
Moving beyond visitor satisfaction to loyalty in nature-based tourism: a review and research agenda

Susan A. Moorea, Kate Rodgera and Ross Taplinb

aSchool of Environmental Science, Murdoch University, South Street, Murdoch, Western Australia 6150, Australia; bSchool of Accounting, Curtin Business School, Curtin University of Technology, Kent St, Bentley 6102, Australia

(Received 23 October 2012; final version received 21 March 2013)

Nature-based tourism is increasing worldwide and with it the opportunity to engage these visitors to support and advocate for the protection of natural areas. Loyalty research over the last decade provides a platform for action. Analysing loyalty as an important focus for nature-based tourism research and then proposing a research agenda are the aims of this paper. These aims are achieved by (1) reviewing the place of satisfaction and its relationship to loyalty in nature-based tourism research; (2) analysing recent loyalty and related behavioural intentions research; and (3) proposing a research agenda to further progress loyalty research. Conducting field-based experiments to determine the influence of improving service quality on loyalty and further investigating a suite of items of varying commitment for measuring loyalty (from recommending a destination to others to volunteering to work there) are pivotal to the proposed agenda. Also central are further elaborating and testing the measurement model for loyalty, with place attachment and pursuit of benefits, such as escaping from everyday life and appreciating nature, suggested as promising antecedents to loyalty. The importance of natural areas to society warrants urgent attention to the loyalty-centred research agenda detailed in this paper.

Keywords: behavioural intentions; loyalty; performance; protected areas; service quality; visitor satisfaction

Introduction

Nature-based tourism, the viewing of nature and natural landscapes, is increasing worldwide (Newsome, Moore, & Dowling, 2013). Aligned with this is an increase in visitation to protected areas, the focus of much of the world’s nature-based tourism. A recent study by Balmford et al. (2009) of visit rates to 280 protected areas in 20 countries found that numbers are generally increasing in most countries (the exceptions being the USA and Japan). This increase presents a dilemma for protected areas, given their dual mandate of protecting biological diversity and providing meaningful experiences for visitors in natural settings (Newsome et al., 2013; Worboys, Lockwood, & de Lacy, 2005).

An important goal for protected area agencies is to provide recreational opportunities from which users derive satisfaction. However, since visitors can impact the values of protected areas, they have evoked mixed feeling from the managers of such areas. Importantly though, appreciation is growing for the benefits of visitors to such natural
areas and their future. A symbiotic park–people relationship has been described where visitors are viewed as an asset rather than a liability (Manning, 2011; Weaver & Lawton, 2011). Also, a new ‘modern’ paradigm of protected areas is emerging where such areas are run for and in some cases by local people, affording the human aspect of such areas greater primacy (Phillips, 2003). And, visitors can provide essential societal support for protected areas in a global economy where competition for all lands, including such areas, is becoming increasingly fierce. The future of protected areas cannot be assured without broadscale, ongoing societal support. Loyal visitors are critical to this group.

This greater appreciation of visitors is also partly grounded in them increasingly being seen as a valuable source of operational revenue (e.g. paying entrance fees) as well as volunteering to assist with management. Both outcomes are of great interest to managers as they work in times of declining resources for management and increasing accountability for public funds spent (Lee, Graefe, & Burns, 2004; O’Neill, Riscinto-Kozub, & van Hyfte, 2010). Other outcomes of interest to managers include visitors’ intentions to revisit and recommend to others, which can increase revenue if entry fees are charged as well as potentially build societal support for protected areas. This constellation of outcomes is increasingly referred to as visitor loyalty (Chi, 2012; Rivera & Croes, 2010; Weaver & Lawton, 2011).

The last decade has seen an emergence of loyalty studies and its antecedents in nature-based tourism research. Such a focus is critical given it enables protected area agencies to determine if they have achieved desired outcomes (e.g. revisiting, recommending to others) and the influences on these outcomes. An interest in outcomes is part of growing attention to measuring management performance (Hockings, Stolton, & Dudley, 2004). Satisfaction is one these influences, suggesting a continued interest in it as a contributor to loyalty and also as an important, and long-recognised, way of reporting on visitor experience. A decade of research on visitor loyalty and protected areas, plus the forthcoming World Parks Congress to be held in Sydney, Australia in 2014, makes it timely and essential to reflect on what has been achieved and what still remains to be done.

As such, the aims of this paper are analysing loyalty as an important focus for nature-based tourism research and proposing a research agenda. The analysis begins by reviewing the place of satisfaction and its relationship to loyalty in nature-based tourism research. Such a review is essential to the aim of this paper given that satisfaction has been central to customer service and service delivery research for decades. Accordingly, it has been a centrepiece of visitor research in nature-based tourism and tourism more generally. Satisfaction also contributes to loyalty, making it pivotal to any consideration of loyalty research. Antecedents of visitors’ choices and behaviours, such as motivations and expectations, although critical to understanding and managing nature-based tourism, are beyond the scope of this paper.

