

Moyle, B. and Weiler B. (in press). Revisiting the Importance of Visitation: Public Perceptions of Park Benefits. *Journal of Tourism and Hospitality Research*

ACCEPTED FOR SPECIAL ISSUE: A Decade of Progress in Protected Area Tourism.

Revisiting the Importance of Visitation: Public Perceptions of Park Benefits

Abstract

The personal and community-wide benefits of parks are well documented in previous studies. Despite a strong recognition of park benefits in the literature, there has been limited inquiry focused on the relationship between visitation and perceptions of the personal and community-wide benefits of parks. Consequently, this paper revisits the influence of visitation, as well as other key variables, on public perceptions of the benefits of parks. To achieve this objective a survey was administered to 1584 participants from Australia. Overall, the Australian public was quite positive about the benefits of parks. Results revealed a strong association between visitation, age, gender and public perceptions of park benefits. Residing in an urban or regional location had little effect on perceptions of park benefits. Future research and management attention should be directed towards improving non-visitors', young people's and males' perceptions of the benefits of parks.

Keywords: Visitor, Public, Perceptions, Park, Benefit

Revisiting the Importance of Visitation: Public Perceptions of Park Benefits

INTRODUCTION

The world contains in excess of 100,000 protected areas, of which the terrestrial ones cover 12.2% of the earth's surface (UNEP-WCMC 2008). Protected areas are a clearly defined geographical space, managed through legal or other effective means, to achieve the long-term conservation of nature and its associated values (Dudley, 2008). As such, protected areas are recognised internationally as a key strategy in nature conservation, contributing to the preservation of global biodiversity (Moyle & Croy, 2009). If well planned and managed, protected areas are among the most effective tools for shielding endemic species from extinction, particularly from the impact of human-induced threats (Morse, Hall & Kruger, 2009). Although a key purpose of protected areas, including national parks, is to conserve and safeguard biodiversity, they also offer people the opportunity to experience and enjoy the natural environment (Schliephack, Moyle & Weiler, 2013). Consequently, many national parks across the world have become sites for tourism, leisure, and recreation.

Tourism, leisure and recreation in parks have been identified to provide a vast array of physical and mental health benefits for visitors (Maller, Townsend, Pryor, Brown & St Leger, 2006), and indeed 'improving health and well-being' was one of the themes of the 2014 World Parks Congress that precipitated this special issue of THR. This has led some authors to conclude that visiting parks is important for human well-being (Mowen, Payne, Orsega-Smith & Godbey, 2009). Although the importance of parks for visitors has been established, few studies have considered if visitors are important for parks (Weiler, Moore & Moyle, 2013). Visitation to parks can potentially benefit parks in an enumerative amount of ways, for instance visitors have been identified as especially important for building and enhancing societal support for national parks, which is critical for their survival globally (Crompton, 2008). Despite this, visitors are often regarded as secondary by park agencies, even perceived as getting in the way of the core business of conservation, especially in times of economic austerity (Ise, 2011).

Drawing on the results of empirical research conducted in Australia, this paper seeks to fill a gap in the literature relating to understanding how park visitation is associated with positive perceptions of the benefits of parks among the constituent public. In addition, this manuscript investigates how perceptions of park benefits vary across different segments of the public. A key contribution of this paper is valuable insights into how perceptions of benefits can be leveraged to build support for parks among the constituent public. Importantly, this has implications for the communication strategies parks management agencies can utilise to sustain and enhance support for parks and associated conservation initiatives. A secondary but equally important contribution of this research is the design and implementation of an instrument that can be used by parks management agencies to monitor public perceptions of the personal and community-wide benefits of parks.

LITERATURE REVIEW

While the theme of this special issue of THR is ‘Sustainable and inspirational: A decade of progress in protected area tourism’, the benefits of leisure and recreation including benefits within the context of national parks have been the subject of intense scholarly enquiry for much longer than a decade, having in fact spanned the past four decades (Weber & Anderson, 2010). However, previous literature tended to segment the benefits of parks into five core categories, including physiological, psychological, sociocultural, environmental and economic benefits (Manning, 2009). There has been considerable consolidation of this literature in the past decade that now suggests that benefits derived from a visitor experience in parks can include an improved change in condition, maintenance of a desired condition, prevention of or reduction in an undesired condition, and the realisation of a satisfying experience (Driver, 2008). The following provides some key highlights, with more literature accessible in the form of an annotated bibliography produced as part of this project (Moyle, Weiler & Schliephack, 2011) and freely downloadable at http://works.bepress.com/betty_weiler/76/

The rising cost of healthcare has thrust the potential benefits offered by leisure and recreation in parks into the public debate surrounding preventative healthcare measures (Bowler, Buyung, Knight & Pullin, 2010). Physiological benefits stem from opportunities for regular physical exercise provided

by parks, which has the potential to alleviate a vast array of health issues (Leahy, Shugrue, Daigl & Daniel, 2009). Activities such as walking, cycling and running in parks not only offer physiological health benefits, but are enjoyable as well, encouraging long-term participation (Henderson & Bialeschki, 2005). Frequently-cited physiological benefits include a reduction in the risk of heart attack, lowered cholesterol, increased cardiovascular fitness and maintaining healthy muscles and bones (Maller et al., 2009). For instance, Orsega-Smith, Mowen, Payne and Godbey (2004) found that physical activity while visiting parks led to a reduced Body Mass Index. Previous research demonstrates that a majority of physical health benefits derived from parks occur as the result of multiple and frequent visits to parks (Godbey, Caldwell, Floyd & Payne, 2005). Evidence suggests that proximity to parks, especially in urban landscapes, results in more physical activity being undertaken in parks and more health benefits for visitors (Alvarez & Larkin, 2010).

