisfaction during and after the event shows significant differences in a few of the queried items. These are related to parking/car parking issues, which are retrospectively rated as “less dramatic” by LES. ET were retrospectively more satisfied with the event site and in terms of the overall rating; both groups rated the athletes' performance and additional programs such as “Kidsworx” significantly higher. Although the visitors’ evaluation of the given event aspects always changed in a more positive direction, it should be noted that all effects are to be considered small ($r = .11-.23$).

Figure 1 displays perceived lowlights mentioned during the CI-2017 (a, N = 89) and 6 months after the CI-2017 (b, N = 111), as well as perceived highlights mentioned during the CI-2017 (c, N = 133) and 6 months after the CI-2017 (d, N = 149).

In a second step, the analyses were limited to those cases in which a lowlight or highlight was mentioned at both time points in the survey. For lowlights, the number of cases was 84 and for highlights 126. Analyses revealed that 56% of the mentioned lowlights and 62% of the highlights remained identical.

4 | CONCLUSION

For the majority of items (74%), our analyses showed no significant differences when visitors’ assessments of satisfaction with various event aspects during and 6 months after the CI-2017 were compared. If differences existed, these were of a positive nature, although the size of the effects was small in all cases. These results let us conclude that perceived satisfaction remained relatively stable over time. This conclusion is supported by the results we gained from the quantitative analysis of our qualitative data. The event lowlights and highlights mentioned by LES and ET remained very similar in terms of their nature. Interestingly, not only did the frequency of the lowlights and/or highlights mentioned remain constant, but the lowlights and highlights mentioned at an individual level also remained relatively stable. Whereas the positive aspects of the event (during and after CI-2017) were related to the sports competition (or single disciplines) and the event atmosphere, the lowlights were associated with service-related issues with respect to the event (transport, food and beverage, venue access, and expo areas).

The CI-2017 results should not be seen as supporting the “rosy view” phenomenon (Mitchell et al., 1997). However, a tendency to
reevaluate events retrospectively as being at least as satisfying as during the event or even slightly more satisfying in some aspects, seems to be given. Where the peak-end rule is concerned, the “peak experiences” (lowlights and highlights) and the “end experiences” (rating of single satisfaction items) remained similar over the course of time and thus underpin the importance of carrying out retrospective assessments of events.

This study is not without limitations. First, the small sample size and the high level of satisfaction led to issues with respect to carrying out further statistical analyses (e.g., factor analysis). Furthermore, a selection bias may occur, as potentially highly interested and highly satisfied respondents participated in the study, especially those willing to do the study twice (during and after the CI-2017). Finally, literature is not clear about the definition of longitudinal studies in the sports event context, and thus, this research note may exclude presports and postsports event studies (e.g., Gibson et al., 2014), which are relevant contributions in the field, too. Furthermore, it has to be considered that as Osti et al. (2012) already mentioned, that high levels of satisfaction during the event may lead to revisits of the same event a year later but not necessarily to revisits of the event’s host location. Last but not least, it needs to be explored whether there is a difference between active (e.g., cycling tour as discussed by Mitchell et al., 1997) and passive sports tourism settings such as attending events as an ET.

This research note can be considered as a first step to achieving a better understanding of the phenomenon of visitor satisfaction in a longitudinal approach. Thus, the study may contribute to the literature by showing that ratings for event visitors’ satisfaction with various aspects of a sports event remain relatively stable over time. The research note is hoped to enhance the discussion within the sports tourism community with respect to satisfaction gained from sports events.

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