The other important part of the analysis provided in this paper, again undertaken as a literature review, is of recent loyalty and related behavioural intentions research in nature-based tourism. Particular foci include the conceptualisation of loyalty, its measurement and relationship with other influences, such as satisfaction, service quality and other factors emerging from research efforts over the last decade. Attention to such conceptualisations and measurement is absolutely critical given past conflation of key concepts such as service quality, satisfaction and loyalty. Based on and following the literature review, a research agenda centred on visitor loyalty is proposed and concludes the paper.
Review of literature

Satisfaction

Satisfaction and service quality as concepts

No review of satisfaction or subsequent understanding of visitor loyalty would be complete without exploring satisfaction and service quality as intertwined concepts. Baker and Compton (2000, p. 786) note in their review of tourism research that the ‘lack of consensus on conceptualization of the two constructs [satisfaction and service quality] has resulted in confusion to the point where the two constructs are frequently used interchangeably’. It is generally agreed, however, that satisfaction is a measure of a visitor’s emotional state after experiencing a destination, while service quality focuses on perceived quality of performance based on evaluating services (e.g. staff interactions with visitors) and facilities (e.g. infrastructure) (Baker & Crompton, 2000; Parasuraman, 1985; Tian-Cole, Crompton, & Wilson, 2002; Zabkar, Brencic, & Dmitrovic, 2010). Table 1 summarises current concepts in use, which are subsequently deployed through the remainder of the paper. A generalised model of the relationships between these concepts is provided in Figure 1. This confusion can be attributed to the shared origin of satisfaction and service quality in the expectancy disconfirmation paradigm (Oliver, 1980). This paradigm defines a visitor’s

<table>
<thead>
<tr>
<th>Concept</th>
<th>Widely used interpretation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Satisfaction</td>
<td>Visitor’s emotional state after experiencing a destination</td>
<td>Long history of confusion and overlap with service quality</td>
</tr>
<tr>
<td>(1a) Overall satisfaction</td>
<td>As per definition above for satisfaction</td>
<td>Widely measured and reported on by those managing destinations for nature-based tourism</td>
</tr>
<tr>
<td>(1b) Quality of experience</td>
<td>Perceived benefits from the experience</td>
<td>An area of active research; currently being operationalised and measured as benefits (e.g. nature appreciation, escape, physical fitness)</td>
</tr>
<tr>
<td>(2) Service quality</td>
<td>Perceived quality of performance of attributes (e.g. friendliness of staff, restroom cleanliness) at a destination</td>
<td>Popular to measure as the majority of attributes readily respond to management</td>
</tr>
<tr>
<td>(2a) Overall service quality</td>
<td>Overall quality of service at destination</td>
<td>Rarely if ever operationalised and measured; performance of individual attributes of much greater interest (i.e. 2b)</td>
</tr>
<tr>
<td>(2b) Quality of performance</td>
<td>As per the above definition for service quality, but for specific attributes</td>
<td>Widely measured and reported on by those managing destinations for nature-based tourism; often reported as ‘satisfaction’ with attributes resulting in further confusion between quality and satisfaction</td>
</tr>
<tr>
<td>(3) Post-visit behavioural intentions</td>
<td>Person’s stated intention to perform a behaviour after visiting a destination</td>
<td>Most often measured as intention to revisit and recommend the destination to others</td>
</tr>
<tr>
<td>(4) Loyalty</td>
<td>Commitment to a destination</td>
<td>Behavioural intentions provide a means for measuring loyalty</td>
</tr>
</tbody>
</table>

perception of quality of performance (i.e. service quality) and level of satisfaction in terms of the magnitude of their ‘disconfirmation’. The visit perceptions are compared to initial expectations resulting in confirmation (met expectations), negative disconfirmation (worse than expected), or positive confirmation (better than expected) (Baker & Crompton, 2000).

A widespread view is now held in the tourism and recreation literature that the two concepts – service quality and satisfaction – are distinctive (Tian-Cole & Crompton, 2003) (Figure 1). This view also permeates nature-based tourism research (Lee et al., 2004; Rivera & Croes, 2010). Service quality in nature-based tourism is a judgement about the services and facilities available. For example, research into the performance of Tanzanian national parks asked visitors for their perceptions of the friendliness of guides, availability of information, and cleanliness of restrooms (Wade & Eagles, 2003) (Table 1, concept 2b). Satisfaction is usually evaluated in more general terms and is regarded as more subjective than service quality (Lee et al., 2004) (Table 1, concept 1a).