Previous studies suggest that the physical and psychological health benefits that occur from visitor experiences in parks are very much interrelated (Stodolska, Shinew, Acevedo & Izenstark, 2011). As a result, the link between physical activity and psychological health benefits in parks has been covered extensively in the literature (Frost & Hall, 2009). More and Payne (1978) conducted pioneering work on the psychological health benefits in a park setting, finding park users reported lower levels of anxiety and sadness after visiting parks. Following this work, Godbey and Blazey (1983) determined visitors were in a better mood after a visitor experience in parks. Hull and Michael (1995) added to this work, finding that the longer the participants stayed in park settings, the less stress they reported. Since the foundation was set, the restorative effects of exposure to natural environments facilitated by parks have been widely documented by empirical studies (Heintzman, 2013). Commonly identified psychological health benefits include a more holistic sense of wellness, increased perceived quality of life, reduced depression, greater self-confidence and problem-solving abilities (Rosenberger, Bergerson & Kline, 2009). Beyond this, literature is emerging to suggest that in some instances, parks present the opportunity to find inner peace and achieve spiritual and restorative benefits (Maller et al., 2006).

Visitor experiences in parks have also been documented to provide social and cultural benefits (Stein & Lee, 1995). For instance, parks can make neighbourhoods more liveable, create an increased sense of community, offer recreational activities for at-risk youth and low-income families as well as connect people from diverse cultural backgrounds (Allen, Stevens & Harwell, 1996; Tinsley, Tinsley & Croskeys, 2002; Mainella, Agate & Clark, 2011; Perry, Saelens & Thompson, 2011). Previous studies often report that parks have a key role in facilitating social interaction, which is critical for maintaining community cohesion and pride and building social capital (Hung & Crompton, 2006). For example, in a study of park benefits, Moore et al. (2010) found opportunities for social interaction to be critical for encouraging park use. There is a substantial body of literature on the importance of and strategies for connecting youth and nature more broadly (beyond parks) but this is outside the scope of the current study.

Economic benefits, such as a reduction in the cost of healthcare, have also been reported to occur as a result of visitor experiences in parks (Bushell & Eagles, 2007). Park management agencies draw attention to the link between spending time in parks and economic benefits to demonstrate relevance beyond conservation and to the economic bottom line (Harper, Neider & Godbey, 1997). Crompton (2008; 2009) argues that the evidence of the physical and psychological health benefits of visiting parks can be leveraged to support the view that parks reduce the cost of healthcare and thus help reposition the value of parks in relation to other non-discretionary government portfolios. That is, more people being physically active creates a healthier society, and in turn there is less pressure on the health sector to provide services for mentally and physically unwell patients. However, limited research has ascertained if the public accepts the idea that the health benefits of parks translate into broader economic benefits, with current attempts to definitively measure a link between the two being tenuous at best. Other documented economic benefits of visitor experiences in parks include less work absenteeism, reduced on-the-job hazards and decreased job turnover (Hunt, Scott & Richardson, 2003), and increased tourism (Oh & Hammitt, 2010).

Visitor experiences in parks have also been identified to provide a variety of environmental benefits to visitors, with flow-on effects to the broader community (Kaczynski & Crompton, 2004; Halpenny,

2010). Although it is beyond the scope of this manuscript to review the large body of literature on the environmental benefits of parks, the contribution of parks to maintaining biodiversity is well documented, particularly in the preservation of natural, cultural and historic sites (Jager & Halpenny, 2012; Weaver, 2013). In addition, visiting parks has been identified as important for environmental stewardship and advocacy for the environment (Nuva, Mad Nasir, Alias, Ahmad, 2009). Other ecosystem services, including clean air and water quality and, more recently, the role of parks in combatting the effects of climate change are also inherently linked to having a natural environment frequented by visitors (Jones & Scott, 2006).

As a consequence of the increased recognition of the importance of benefits, a framework broadly defined as Benefits Based Management (BBM) emerged. BBM has evolved considerably since Driver and Tocher (1970) first introduced the concept of a behavioural approach to the study of leisure and recreation. The articulation of BBM is not captured in a single document, but rather in at least two books and a series of papers published over three decades (Veal, 2010). Outcomes Focussed Management (OFM), the most recent incarnation of BBM, stipulates that achieving a desired experience in parks leads visitors to accrue a series of benefits, on-site and off-site as well as short-term and long-term (Weber & Anderson, 2010). OFM allows managers to target the benefits associated with visitor experiences, and design recreation opportunities in appropriate settings that can achieve target benefits. For example, a parks agency may identify self-esteem and social interaction as key benefits to target. The achievement of these two target benefits would be identified as goals, and recreation opportunities would be developed to address them directly (Allen, Stevens & Harwell, 1996). Then, the beneficial consequences of each recreation activity would be identified, monitored and evaluated. In practice, this process includes the three key steps of benefit and opportunity identification, implementation and evaluation (Allen, 1996).

Although OFM has been operationalised around the world, criticisms have emerged centred around the relative utility of the framework as a tool for the management of visitor experiences in parks (Moore & Driver, 2005). A common criticism of the OFM is that benefits often transfer across each of the five core categories of physical, psychological, economic, socio-cultural and environmental (Stein

& Anderson, 2002). The perceived physiological health benefit of weight loss, for example, has the potential to generate psychological benefits for the individual, such as increased self-confidence, as well as reduce the economic burden on the health care system through less risk of chronic disease (Pigram & Jenkins, 1999). In addition, the OFM framework has been criticised for its inability to definitively link and quantify the achievement of benefits with leisure and recreation in a particular park (Godbey & Mowen, 2011).

As a result of the inherent difficulties in conceptualising benefits and associated measurement issues, Moyle, Weiler & Moore, 2014 have proposed an alternative framework, arguing that benefits occur using a laddering approach consisting of three layers. The layers were based on a review of 147 studies on park benefits (see Moyle, Weiler & Moore, 2014) and a series of interviews with 27 senior park managers employed within Australia. The first category, labelled 'personal experiential benefits', includes benefit items specifically focused on the realisation of satisfying recreation experiences in parks. The second category of benefits, 'personal higher-order benefits', taps into benefits typically associated with multiple recreation experiences in parks. The third category of benefits focuses on benefits beyond the individual level, and delving into the broader benefits that visitor experiences in parks provide to communities and to society in general. This particular level of benefits has been used by Crompton (2008; 2009) and colleagues in efforts to strategically position parks in the US marketplace.

