#### ARTICLE IN PRESS

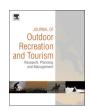
Journal of Outdoor Recreation and Tourism xxx (xxxx) xxx-xxx

ELSEVIER

Contents lists available at ScienceDirect

#### Journal of Outdoor Recreation and Tourism

journal homepage: www.elsevier.com/locate/jort



## Small-scale race events in natural areas: Participants' attitudes, beliefs, and global perceptions of leave no trace ethics

J. Tom Mueller\*, B. Derrick Taff, Jeremy Wimpey, Alan Graefe

Department of Recreation, Park, and Tourism Management, Pennsylvania State University, 801 Donald H. Ford Building, University Park, PA 16802, United States

#### ARTICLE INFO

# Keywords: Leave no trace Event management Race event Special events Racing Visitor management

#### ABSTRACT

Small-scale race events are a popular form of recreation in natural areas with the potential for social and environmental impacts. Leave No Trace-based communication and education strategies are the most prevalent form of mitigating recreation impacts on public lands. To understand competitive race participants' perceptions of Leave No Trace, this exploratory study compared race event participants' attitudes, evaluative beliefs, and global perceptions of Leave No Trace by event type: gravel road running, trail running, mountain biking, and motorcycle trail racing. Data were collected using online post-event surveys. Participants were sampled from five competitive race events on public land held during fall 2015 to summer 2016. Significant differences between event types were found for all constructs examined. Motorcycle racers were the least likely to agree that Leave No Trace is an effective method for protecting the environment, least likely to believe that humans have the potential to cause social or environmental impacts, and were the least willing to change their behavior if they found out it was damaging the environment. Runners' attitudes toward specific Leave No Trace behaviors were the least in line with Leave No Trace recommendations, while mountain bikers were the most in-line.

Management implications: When issuing permits and managing events on public natural areas, managers should approach each affair differently, realizing that the type of event may influence the level of social and ecological impact. Managers should contact event organizers as early as possible to raise awareness of possible impacts, provide tailor-made messaging to participants, and develop management plans specific to the event and location that monitor and adaptively manage impacts to preserve social experiences and ecological resources. This will help managers remain flexible in their event management.

#### 1. Introduction

Race events are a popular form of recreation in the United States, which has grown over the past 15 years (Bush, 2016; Torrence, 2016). The impacts of various types of special events have been studied and reported since the early 1970's (Getz, 2008). Although much attention has been paid to the economic and environmental impact of events of varying scales, little attention has been paid to the attitudes, beliefs, and perceptions of those who participate in small-scale race events. The attention that has been paid to small-scale race events has largely been focused on urban or municipal locales. This study focused on events occurring in natural areas. Many natural areas within the United States are on public lands. Public lands in the United States often carry dual mandates which require managers to allow for high quality visitor experiences, as well as preserving natural resources (Manning, 2011). This dual mandate creates a paradox for management. Providing high quality visitor experiences may actively compete with the preservation of natural resources (Manning, 2011). As race events in natural areas increase in popularity, the social and environmental impacts caused by participants are also likely to increase (Newsome, 2014; Newsome, Lacroix, & Pickering, 2011). It is important that managers understand the impacts of these events, as well as the attitudes and beliefs held by their participants, so that they can effectively manage recreation resources and special event activities.

This exploratory study analyzed data from participants in small-scale race events in natural areas to improve understanding of racers' attitudes, beliefs, and perceptions towards Leave No Trace. In the interest of clarity, this study is proposing a working definition for small-scale race events. A small-scale race event is defined as a race event with no more than 1000 participants where, although professional athletes can and do compete, the field of competitors is made up by a majority of amateur athletes. The term small-scale race event is drawn from the event management literature where the term small-scale sport event is used in contrast to hallmark or mega-events, such as major fairs or sporting events of international status (Gibson, Willming, & Holdnak, 2003; Higham, 1999). Examples of small-scale sport events provided by

E-mail addresses: Jfm5607@psu.edu (J.T. Mueller), bdt2@psu.edu (B.D. Taff), Gyu@psu.edu (A. Graefe).

https://doi.org/10.1016/j.jort.2018.03.001

Received 1 March 2017; Received in revised form 22 March 2018; Accepted 30 March 2018 2213-0780/ © 2018 Elsevier Ltd. All rights reserved.

<sup>\*</sup> Corresponding author.

J.T. Mueller et al.

Higham (1999) were, "regular season sporting competitions (ice hockey, basketball, soccer, rugby leagues), international sporting fixtures, masters or disabled sports, and the like (p.87)." As an example, a small-scale race event may be a local 5 K or half-marathon, whereas a large-scale race event would be something like the Boston Marathon. When considering these two events, it is easy to see how lumping them together as 'events' would miss the clear differences in their impacts, planning, and structure. Further, the distinction between small-scale and hallmark events goes beyond the size of the event, it is also in relation to the potential strain the event places on nearby communities and host cities (Gibson et al., 2003). The term small-scale race event, along with the provided definition, provides a level of specificity and clarity for this paper and future research on these types of race events.

Previous research on special events has largely been concerned with economic benefits of hosting an event and has been conducted mainly by those from the field of tourism research (Brown, Getz, Pettersson, & Wallstam, 2015; Sherwood, Jago, & Deery, 2005). In the past decade, there has been a push within the field of event management to integrate a triple-bottom line (TBL) approach to event evaluation (Brown et al., 2015). A TBL approach seeks to evaluate an event based not just upon economic benefits, but also social and environmental impacts (Sherwood et al., 2005). While there is a significant body of literature addressing all three dimensions of various events, the social component of event management has received less attention (Brown et al., 2015). Additionally, studies addressing the social impacts of events rarely address the attitudes and beliefs of participants irrespective of the event in question.