From this distinction, it is apparent that protected area managers are likely to have more control over service quality than satisfaction. Tourism researchers have similarly noted that the quality of performance of services relates to attributes primarily controlled by a supplier (Baker & Crompton, 2000; Parasuraman, 1985). For protected areas, for example, managers can pay attention to improved cleanliness of restrooms and work with staff to improve friendliness. Satisfaction, as a psychological outcome or emotional response (Crompton & Love, 1995; Manning, 2011), is far less amenable to management. It can also be influenced by factors outside the control of managers such as the visitor’s mood, emotions, and even the weather (Baker & Crompton, 2000; Fletcher & Fletcher, 2003; Lee et al., 2004; Tian-Cole et al., 2002).

A major contributor to confusion regarding service quality and satisfaction in nature-based tourism research is ongoing reporting of the performance of attributes, such as the friendliness of staff, as satisfaction (Newsome et al., 2013). In researching visitors to parks in New Zealand, Ryan and Cessford (2003) asked visitors how satisfied they were with a list of attributes including information signs, boardwalks, and clean restrooms. Tonge and Moore (2007), similarly in their survey of visitors to the hinterland of a
marine park in Western Australia, asked visitors for their professed satisfaction with attributes such as condition of the path and presence of litter.

Protected area agencies similarly report on ‘satisfaction’ using the performance of attributes such as restrooms, walk trails, signage, and staff, when using the term quality of performance may produce less confusion (Table 1, concept 2b). For example, the United States Forest Service analyses the performance of a suite of attributes for its National Forests, including restroom cleanliness, road condition, and signage adequacy to provide a satisfaction score for each (United States Department of Agriculture Forest Service [USDA FS], 2012). The Western Australian Department of Environment and Conservation, responsible for managing more than 10% of this state’s vast land area in national parks and other reserves, asks visitors how satisfied they are with attributes ranging from the usefulness of directional road signs to interesting guided walks (Moore et al., 2009). This confusion could be readily resolved by referring to the preceding as the quality of performance (as per concept 2b, Table 1). Protected area agencies also report on overall satisfaction (Table 1, concept 1a; Figure 1; Moore et al., 2009; USDA FS, 2012).

Measuring service quality and satisfaction

Measurement issues continue to vex researchers in nature-based tourism, as noted by Lee et al. (2004), and identified more broadly in the tourism and recreation literature. SERVQUAL (Parasuraman, Zeithaml, & Berry, 1988) was developed to investigate the gap between perceptions and expectations of service at the attribute level (Table 1, concept 2b). Five service dimensions are measured: tangibles (physical setting), reliability (ability to perform the service dependably), responsiveness (willingness to help users), empathy (individualised attention), and assurance (courteous and knowledgeable employees) (Parasuraman et al., 1988). Service quality is assumed to increase as the gap between perception and expectation of service increases.

Concerns were and continue to be raised about SERVQUAL and measuring service quality in tourism and recreation (Ryan & Cessford, 2003), in particular regarding how expectations are measured and whether they need to be measured. Also and contributing to confusion, the terms expectations and importance have been used interchangeably (Oh, 2001). Taplin (2012) provides clarity by noting that expectations must be measured prior to a visit, whereas importance can and should be measured during or after a visit. In nature-based tourism research (e.g. Ryan & Cessford, 2003; Tonge & Moore, 2007; Wade & Eagles, 2003), researchers ask visitors how important an attribute is to them and then rely on importance rather than expectation to assist them in measuring service quality.

Debate continues regarding whether or not to measure importance (expectations) as well as performance (Lee et al., 2004; Taplin, 2012). Lee et al. (2004), in synthesising previous research, commented that performance-only indicators measure service quality adequately and more validly than if importance/expectation is included. Empirical research has also shown that using performance–expectation gaps provides worse predictions of overall satisfaction than using attribute performance without expectations (Crompton & Love, 1995; Dorfman, 1979).

Deng (2007) and more recently Huang (2010) sought to resolve this issue by collecting performance data only and information on overall satisfaction and then using logarithmic transformation and partial correlation to produce derived importance scores for inclusion in subsequent importance–performance analyses (IPA). Taplin (2012) offers a sensible and simpler way forward. Through including ‘relative’ importance (the importance ascribed to an individual attribute by a respondent relative to how they responded to all attributes),
importance provided directly by visitors did improve the prediction of overall satisfaction from attribute performance.

IPA, grounded in service quality concerns (Martilla & James, 1977; Oh, 2001), provide a simple way to visually represent the performance of individual service quality attributes in a two-dimensional grid. Importance is indicated by the vertical axis and performance along the horizontal axis. Each attribute (e.g. for protected areas: friendly staff, clean restrooms) is placed in the grid according to their importance and performance means. Cross-hairs are added to create four quadrants, with their placement determined by the researcher (Oh, 2001; Tonge, Moore, & Taplin, 2011). Each quadrant provides different guidance for managers, from ‘keep up the good work’ (where both performance and importance are high) to ‘concentrate here’ (with high importance and low performance).