Despite a growing body of knowledge on the benefits of parks to visitors, there is a lack of contemporary research which generates empirical data on the relationship between visiting parks and public perceptions of benefits. With a few notable exceptions (e.g. Jager & Halpenny, 2012), there are few studies that have examined whether visiting parks actually transfers into more positive perceptions of the benefits of parks. Revisiting this question is particularly important for the parks fraternity in the face of continued pressure to demonstrate relevance to the public as a basis for attracting government funding to support conservation initiatives. Consequently, the aim of this paper is to examine the relationship between visitation and public perceptions of the benefits of parks in 3 Australian states of Victoria, Western Australia and New South Wales. In addition to park visitation,

the potential influence of other key variables such as age, gender, and region on public perceptions of park benefits are explored.

This research contributes to park management practice by identifying how parks can leverage perceptions of benefits to build and sustain relevance in rapidly changing 21st century society, in particular, demonstration of a methodology that can be used by park managers to monitor public perceptions of the benefits of parks. The methods also provide park managers with a mechanism for identifying segments of the public with less-than-optimal perceptions of the benefits that parks offer. Targeting these segments of the public with communication interventions based on the principles of persuasive communication may be an important strategy for garnering public support for parks.

METHOD

Over 28 million hectares of Australia are designated as national parkland, accounting for almost four per cent of Australia's land areas. In addition to over 500 designated national parks, a further six per cent of Australia is protected and includes state forests, nature parks and conservation reserves. Most of Australia's national parks are managed by the state and territorial governments of Australia, with the Commonwealth government managing just six national parks and a further 13 marine parks. This research set out to explore public perceptions of Australian parks managed by state government agencies in the 3 Australian states of Victoria, Western Australia and New South Wales.

Parks Victoria is responsible for managing an expanding estate covering more than 4 million hectares, or about 17 per cent, of the state of Victoria. The Department of Parks and Wildlife (formerly known as the Department of Environment and Conservation) in the state of Western Australia manages land covering more than 27 million hectares. The Office of Environment and Heritage manages 7 million hectares of national parks and reserves, which is almost 9 per cent of the state of New South Wales. These 3 park management agencies were selected in this research due to their considerable size and influence in managing national parks and visitation to parks in Australia.

Data on public perceptions of the benefits of providing visitor experiences in parks was solicited via an online survey instrument. Participants were recruited via an online panel provider, Survey

Sampling International (SSI), based in Sydney, Australia. One of the key advantages of utilising the services of a panel provider was the ability to gain a representative sample of the population within each of the states of Victoria, Western Australia and New South Wales. Sampling in each state was stratified, with quotas in each state set by age, by gender and by region. The panel provider distributed the instrument to their existing opt-in lists of residents based on post-codes, which aligned with the State Government Area boundary as defined by the Australian Standard Geographical Classification (ASGC) (Australian Bureau of Statistics, 2011).

Following collection, data were then weighted (scaled up) by age and sex to the resident population in each of the three states (sourced from the Australian Bureau of Statistics, 2011). Australian population data are reported in 5-year age categories including a 15-19 year age group category. As ethics approval limited sampling to respondents aged 18 and over, the present study includes only 18 to 19 year olds from this 15-19 year age group. The weighting procedure improves the representativeness, particularly in the older age groups, thereby improving the generalisability of the results to the population in each state. However, although generating more robust data, weighted data limits options available for multivariate analysis (McLennan et al., 2013). As a result, Adjusted Wald tests rather than t-tests were used to compare means (UCLA Academic Technology Services, 2011).

The benefit items included in each of the survey instruments were identified in an earlier stage of research using interviews with park managers (Moyle, Weiler & Moore, 2014) and from previous studies on the benefits of parks (Driver, 2008; Manning, 2011). Items were presented in three categories reflecting the multiple layers of park benefits conceptualised in extant literature and identified by park managers. These three categories included personal experiential benefits (12 items), personal higher-order benefits (12 items) and societal/community-wide benefits (15 items). Respondents' perceptions of the benefits of visiting parks were measured on 7-point Likert-type scales from 'Very Strongly Disagree' to 'Very Strongly Agree'. Other information, such as demographic characteristics and park visitation habits, was also gathered from respondents.

RESULTS

Participant Background

A total of 1,584 members of the Australian public were surveyed, including 523 from Victoria, 537 from Western Australia and 524 from New South Wales. Table 1 illustrates how these were stratified by age, gender, and region across each of the three states. Table 1 also presents some summary statistics for other trip and demographic variables measured in the instrument.

INSERT TABLE 1 HERE

As shown in Table 1, a systematic sample was obtained across various age groups, gender and regions in each of the three states. Table 1 illustrates that both Australian- and internationally-born members of the public participated in the survey, with a range of different levels of education. The park visitation habits of respondents varied, with around 70% of participants in each state reporting to visit parks at least once a year, meaning around 30% of residents captured in the sample did not visit parks at all. The first section of the results is presented mainly to illustrate the lack of variability between the three states, in order to support the decision, for the remainder of the analysis, to aggregate the data from the three state-wide surveys. The bulk of the analysis focuses on the relationship between age, gender, region and park visitation habits on public perceptions of the benefits of visiting parks.