In a comprehensive review on event evaluation, Brown et al. (2015) highlighted literature that has evaluated events based on social benefits and impacts. The review discussed the importance of evaluating the social aspects of an event in terms of visitor satisfaction as well as cultural and environmental benefits (Brown et al., 2015). Higham (1999) argued for the beneficial impacts of small-scale sport events. Higham (1999) claimed that although the negative impacts of megaevents, such as the Olympics and World Cup, had been widely demonstrated, less attention had been given to smaller events and the benefits they may bring to a community. Daniels and Norman (2003) demonstrated that small-scale sport events can bring economic benefits to communities, as well as encourage visitation to an area that attendees may not have otherwise visited. While this finding by Daniels and Norman (2003) may suggest possible benefits of small-scale race events, the events analyzed in their study consisted of tournaments held in urban and municipal areas, as opposed to the rural and remote locales where small-scale race events in natural areas occur. Other research within the field of outdoor recreation which has focused on special events has been concerned with festivals in urban or municipal areas. This research has been largely focused on crowding (Mowen, Vogelsong, & Graefe, 2003; Wickham & Kerstetter, 2000; Anderson, Graefe, & Kerstetter, 1998).

While understanding the impacts of events at the scale of the specific event is important, examining event participants at a broader scale across events will help researchers understand the possible environmental and social impacts that may occur due to various types of races. The impacts of an event, be they economic, environmental, or social are largely linked to those who attend. In the case of small-scale race events, where spectators are few and the race course may be long and remote, potential impacts will, for the most part, be caused by race participants. Newsome et al. (2011) highlighted the likelihood that race events in natural areas could have a greater social and environmental impact than similar events hosted elsewhere. Additionally, even though many participants in these types of events are not racing to win, speed is incentivized by the very nature of a race event. Given this, it is possible that race participants may act differently, or less sustainably, than when they are not engaged in a race. It is important for researchers and managers to understand the possible impacts of race events in natural areas to help guide management into the future (Newsome et al., 2011; Newsome, 2014).

Beyond the unavoidable physical environmental impacts that occur no matter how an individual travels through an area (Manning, 2011), humans have the potential to exacerbate their impact through various behaviors. Research regarding the potential impacts of small-scale race events is scarce, but the limited work that has been done suggests that races with sprawling courses, motorized travel, or off-trail segments may be more likely to cause negative environmental impacts to trails and protected areas (Marion, Arrendondo, & Eagleston, 2016). Additionally, research suggests that when events cannot be rescheduled due to rain or adverse weather, event impacts can be more extreme due to wet substrates (Marion et al., 2016; Newsome, 2014).

Managers in charge of natural areas, such as public lands, are mandated to protect and conserve the resources they manage, and thus reduce impactful behaviors through direct and indirect actions. Understanding the attitudes and beliefs of event participants is essential for informing management strategies that align with management objectives. The promotion of Leave No Trace is currently the most prevalent method for reducing the social and ecological impacts of recreational use in natural areas in the United States (Marion, 2016). As such, understanding race participants' attitudes towards Leave No Trace behaviors, beliefs about the potential for human impacts, and global perceptions of Leave No Trace will help guide future small-scale race event management in natural areas.

#### 1.1. Leave No Trace

Leave No Trace has evolved from humble beginnings in the 1960's to become the dominant framework used by managers to reduce recreation impacts in wildland recreation environments (Marion & Reid, 2001). Through specific principles, the Leave No Trace Center for Outdoor Ethics, and the practices they promote, help inform and direct users toward sustainable and appropriate behaviors in natural areas and wild places. The Leave No Trace Center for Outdoor Ethics has had a memorandum of understanding with the U.S. federal land managing agencies for nearly two decades (Marion & Reid, 2001), and Leave No Trace is now the most prominent educational strategy employed in public lands (Marion, 2016).

Previous research on Leave No Trace has focused on two dominant dimensions, recreation ecology and human dimensions of natural resources (Lawhon et al., 2013). The majority of previous Leave No Trace and low-impact recreation research has focused on the environmental impacts of recreation though the field of recreation ecology, the study of recreation related impacts on the environment (Lawhon et al., 2013; Monz, Pickering, & Hadwen, 2013). In general, the persuasive communication employed by Leave No Trace has been shown to be effective in influencing appropriate visitor behaviors (Marion, 2016; Schwartz et al., 2018; Schwartz, 2017). However, the human dimension, meaning examining the attitudes toward, and perceptions of, Leave No Trace, which is in turn theorized to predicate either appropriate or inappropriate recreation behaviors, has received significantly less attention (Lawhon et al., 2013).

The Leave No Trace ethos evolved from a desire to curb the impacts of backcountry overnight use (Marion & Reid, 2001). Due to this, much of the previous research on human dimensions regarding Leave No Trace has been concerned with backcountry overnight users (Marion & Reid, 2001; Taff, Newman, Vagias, & Lawhon, 2014). For example, previous research has examined backcountry visitors' knowledge (Newman, Manning, Bacon, Graefe, & Kyle, 2003), and attitudes and global beliefs regarding Leave No Trace (Vagias and Powell, 2010). This research suggested some variation in congruence with recommended practices, depending upon where the visitor is from or where the visitor is recreating. However, overall backcountry-based research suggests that self-reported knowledge, attitudes, and beliefs regarding Leave No Trace align with the recommendations prescribed by the Leave No Trace Center for Outdoor Ethics. Additional human dimensions

#### Download English Version:

### https://daneshyari.com/en/article/10150064

Download Persian Version:

https://daneshyari.com/article/10150064

<u>Daneshyari.com</u>