Application of this technique to protected areas has been limited (Tonge et al., 2011). Examples include visitors to national parks in New Zealand (Ryan & Cessford, 2003), Tanzania (Wade & Eagles, 2003), and Yanchep National Park in Western Australia (Tonge et al., 2011). Few applications to marine protected areas exist. Tonge and Moore’s (2007) study of visitors to the Swan River Estuary Marine Park in Western Australia is an exception. In this latter study, the researchers reconceptualised IPA to importance–satisfaction analysis to highlight the experiential and hence satisfaction-linked aspects of recreation and tourism in protected areas.

Although there are ongoing issues associated with the measurement of service quality, there is general agreement that it can and should be measured at the attribute level using importance and performance (Moore et al., 2009; Taplin, 2012; Tonge et al., 2011). It is rarely measured as overall service quality (Table 1, concept 2a). There is much more confusion regarding what satisfaction is measuring and how it is measured. Lee et al. (2004, p. 75), in introducing their research with forest visitors, comment that measuring satisfaction remains ‘complex and indeterminate’. The confusion stems from at least four sources: (i) blurring of the concepts of satisfaction and service quality; (ii) seeking to measure satisfaction as quality of experience and overall satisfaction (Figure 1); (iii) widely varying ways of measuring overall satisfaction; and (iv) relying on the same items to measure overall satisfaction and behavioural intentions. Confusion between the concepts (i) was addressed and resolved earlier in this paper (Table 1).

Regarding measurement of satisfaction as overall satisfaction and quality of experience (ii) (Table 1, concepts 1a and 1b, respectively), it is most often measured and reported as the former, as overall satisfaction. Great variation in its measurement still exists (iii) (Dorfman, 1979; Taplin, 2012). Most widespread is measurement with a single item (Lee et al., 2004), for example, asking respondents ‘How satisfied are you with your visit?’ (Bushell & Griffin, 2006). Multiple-item scales are noted, however, as a more valid measure of overall satisfaction (Lee et al., 2004; Vaske, Donnelly, & Williamson, 1991).

Unfortunately for clarity in intent and measurement, one or more of these items may relate to behavioural intentions (e.g. ‘Would you recommend this destination to others?’) (e.g. Moore et al., 2009; Ryan & Cressford, 2003) so that the results for satisfaction may be more relevant to behavioural intentions (iv). We return to this important issue in the research agenda concluding this paper. An alternative approach to measuring overall satisfaction using multiple items is a semantic differential scale (Nowacki, 2009; Tian-Cole et al., 2002). For example, Nowacki (2009) asked visitors to four tourist attractions in Poland to identify if their experience was ‘boring versus interesting’, ‘tiring versus relaxing’, and ‘irritating versus pleasant’.

Satisfaction, measured as quality of experience (Table 1, concept 1b), is the most problematic of all the research concepts (ii). Few efforts have been made to operationalise it in
terms of its contribution to overall satisfaction and behavioural intentions. Exceptions coalesce around usage of the recreational experience preference (REP) scales developed by Manfredo, Driver, and Tarrant (1996) and refined by Driver et al. (Driver, 1996, 2008; Driver, Brown, & Peterson, 1991). Tian-Cole et al. (2002) used these scales to identify visitor experiences at a wildlife refuge as nature appreciation/learning, achievement, introspection/nostalgia, escape, physical fitness, and meeting new people. A recent study of visitors to Kakadu National Park, Australia (Crilley, Weber, & Taplin, 2012) showed that the benefits attained by visitors were a strong predictor of an overall positive response to the Park.

**Behavioural intentions and loyalty**

In the last two decades, marketing research and strategising has moved on from achieving a high level of satisfaction as the ultimate goal to regarding behavioural intentions as a better predictor and measure of performance (Chi & Qu, 2008). Behavioural intention is a person’s stated intention to perform a behaviour (Table 1). According to Ajzen and Fishbein’s (1980) theory of reasoned action, the intention to perform a behaviour is a direct determinant of actual behaviour. Very little is known about the behavioural intentions post-visit of those visiting natural areas for recreation and tourism (Lee et al., 2004; Rivera & Croes, 2010). As such, it is an important, but neglected research area.

Visitors’ intentions post-visit are of critical importance in nature-based tourism and hence to managers of protected areas. Intending to revisit or recommend the area to others can provide additional revenue through the receipt of entrance fees and income from attending tours. Such revenue is critical in times of declining budgets and fiscal uncertainty. Other intentions important to managers are visitors being willing to volunteer their time to work in protected areas, and petition or lobby for such areas. Robust information on these intentions is essential for managers as they are increasingly required to report on the success or otherwise of their management to elected officials (i.e. parliaments, congress) and to the public. Items used to measure the behavioural intentions of nature-based tourists are listed in Table 2.