Public Perceptions of the Benefits of Visitor Experiences in Parks in Australia

For all three types of benefits, the relative ranking of benefits was the same across the three states. As shown in Table 2, particularly high scoring benefit items across the three states included access to natural experience, escape the urban environment, experience something new and different, find peace and solitude, relax and unwind, have fun and socialise with friends and family members. For personal higher-order benefits, also displayed in Table 2, 'to appreciate scenic beauty' and 'connect with nature' were the two benefit items that were rated the highest. Some of the key broader societal/community-wide benefits perceived by public in all three states included increased tourism, increased community wellbeing, increased community pride, protection of biological diversity,

protection of drinking water, provision of clean air and provision of green spaces. Benefit items such as reduction in the cost of healthcare, reduction in the effects of climate change and increased business investment were not rated as highly as other items.

INSERT TABLE 2 HERE

INSERT FIGURE 1 HERE

Although the specific purpose of this paper is not to compare public perceptions of parks across each Australian state, the data revealed that residents from Victoria and Western Australia perceive the benefits of parks very similarly. New South Wales residents' perceptions follow a similar trend line, however, the NSW public perceives the benefits of parks slightly more positively than residents of Victoria and Western Australia.

Perceptions of Benefits by Age, Gender, Region and Park Visitation Habits

Data from each state were aggregated to explore the factors that influence public perceptions of the benefits of visiting parks across the three domains: personal experiential benefits, personal higher-order benefits, and societal/community-wide benefits. Table 3 displays the results of the analysis conducted on public perceptions of parks by age, gender, region and park visitation habits. Adjusted Wald tests were conducted to determine significant differences.

INSERT TABLE 3 HERE

INSERT FIGURE 2 HERE

The relative ranking of benefits by males and females is very similar (see Figure 3). However, as shown in Table 3, significant differences between males and females were found on a number of different personal experiential (8), higher-order (11) and community-wide (5) benefits associated with visiting parks. These differences were particularly prolific for the personal experiential and personal

higher-order benefits of parks. Females had more positive perceptions of the benefits of parks across all benefit items measured in the instrument.

To explore public perceptions of the benefits of parks by age, differences across the various age groups were examined, revealing that significant differences were most apparent between residents over 30 vs those under 30 years of age. As a result, a new variable was created and respondents were grouped accordingly. While the rank order of benefits are the same regardless of age (see Figure 3), Table 3 reveals significant differences between over 30 and under 30 year olds in 7 personal experiential benefits, 5 higher-order benefits, and 12 community-wide benefits. For each of these items, perceptions of respondents who were over 30 years of age were more positive than respondents under 30 years of age, especially concerning the societal/community-wide benefits of parks.

To explore public perceptions of the benefits of parks in relation to where respondents lived, a new variable was created and respondents were grouped into urban (those living in the state capital cities of Sydney, Melbourne and Perth) and regional (all other) categories. As shown in Table 3, there were only two items with statistically significant differences between urban and regional residents' perceptions of the personal experiential and personal higher-order benefits of parks. In both these instances, perceptions of regional residents were more positive than urban residents. There were significant differences between how urban and regional residents perceived the broader societal/community-wide benefits of parks for six items. In five out of the six instances of significant differences, perceptions of urban residents were more positive than regional residents. However, for one item, increased tourism, perceptions of regional residents were more positive than urban residents.

To explore if park visitation influences public perceptions of the benefits of parks, a new variable was created and respondents were grouped into visitors (those who do visit parks) and non-visitors (those who do not visit parks or are not sure if they visit parks). In total, 1,165 respondents (73%) were visitors, while 415 respondents (26%) were non-visitors. The pattern of responses is remarkably consistent: visitors and non-visitors perceive the benefits in the same rank order (see Figure 3). However, as illustrated in Table 3, there were significant differences uncovered between visitors' and

non-visitors' perceptions of the benefits of parks for 38 out of the 39 items. In all of these instances perceptions of visitors were more positive regarding personal experiential, personal higher-order and societal benefits of parks than non-visitors. The next section of this paper considers these findings in the light of previous research on public perceptions of park benefits.

DISCUSSION

Overall, the findings of this research reveal that the Australian public have relatively positive perceptions about the benefits of visiting parks. Previous studies, notably those undertaken in a US context, have produced similar findings, specifically high levels of perceived user benefits (Crompton 2008; Godbey, Graefe & James, 1993). Outside of a US context, in a study on perceptions of park benefits in Pakistan, Hussain et al. (2010) found over 70% of respondents strongly agreed that health and psychological well-being was improved by spending time in parks. However, the economic and social problems facing many developing nations may mean that communities are more likely to possess an inherent scepticism towards the benefits of parks. This is evidenced in a study by Fiallo and Jacobson (1995) in Ecuador, who found residents' were not convinced that parks provided many benefits for the local community.

Notwithstanding the largely favourable perceptions of park benefits, the current study demonstrates that there is considerable room for improving public perceptions, especially of specific park benefits, such as reduction in healthcare costs, increasing business investment and strengthening social networks. The finding that non-visitors have considerably lower perceptions of the community-wide benefits of parks makes an important contribution to the literature. Previous studies on non-visitors have focused on the barriers and constraints to participation in parks (Thapa, 2012), as well as on the strategies used to negotiate constraints (Zanon, Doucouliagos, Hall & Lockstone-Binney, 2013). Outcomes of this study add considerable value to this body of work, empirically demonstrating the relationship between park visitation and perceptions of benefits. While there is an obvious connection between park visitation and personal benefits, what may be an important finding from this research is the link with public perceptions of community-wide benefits. Visitors were significantly more

positive than non-visitors for all benefit types, but especially benefit items that relate to the role of national parks in the broader community, such as the contribution of parks to community health and wellbeing, community pride, provision of green spaces, reduction in the cost of healthcare and even the protection of biodiversity. This finding suggests efforts to increase visitation to parks may be a key strategy for enhancing positive public perceptions regarding these community-wide benefits. Research focused on constraint identification and negotiation in turn may be important for getting non-visitors into parks and thereby improving their perceptions of park benefits. A combination of communication strategies that enhance the positive perceptions of park benefits and management strategies that help more people to visit parks is perhaps the best way forward for building support for parks and associated conservation initiatives.