Similarly to the multitude of issues associated with the concepts of satisfaction and service quality, issues abound regarding the overlaps and differences between behavioural intentions and loyalty. Over the last decade in tourism research, including the limited number of studies focused on nature-based tourism, there has been a drift from using the term behavioural intentions for the items listed in Table 2 to using the term loyalty (e.g. Rivera & Croes, 2010; Weaver & Lawton, 2011). The simplest way to understand the relationship between the two is to regard behavioural intentions as a means of measuring visitor loyalty.

<table>
<thead>
<tr>
<th>Table 2. Items used to measure the behavioural intentions of nature-based tourists.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Say positive things about the destination to others</td>
</tr>
<tr>
<td>(2) Recommend the destination to others</td>
</tr>
<tr>
<td>(3) Intention to revisit</td>
</tr>
<tr>
<td>(4) Willingness to pay a higher entrance fee</td>
</tr>
<tr>
<td>(5) Willingness to donate money to managing the area</td>
</tr>
<tr>
<td>(6) Willingness to write to politicians regarding potential threats to the destination</td>
</tr>
<tr>
<td>(7) Willingness to volunteer time to working at the destination</td>
</tr>
<tr>
<td>(8) Willingness to volunteer time to protected areas more generally</td>
</tr>
</tbody>
</table>

Source: Lee et al. (2004), Tian-Cole et al. (2002), and Weaver & Lawton (2011).
A growing interest in behavioural intentions has been evident in the nature-based tourism literature over the last decade, beginning with the publication of Tian-Cole et al.’s (2002) study of visitors to a wildlife refuge in Texas. Measuring the items listed early in Table 2 was the focus of their research and subsequent efforts (Chi, 2012; Lee et al., 2004; O’Neill et al., 2010; Rivera & Croes, 2010). A recent advance by Weaver and Lawton (2011) has been inclusion of the items listed later in the table, with their survey of visitors to a protected area in South Carolina, embracing both on- and offsite post-visit behavioural intentions. The later items generally require more commitment from visitors than the earlier listed ones (Tonge, Ryan, Moore, & Beckley, in preparation). For example, volunteering requires a greater commitment than saying positive things. Weaver and Lawton (2011) describe this progression as moving from ‘convenient’ to ‘inconvenient’ behaviours (or from lower to higher investment actions).

Loyalty can be simply defined as commitment to a destination (Rivera & Croes, 2010; Table 1), where destination can be narrowly defined as a single setting or a broad region (Pearce & Wang, 2009). Loyalty research of visitors to protected areas (and nature-based tourism more broadly) conducted over the last decade can be overviewed under three headings: measuring loyalty; influences on loyalty; and loyalty and place attachment. The following overview provides essential background for the conclusion to this paper where a research agenda is advanced.

### Measuring loyalty

Loyalty in nature-based tourism research has been largely operationalised and measured as a multi-item construct, with intention to revisit and recommend to others the most widely measured items (Chi, 2012; Rivera & Croes, 2010; Tian-Cole et al., 2002; Weaver & Lawton, 2011) (Table 3). Generally, these items describe a single construct. Weaver and Lawton (2011) have recently taken a more complex approach by using three dimensions (referral and repeat; volunteering; and advocacy and financial support) for loyalty.

Loyalty has also been proposed and studied as a complex, sequenced construct (Lee et al., 2007; Weaver & Lawton, 2011). Attitudinal, conative (intentions-related), and behavioural loyalty are suggested as three dimensions with a sequential influence on each other. Lee et al. (2007) measured these dimensions in their study of visitors to Umpqua National Forest, Oregon, USA (Table 3, study no. 4, column 2). They found a positive, significant relationship between attitudinal and conative loyalty and between conative and behavioural loyalty. Although there is value in measuring loyalty as a complex, sequenced construct, of greatest interest to managers are intentions (conative loyalty) and behaviour (if it can be measured). If this complex, sequenced perspective risks confusing protected area managers or requires lengthy questionnaires (Rivera & Croes, 2010), then a sole focus on intentions (as has been the case in almost all of studies reviewed in Table 3) is preferable.

An emerging issue in loyalty research of protected areas as tourist destinations is variable results for intention to revisit (Rivera & Croes, 2010). In their study of ecotourists at the Galapagos, they found a significant difference between the means for intention to revisit and recommend to others (Table 3, study no. 6, column 3). They concluded that for ‘once-in-a-lifetime’ destinations such as the Galapagos revisiting may not be relevant to loyalty. However, most of the other reviewed studies that used both intention to revisit and recommend as the items measuring loyalty reported good reliability of their behavioural intentions/loyalty scales (Table 3) (e.g. Lee et al., 2004; O’Neill et al., 2010; Tian-Cole et al, 2002). Lee et al. (2004) did note that short-term intention to revisit had a lower mean
Table 3. Measuring visitor loyalty/behavioural intentions in nature-based tourism.

<table>
<thead>
<tr>
<th>Application</th>
<th>Operationalisation of construct</th>
<th>Findings relevant to measuring construct</th>
<th>Predictors of loyalty/behavioural intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Visitors to a wildlife refuge in Texas, USA (Tian-Cole et al., 2002)</td>
<td>Behavioural intentions operationalised using seven items (actions visitors were likely to take)</td>
<td>As part of factor analysis, four items were deleted resulting in a single factor – ‘intentions’ – with acceptable reliability. Items retained: encouraging friends and relatives to visit; visiting again; and saying positive things</td>
<td>Quality of performance, quality of experience, overall service quality, and overall satisfaction</td>
</tr>
<tr>
<td>(2) Appalachian Trail (AT) users, USA (Kyle, Graefe, Manning, &amp; Bacon, 2004)</td>
<td>Three items measured respondents’ behavioural loyalty: their annual frequency of use (i.e. (a) days spent on the trail, (b) miles hiked along the trail, and (c) the proportion of their annual use devoted to the AT)</td>
<td>Measurement model (including behavioural loyalty) was regarded as adequate and reliable</td>
<td>Leisure involvement, psychological commitment, behavioural commitment, and resistance to change. Place attachment research influenced item choice</td>
</tr>
<tr>
<td>(3) Visitors to Umpqua National Forest, Oregon, USA (Lee et al., 2004)</td>
<td>Four items measured behavioural intention: word of mouth (two items: intention to recommend and say positive things) and intention to revisit (two items: long term and short term)</td>
<td>Construct had acceptable reliability</td>
<td>Service quality and satisfaction</td>
</tr>
<tr>
<td>(4) Visitors to Umpqua National Forest, Oregon, USA (Lee, Graefe, &amp; Burns, 2007)</td>
<td>Destination loyalty was operationalised with three dimensions</td>
<td>The scales for attitudinal and conative loyalty had good reliability</td>
<td>Service quality, satisfaction, and activity involvement. Attitudinal and conative loyalty influence behavioural loyalty</td>
</tr>
<tr>
<td>(5) Nature-based tourists in Alabama, USA (O’Neill et al., 2010)</td>
<td>Behavioural intentions: revisit and recommend (two items)</td>
<td>Behavioural intention scale had good reliability</td>
<td>Quality of staff (PEOPLE), service delivery (SERVICE), physical condition of destination (TANGIBLE), restroom quality (WC), and overall satisfaction</td>
</tr>
</tbody>
</table>

(Continued)
than the other behavioural intention items. These variable findings suggest a need to carefully consider the relevance of intention to revisit for ‘once-in-a-lifetime’ destinations.

**Influences on loyalty**

Quality of service and (overall) visitor satisfaction are widely attributed as influencing loyalty, with the former directly influencing loyalty as well as having a mediated influence via satisfaction (Chi, 2012; Lee et al., 2004; Rivera & Croes, 2010; Tian-Cole et al., 2002) (Figure 1; Table 3, column 4). The relationships illustrated in Figure 1 suggest the necessity but not sufficiency of including satisfaction in loyalty studies. It is necessary to include satisfaction because of its effect on loyalty. This effect is well known and comprehensively reported in marketing as well as tourism research (Baker & Crompton, 2000; Wang, Zange, Gu, & Zhen, 2009; Yuksel, Yuksel, & Bilim, 2010; Zabkar et al., 2010).

It is, however, insufficient to report on satisfaction alone for two reasons. First, managers of protected areas are increasingly interested in outcomes such as repeat visits, increasing visitor numbers through visitors recommending destinations to others, and willingness to pay more, rather than satisfaction per se. Loyalty (intentions) measures give managers this much-needed information and are essential for performance reporting. Second, other variables, additional to satisfaction and service quality, influence loyalty (Table 3, column 4). Of these other variables, place attachment has received the most research attention (Kyle et al., 2004; Lee et al., 2007; Weaver & Lawton, 2011). Destination image (e.g. pre-visit perceptions regarding natural attractions, entertainment and events,
travel infrastructure) (Chi, 2012), value for money (Rivera & Croes, 2010), involvement in activities (Lee et al., 2007), and quality of experience (i.e. benefits gained from the visit) (Tian-Cole et al., 2002) also receive attention (Table 3).

Loyalty and place attachment

Place attachment has been suggested as conceptually similar to attitudinal loyalty (Kyle et al., 2004), and as such influential in determining behavioural intentions associated with loyalty. Place attachment research has made important contributions to protected area research and management in helping explain visitors’ responses to a destination and especially to proposed changes to that destination. Place items, as developed and tested by Williams and Vaske (2003), have been included in loyalty studies either as antecedents of loyalty (Kyle et al., 2004) to help explain the processes contributing to loyalty or as part of operationalising loyalty as a complex construct including attitudinal, conative, and behavioural loyalty (Lee et al., 2007) (Table 3). In their study of visitors to a South Carolina protected area, Weaver and Lawton (2011) took an approach related to that of Lee et al. (2007), using place items to help operationalise attitudinal loyalty as an influence of loyalty intentions. Ramkissoon, Smith, and Weiler (2012) examined the relationship of place attachment with the behavioural intentions of visitors to Dandenong National Park in Victoria, Australia. Place attachment is also central to investigations of the loyalty of first-time versus repeat visitors (Chi, 2012; Weaver & Lawton, 2011).