Given that this research has revealed that residents under the age of 30 have significantly and dramatically less positive perceptions of the personal and community-wide benefits of parks than residents over 30 years, further research on the relationship between age and perceptions of the benefits of parks seems important. Of the few studies that have considered age, most have been focused on older adults, encouraging visitation to parks to alleviate a myriad of health issues (Hung & Crompton, 2006; Moore et al., 2010). A few studies have identified the importance of encouraging youth into parks, with research demonstrating that participation in leisure and recreation in parks is linked with reduced incidences of juvenile delinquency (Allen, Stevens & Harwell, 1996; Kaczynski, Havitz & McCarville, 2005). The findings of this study provide empirical evidence that in addition to the constraints that limit youth visitation to parks, people under 30 have low perceptions of the personal and community-wide benefits of parks. As such research designed to inspire a connection to nature among the next generation, noted earlier as a growing field of study, may be particularly important, considering people under 30 will be the next cohort to advocate for the protection of parks from more utilitarian interests, such as forestry or mining.

This research also revealed that females consistently evaluated both the personal and community-wide benefits of parks more positively than males. In a study on gender variations in urban park preferences, Ho et al. (2005) found women were more likely than men to evaluate park characteristics

as important, but found limited differences regarding perceptions of the benefits of parks. In addition, the present study found limited difference between urban and regional residents' perceptions of the benefits of parks. While previous studies have focused on differences in perceived benefits among specific ethnic groups (Tinsley, et al., 2002), the recognition that urban and rural residents have relatively similar perceptions of the benefits of parks contradicts the findings of some previous studies. For instance, Weaver and Lawton (2001) found supporters, neutrals and opponents to the tourism development in the urban-rural fringe, with differences in clusters depending on place of residence.

Previous studies on the repositioning of parks and leisure services provide some important insights into how the key findings of this research can be operationalised in a park management context (Crompton, 2008, 2009; Kaczynski, Havitz & McCarville, 2005). The construct of positioning, drawn from the marketing literature, has come relatively late to public sector organisations, but is now acknowledged as one of several tools potentially useful for building public support for parks (Morgan, Pritchard & Piggot., 2002). Despite this recognition, the application of positioning to park management has received little attention outside of the US, partly due to the complexity of positioning public sector services and experiences as opposed to products (Blain, Levy & Ritchie, 2005). Despite the emergence of the importance of the concept of repositioning in parks, there are still few practical examples published which demonstrate how repositioning is operationalised, with knowledge primarily conceptual (Crompton, 2000), and focused explicitly on community-wide benefits, often overlooking the importance of the visitor (Crompton, 2009).

Even with such limitations, such previous studies have laid the foundation for research focused on repositioning parks agencies in the hearts of minds of the constituent public. Particular attention needs to be given to segments of the public with less favourable perceptions of the benefits of parks, such as non-visitors, males and people under 30 years of age as evidenced in the present study. Efforts need to be made to build support for parks among these particular groups. Interventions based on the principles of persuasive communication have the potential to improve public perceptions of parks benefits, thereby assisting to build and sustain support for parks into the future.

CONCLUSIONS, IMPLICATIONS, FUTURE RESEARCH

Buckley (2009) recently noted that ‘visitors may bring with them the political capital to survive’ (p.1). If parks are not regarded as relevant by society, then the two-thirds of the country’s ecological diversity that parks protect may be threatened through neglect (Sattler & Glanznig, 2006). As a result, this research sought to understand if visitation, as well as other key variables, is associated with the perceptions of benefits that the public holds regarding parks. To achieve this objective, a survey was administered across 3 Australian states of Victoria, New South Wales and Western Australia. Importantly, findings revealed that perceptions of benefits were similar across the 3 states, with the rank order of benefits consistent despite NSW residents having slightly more positive perceptions than Victorian and Western Australian counterparts. Females have significantly more favourable perceptions than males on most benefits, especially for experiential and personal benefits. However, there were fewer significant differences between males and females for societal benefits. Respondents over 30 have significantly more favourable perceptions than respondents under 30 for nearly all societal benefits and for most personal experiential benefits. Perceptions of benefits are largely the same regardless of place of residence (urban or regional) for all three types of benefits.

Park visitation was found to be statistically significant for the greatest number of benefit items. This research revealed that respondents that had visited a park in the last 12 months had significantly more positive perceptions than those who had not visited a park on all but one of the 39 items. This finding suggests that visiting parks is not only critical for appreciating the personal benefits that can be derived from visitation, but also critical for recognising the broader community-wide benefits critical for demonstrating relevance to broader society. A key message of this research is that visitation is important for parks, and that getting non-visitors into parks may be a key strategy to enhance and sustain support for parks and associated conservation initiatives. To encourage visitation, parks agencies could also focus on how to improve perceptions of benefits among segments of the public including non-visitors.

The present study was limited to a one-off measure of perceptions, and respondents were asked about their perceptions of the benefits of a state-wide system of parks. The methods and instruments lend

themselves to a more targeted study such as perceptions of the benefits of visiting specific parks. They could also be applied to specific stakeholder groups whose perceptions may be of particular strategic importance. Potentially, interventions based on the principles of persuasive communication could be administered together with pre-and-post measures of perceptions to examine whether perceptions can be shifted. The move to experimental and intervention-based research is an indicator of the progress and maturity of research in protected area tourism. If successful, such a study would provide important insights into how to use communication to build support among specific constituent publics who may have less favourable perceptions of the benefits of parks than the respondents in the present study. Qualitative research that explores why particular segments of the public hold the perceptions that they do would also add further richness to this important area of study.