With respect to first-time versus repeat visitors, Chi (2012) from their study at Arkansas – Eureka Springs, southern USA – noted that repeat visitors had higher levels of revisit and recommend intentions than first-time visitors. Overall satisfaction had a stronger impact on loyalty for first-time than for repeat visitors. Also, for first-time visitors both overall satisfaction and service quality directly influenced loyalty, whereas for repeat visitors only overall satisfaction had a direct influence.

Research agenda

Enormous progress has been made over the last decade in loyalty research of nature-based tourists, including visitors to protected areas. It is timely to reflect on this progress and suggest research directions for the next decade. This is the purpose of this last section. Several elements of the agenda are reminders of research remaining to be done on aspects that have received considerable research attention already, such as service quality. Others are developing elements, such as loyalty beyond a single natural area and intriguing analyses triggered by visitor segmentation and place attachment, where new, novel insights are likely.

Service quality and satisfaction (1)

Both service quality and satisfaction have received extensive attention in leisure, recreation, and tourism research and more recently in nature-based tourism (Lee et al., 2004; O’Neill et al., 2010; Rivera & Croes, 2010; Weaver & Lawton, 2011). Evidence to date suggests both are important in understanding and managing visitors and enhancing loyalty. Manning (2011) reminds us that (overall) visitor satisfaction is important in its own right as an indicator of the quality of park management. Perceptions of service quality are important in natural-based tourism (and more broadly) for their influence on satisfaction and both directly and indirectly on loyalty (Lee et al., 2004; Nowacki 2009; Tian-Cole & Crompton, 2003; Tian-Cole et al. 2002; Zabkar et al. 2010).
It is not known, however, if improving service quality (e.g. more information, friendlier staff, better facilities) results in increased loyalty. Experimental data are needed to measure the effects of services and facilities on loyalty. In the only study reported in the peer-reviewed literature where service quality has been experimentally manipulated, no difference in overall satisfaction was found (Daniels & Marion, 2006). In their study of visitors using the Appalachian Trail, new campsites were constructed and campfires prohibited to address the problem of high-use/high-impact campsites. Visitors were surveyed pre- and post-intervention. Visitors were significantly more satisfied with most social and environmental indicators post-intervention, but there was no difference in overall satisfaction. This lack of significance emphasises the value in obtaining experimental data to further test these relationships.

Several service quality attributes are suggested by previous research for attention. Fletcher and Fletcher (2003) identified park maintenance and park personnel as strong predictors of satisfaction using multiple regression analysis of visitors to state parks in Florida. Lee et al. (2004) suggested interpretation as a service quality improvement. As such, experimental efforts would do well to focus on one or more of these attributes. Interventions associated with restrooms seem logical given that IPA often highlights poor performance of this feature of park service (e.g. Ryan & Cressford, 2003; Wade & Eagles, 2003). Park personnel and interpretation are two other obvious avenues.

**Other influences on loyalty (2)**

Elaboration of the measurement model for loyalty, including and beyond service quality and satisfaction, is essential as is validation in different settings (e.g. front country, back country, marine settings) (Lee et al, 2004; O’Neill et al., 2010). O’Neill et al. (2010, p. 142) comment that such research is essential given that ‘...conservation and preservation executives still find themselves struggling with ways to offer an overall quality experience that will ultimately leave the visitor satisfied and with the desire to revisit or recommend’.

One of the most promising areas is a benefits-based approach that relies on the experiential focus of the REP scales (Driver, 1996, 2008; Driver et al., 1991), as described earlier in the paper (refer to **Review of literature section**). Crilley et al. (2012) chose opportunities for solitude, escape from personal pressures, learning, enjoying nature, and family togetherness as the benefits of most relevance to park visitors. This benefits-based approach has been used in several countries including Australia, New Zealand, and Canada, although its usefulness has been critiqued (McCool, Clark, & Stankey, 2007). The main concern is a lack of knowledge about how managers can contribute to the benefits desired by visitors. Analysis of visitor segments has helped overcome this concern through relating benefits to visitor types (Frochot & Morrison, 2001; Li, Huang, & Cai, 2009), as well as the expectations of these segments regarding service quality.

Another promising area is place attachment, with its inclusion in loyalty research adding a vibrant body of scholarship. Although place-loyalty research is in its infancy, place items (drawn from a wealth of research on place identity and place dependency) are already helping to measure an attitudinal contribution to loyalty intentions and behaviour. Investigation of the parallels in the development of place meanings and destination loyalty could be a productive research focus.

**Measuring loyalty (3)**

Two issues are of critical concern here: potential problems from combining items to measure loyalty that may be reported very differently for different destinations (and by
different visitors) (Rivera & Croes, 2010) and the importance of progressing analysis of loyalty as a complex construct (Lee et al., 2007), with continued attention to intended behaviours requiring minimal through to high investment (Weaver & Lawton, 2011). Although loyalty has been reliably measured in the small number of studies of nature-based tourists, sufficient doubt has been raised by Rivera and Croes (2010) in studying ‘once-in-a-lifetime’ visitors regarding the unreliability of intention to revisit as a measure of loyalty, specifically when using intention to revisit and recommending to others (Table 2; Weaver & Lawton, 2011). For ‘once-in-a-lifetime’ destinations, intention to revisit is not a suitable item.

Lee et al. (2007) describe loyalty as a complex, sequenced construct of attitudinal, conative, and behavioural loyalty. Most research to date has focused on the second element, with researchers such as Rivera and Croes (2010) suggesting this as the central focus to keep questionnaires to a manageable length. The majority of loyalty studies in nature-based tourism measure intention to revisit and recommend, both measures of conative loyalty. Greater efforts, adding to those underway by Lee et al. (2007), Kyle et al. (2004), and most recently Weaver and Lawton (2011), to better understand and measure attitudinal, psychological, and behavioural aspects of loyalty could be advanced by further investigating this tripartite construct.

The items in Table 2, and potentially others yet to be identified and tested, provide a basis for further investigating and developing a suite of items for measuring (conative) loyalty. Ramkissoon et al. (2012) and Tonge et al. (in preparation) also provide a useful set of items. Weaver and Lawton (2011) have also begun this task, making it clear that further work is required on the items in the second half of Table 2 given their ad hoc development. Further testing in different settings is also essential to ensure their reliability and validity in contributing to measurement of loyalty as a construct.

**Segmenting visitors (4)**

Visitor segmentation to determine the differing influences on loyalty is very much in its early stages. One recent study identified income, education, residency, and birding skills as factors differentially influencing loyalty to a protected area in South Carolina (Weaver & Lawton, 2011). Another showed how repeat visitors reported higher levels of intention to revisit and positive referrals than did first-time visitors (Chi, 2012). There are clearly opportunities to examine the influences on the loyalty of different visitor segments as well as the various ways in which they might differentially express loyalty.

**Loyalty to what? (5)**

All loyalty research to date regarding nature-based tourism and protected areas has been based on an assumption of loyalty to a particular destination. Kyle et al. (2004, p. 100) clearly summarised this intent:

> In the context of natural resource-based recreation the concept of loyalty is most often used to refer to recreationists’ attachments to specific recreation areas. Seldom has recreationists’ loyalty to the service provider (e.g., National Park Service, USDA Forest Service, Bureau of Land Management, etc.) been examined.

Their work and subsequent efforts, especially where place attachment is a key consideration, have all focused on a destination. A refreshing exception and important direction for future research is suggesting sense of place ‘...as a phenomenon of multideestination loyalty or bonding derived as much from perceived environmental value as direct experience’
(Weaver & Lawton, 2011, p. 337). This opens up the possibility of loyalty to multiple places or destinations within a system of natural areas.

Loyalty to multiple destinations, described as transferred loyalty (Pearce & Kang, 2009), offers rich research opportunities. For example, visitors to the Galapagos may be loyal to iconic protected areas with rare wildlife, to protected areas in general, and/or to a protected area agency such as the National Park Service, rather than a single destination. New measures are required to access these expressions of loyalty. In all these cases, loyalty to multiple destinations or to an agency rests on a long-term relationship rather than a single transaction. Again, interesting research possibilities are suggested, such as exploring the influences of multiple transactions on loyalty. Another potential research avenue is examining loyalty as having multiple loci at different scales (Pearce & Kang, 2009), for example, loyalty to a particular site, a single protected area, a protected area system, and/or protected areas as a more abstract concept.

**Conclusion**

Understanding and improving loyalty to natural areas is essential in the rapidly changing social and political environment of the twenty-first century. We can no longer assume that natural areas will continue to exist and many are already suffering from attrition as damaging land uses, such as timber extraction, encroach on their values. Loyal visitors have the potential to be advocates for such areas as well as being willing to pay to visit and enjoy such areas. As such, it is critical to continue to progress loyalty research, with a particular focus on its antecedents, so that managers can understand and enhance visitor loyalty and thereby better protect our irreplaceable natural places.

**Acknowledgement**

This research was supported under the Australian Research Council’s Linkage Projects funding scheme (project number LP100200014).

**Note**

1. The World Parks Congress is held every 10 years and is described as ‘... the world’s most influential gathering of people involved in protected area management’ (International Union for Conservation of Nature, 2012).

**References**