Funding Disclosure

This research was funded by an Australian Research Council Linkage project number: **LP100200014**

REFERENCE LIST

- Allen, L. R. (1996). Benefits-based management of recreation services. *Parks & Recreation (Arlington)*, 31(3), 64-76.
- Allen, L. R., Stevens, B., & Harwell, R. (1996). Benefits-based management activity planning model for youth in at-risk environments. *Journal of Park and Recreation Administration*, 14(3), 10-19.
- Alvarez, S., & Larkin, S. L. (2010). Valuing ecological restoration and recreational benefits in a mountain protected area: The case of Los Nevados National Park, Colombia. *Journal of Sustainable Development*, 3(4), 3-16.
- Blain, C., Levy, S. E., & Ritchie, J. B. (2005). Destination branding: Insights and practices from destination management organizations. *Journal of Travel Research*, 43(4), 328-338.
- Bowler, D. E., Buyung-Ali, L. M., Knight, T. M., & Pullin, A. S. (2010). A systematic review of evidence for the added benefits to health of exposure to natural environments. *BMC Public Health*, 10, 456- 466.
- Buckley, R. (2009). Parks & Tourism. *PLoS Biol*, 7(6), e1000143.
- Bushell, R., & Eagles, P. F. J. (2007). *Tourism and protected areas: Benefits beyond boundaries*. Gateshead: Athenaem Press.
- Crompton, J. L. (2000). Repositioning leisure services. *Managing Leisure*, 5, 65-76.
- Crompton, J. L. (2008). Evolution and implications of a paradigm shift in the marketing of leisure services in the USA. *Leisure Studies*, 27(2), 181-205.
- Crompton, J. L. (2009). Strategies for implementing repositioning of leisure services. *Managing Leisure*, 14(2), 87-111.
- Driver, B. 2008. *Managing to optimize the beneficial outcomes of recreation*. State College: Venture Publishing.

- Driver, B. L., & Tocher, S. R. (1970). Toward a behavioral interpretation of recreational engagements, with implications for planning. In B. L. Driver & S. R. Tocher (Eds.), *Elements of outdoor recreation planning*. State College, PA: Venture Publishing.
- Dudley, N. (2008). Guidelines for applying protected area management categories In IUCN (Ed.). Switzerland.
- Fiallo, E. A., & Jacobson S. K. (1995). Local communities and protected areas: Attitudes of rural residents towards conservation and Machalilla National Park, Ecuador. *Environmental Conservation*, 22, 241-249.
- Frost, W., & Hall, C. M. (eds.) (2009). *National parks and tourism: International perspectives on development, histories and change*. London and New York: Routledge.
- Godbey, G., & Blazey, M. (1983). Old people in urban parks: An exploratory investigation. *Journal of Leisure Research*, 15, 229-244.
- Godbey, G., Caldwell, L., Floyd, M., & Payne, L. (2005). Contributions of leisure studies and recreation and park management research to the active living agenda. *American Journal of Preventive Medicine*, 28(2 Suppl 2), 150-158.
- Godbey, G., Grafe, A., & James, S. (1993) Reality and perception: Where do we fit in? *Parks and Recreation*, 28(1) 76-83.
- Godbey, G., & Mowen, A. (2011). The benefits of physical activity provided by park and recreation services: The scientific evidence. *Australasian Parks and Leisure*, 14(1), 26-29.
- Halpenny, E. A. (2010). Pro-environmental behaviours and park visitors: The effect of place attachment. *Journal of Environmental Psychology*, 30, 409-421.
- Harper, J., Neider, D., & Godbey, G. (1997). The use and benefits of public parks and recreation services in Canada. *Parks & Recreation Canada* (5), 22-24.
- Heintzman, P. (2013). Spiritual Outcomes of Park Experience: A Synthesis of Recent Social Science Research. *George Wright Forum* (30), 3, 273-279

- Henderson, K. A., & Bialeschki, M. D. (2005). Leisure and active lifestyles: Research reflections. *Leisure Sciences, 27*(5), 355-365.
- Ho, C. H., Sasidharan, V., Elmendorf, W., Willits, F. K., Graefe, A., & Godbey, G. (2005). Gender and ethnic variations in urban park preferences, visitation, and perceived benefits. *Journal of Leisure Research, 37*(3), 281-306.
- Hull, R., B., & Michael, S., E. (1995). Nature-based recreation, mood change, and stress restoration. *Leisure Sciences, 17*, 1-14.
- Hung, K., & Crompton, J. L. (2006). Benefits and constraints associated with the use of an urban park reported by a sample of elderly in Hong Kong. *Leisure Studies, 25*(3), 291-311.
- Hunt, K. S., Scott, D., & Richardson, S. (2003). Positioning public recreation and park offerings using importance-performance analysis. *Journal of Park and Recreation Administration, 21*(3), 1-21.
- Hussain, G., Nadeem, M., Younis, A., Riaz, A., Khan, A., & Naveed. (2010). Impact of public parks on human life: A case study. *Pakistan Journal of Agricultural Science, 47*(3), 225-230.
- Ise, J. (2011). *Our national park policy: A critical history*. New York, NY: Earthscan.
- Jager, E., & Halpenny, E. A. (2012). Supporting the cbd aichi biodiversity conservation targets through park tourism: A case study of Parks Canada's visitor experience programme. *PARKS, 18*(2), 78
- Jones, B., & Scott, D. (2006) Climate change, seasonality and visitation to Canada's national parks. *Journal of Park and Recreation Administration, 24*(2) 42-62.
- Kaczynski, A. T., & Crompton, J. L. (2004). An operational tool for determining the optimum repositioning strategy for leisure service departments. *Managing Leisure, 9*(3), 127-144.

- Kaczynski, A. T., Havitz, M. E., & McCarville, R. E. (2005). Altering perceptions through repositioning: An exercise in framing. *Leisure Sciences*, 27(3), 241-261.
- Leahy, J., Shugrue, M., Daigl, J., & Daniel, H. (2009). Local and visitor physical activity through media messages: A specialized benefits-based management application at Acadia National Park. *Journal of Park and Recreation Administration*, 27(3), 59-77.
- Mainella, F. P., Agate, J. R., & Clark, B. S. (2011). Outdoor based play and reconnection to nature: A neglected pathway to positive youth development. *New directions for youth development*, 2011(130), 89-104.
- Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: 'Contact with nature' as an upstream health promotion intervention for populations. *Health Promotion International*, 21(1), 45-54.
- Maller, C., Townsend, M., St Leger, L., Henderson-Wilson, C., Pryor, A., Prosser, L., & Moore, M. (2009). Healthy parks, healthy people: The health benefits of contact with nature in a park context. *The George Wright Forum*, 26(2), 51-83.
- Manning, R. E. 2009. *Studies in outdoor recreation: Search and research for satisfaction* (3rd ed. ed.). Corvallis, OR: Oregon State University Press.
- McLennan, C. J., Moyle, B. D., Ritchie, B. W. & Ruhanen, L. M. (2013). Developing and Testing a Suite of Institutional Indices to Underpin the Measurement and Management of Tourism Destination Transformation, *Tourism Analysis*, 18(2), 157-171.
- Moore, S., Gauvin, L., Daniel, M., Kestens, Y., Bockenholt, U., Dubé, L., & Richard, L. (2010). Associations among park use, age, social participation, and neighborhood age composition in Montreal. *Leisure Sciences*, 32(4), 318-336.
- More, T. A., & Payne, B. R. (1978). Affective responses to natural areas near cities. *Journal of Leisure Research*, 10, 7-12.

- Morse, W. C., Hall, T. E., & Kruger, L. E. (2009). Improving the integration of recreation management with management of other natural resources by applying concepts of scale from ecology. *Environmental Management*, 43(3), 369-380.
- Moore, R. L., & Driver, B. L. (2005). *Benefits of leisure and its roles in society. Introduction to outdoor recreation: Providing and managing natural resource based opportunities*. State College, PA: Venture Publishing, Inc.
- Moore, S., Gauvin, L., Daniel, M., Kestens, Y., Bockenholt, U., Dubé, L., & Richard, L. (2010). Associations among park use, age, social participation, and neighborhood age composition in Montreal. *Leisure Sciences*, 32(4), 318-336
- Morgan, N., Pritchard A., & Piggott, R. (2002). New Zealand, 100% pure: The creation of a powerful niche destination brand. *Journal of Brand Management*, 9(4/5), 335-354.
- Mowen, A., J., Payne, L., L., Orsega-Smith, E., & Godbey, G. C. (2009). Assessing the health partnership practices of park and recreation agencies: Findings and implications from a national survey. *Journal of Park and Recreation Administration*, 27(3), 116-13.
- Moyle, B. D. & Croy W. G. (2009). Media in the Pre-Visit Stage of a Recreation Experience: Port Campbell National Park, *Tourism Analysis*, 14(2), 199-208
- Moyle, B.D., Weiler, B. & Schliephack, J. (2011). *ARC Linkage Project LP 100200014 program 1: a selected annotated bibliography of research on the benefits of parks* report to Parks Victoria and Department of Environment and Conservation, WA.
http://works.bepress.com/betty_weiler/76/
- Moyle, B.D., Weiler, B., & Moore, S.A., (2014). Benefits that matter to managers: An exploratory study of three national park management agencies. *Managing Leisure* 19(6): 400-419.
- Nuva, R., Mad Nasir, S., Alias, R., & Ahmad, S. (2009). Willingness to pay towards the conservation of ecotourism resources at Gunung Gede Pangrango National Park, West Java, Indonesia. *Journal of Sustainable Development*, 2(2), 173-186.

- Oh, C.-O., & Hammitt, W. E. (2010). Determining economic benefits of park trails: Management implications. *Journal of Park & Recreation Administration*, 28(2), 94-107.
- Orsega-Smith, E., Mowen, A. J., Payne, L. L., & Godbey, G. (2004). The interaction of stress and park use on psycho-physiological health in older adults. *Journal of Leisure Research*, 36(2), 232-256.
- Rosenberger, R. S., Bergerson, T. R., & Kline, J. D. (2009). Macro-Linkages between health and outdoor recreation: The role of parks and recreation providers. *Journal of Park & Recreation Administration*, 27(3), 8-20.
- Sattler, P. & Glanznig, A. (2006). *Building nature's safety net: A review of Australia's terrestrial protected area system, 1991-2004*. Sydney: WWF-Australia.
- Schliephack, J., Moyle, B. D. & Weiler, B. (2013). Visitor Expectations of Contact with Staff at a Protected Site, *Annals of Leisure Research*, 16(2), 160-174.
- Stein, T. V., & Anderson, D. H. (2002). Combining benefits-based management with ecosystem management for landscape planning: Leech Lake watershed, Minnesota. *Landscape and Urban Planning*, 60(3), 151-161
- Stein, T. V., & Lee, M. E. (1995). Managing recreation resources for positive outcomes: An application of benefits-based management. *Journal of Park and Recreation Administration*, 13(3), 52-70.
- Stodolska, M., Shinew, K. J., Acevedo, J. C., & Izenstark, D. (2011). Perceptions of urban parks as havens and contested terrains by Mexican-Americans in Chicago neighborhoods. *Leisure Sciences*, 33(2), 103-126.
- Thapa, B. (2012). Why did they not visit? Examining structural constraints to visit Kafue National Park, Zambia. *Journal of Ecotourism*, 11(1), 74-83.

- Tinsley, H. E. A., Tinsley, D. J., & Croskeys, C. E. (2002). Park usage, social milieu, and psychosocial benefits of park use reported by older urban park users from four ethnic groups. *Leisure Sciences*, 24, 199-218.
- Weaver, D. B. (2013). Protected area visitor willingness to participate in site enhancement activities. *Journal of Travel Research*, 52 (3), DOI: 0047287512467704
- Weaver, D. B., & Lawton, L. J. (2001). Resident perceptions in the urban-rural fringe. *Annals of tourism research*, 28(2), 439-458.
- Weber, D., & Anderson, D. (2010). Contact with nature: recreation experience preferences in Australian parks. *Annals of Leisure Research*, 13(1/2), 46-69.
- Weiler, B. Moore, S. & Moyle, B. D. (2013). Building and Sustaining Support for Parks in the 21st Century: Why and How to Save the National Park Experience from Extinction, *Journal of Park and Recreation Administration*, 31(2), 110-126.
- Veal, T. (2010). Planning for leisure: Goals and rationale. *Australasian Parks and Leisure*, 13(3), 36-39.
- Zanon, D., Doucouliagos, C., Hall J. & Lockstone-Binney, L. (2013) Constraints to Park Visitation: A meta-analysis of North American studies, *Leisure Sciences*, 35(5), 475-493.

Table 1 Background to Respondents from Each State

States	Victoria		Western Australia		NSW		Total	
Variables	% of Victoria Population	Sample	% of WA Population	Sample	% of NSW Population	Sample	% of Australian Population	Sample
AGE								
15-19 years	7.86%	51	8.15%	38	7.88%	66	7.9%	155
20-29 years	18.50%	70	19.03%	53	17.46%	66	18.1%	189
30-39 years	17.39%	74	17.62%	75	17.20%	76	17.3%	225
40-49 years	17.26%	75	17.90%	78	17.03%	68	17.2%	221
50-59 years	15.22%	74	15.68%	97	15.69%	70	15.5%	241
60-69 years	11.79%	84	11.43%	101	12.30%	67	12.0%	252
70-79 years	8.34%	68	8.57%	79	8.49%	74	8.4%	221
80 years +	3.64%	27	1.63%	16	3.95%	37	3.5%	80
TOTAL	100.00%	523	100.00%	537	100.00%	524	100.00%	1584
GENDER								
Male	49.03%	254	50.14%	240	49.20%	265	49.28%	759
Female	50.97%	269	49.86%	297	50.80%	259	50.72%	825
Total	100.00%	523	100.00%	537	100.00%	524	100.00%	1584
REGION								
Urban (Melb, Perth, Syd)	74.50%	266	74.64%	286	64.03%	267	69.53%	819
Regional (Vic, WA, NSW)	25.50%	257	25.36%	251	35.97%	257	30.47%	765
Total	100.00%	523	100.00%	537	100.00%	524	100.00%	1584
COUNTRY BORN								
Australia	82.11%	420	65.08%	348	85.33%	440	81.01%	1208
Other	17.89%	103	34.92%	189	14.67%	84	18.99%	376
Total	100.00%	523	100.00%	537	100.00%	524	100.00%	1584
LEVEL OF EDUCATION								
Primary School	1.99%	10	1.69%	10	0.67%	6	1.32%	26
Secondary School	34.07%	208	39.45%	225	38.44%	219	36.99%	652
Trade Qualification	19.70%	104	21.65%	116	24.74%	129	22.40%	349
Undergraduate Degree	30.27%	135	20.15%	95	27.48%	123	27.37%	353
Postgraduate Qualification	13.43%	63	11.60%	62	8.29%	42	10.70%	167
Other	0.54%	3	5.46%	29	0.39%	5	1.23%	37
Total	100.00%	523	100.00%	537	100.00%	519	100.00%	1584
PARK VISITATION								
Yes	72.82%	379	68.44%	398	72.43%	389	71.96%	1166
No	16.90%	89	17.62%	82	18.76%	91	17.90%	262
Don't know	10.27%	55	13.94%	56	8.80%	42	10.14%	153
Total	100.00%	523	100.00%	536	100.00%	522	100.00%	1581

Table 2
Public Perceptions of Park Benefits by State

States	VIC	WA	NSW	VIC vs WA	VIC vs NSW	WA vs NSW
Personal Experiential, Personal Higher-Order and Societal/Community-wide Benefit Items	Mean	Mean	Mean	Signif (Prob > F)	Signif (Prob > F)	Signif (Prob > F)
1A. Access natural experiences	5.26	5.24	5.54	0.79	0.00	0.00
1B. Be in a comfortable and safe place	5.19	5.22	5.41	0.74	0.01	0.01
1C. Challenge yourself	4.70	4.68	4.95	0.82	0.00	0.00
1D. Escape the urban environment	5.38	5.29	5.61	0.28	0.00	0.00
1E. Experience something new and different	5.25	5.21	5.50	0.62	0.00	0.00
1F. Find peace and solitude	5.33	5.37	5.62	0.62	0.00	0.00
1G. Learn about nature, culture and heritage	5.24	5.21	5.52	0.75	0.00	0.00
1H. Participate in outdoor recreation activities	5.22	5.21	5.44	0.82	0.01	0.00
1I. Reflect on personal values	4.84	4.85	5.06	0.83	0.00	0.01
1J. Relax and unwind	5.44	5.46	5.62	0.79	0.02	0.04
1K. Have fun	5.47	5.50	5.60	0.69	0.08	0.19
1L. Socialise with friends and family	5.39	5.39	5.57	0.97	0.02	0.02
2A. Appreciate biodiversity	5.00	4.98	5.24	0.87	0.00	0.00
2B. Appreciate scenic beauty	5.44	5.54	5.78	0.21	0.00	0.00
2C. Connect with heritage	4.95	5.01	5.24	0.46	0.00	0.00
2D. Connect with culture	4.87	4.86	5.11	0.92	0.00	0.00
2E. Connect with nature	5.45	5.50	5.75	0.51	0.00	0.00
2F. Connect with spiritual side	4.66	4.54	4.83	0.20	0.05	0.00
2G. Strengthen social networks	4.63	4.53	4.75	0.22	0.13	0.01
2H. Strengthen family ties	4.91	4.90	5.08	0.91	0.03	0.02
2I. Improve quality of life	5.18	5.15	5.30	0.73	0.10	0.05
2J. Increase self-confidence	4.76	4.73	4.94	0.77	0.03	0.01
2K. Achieve mental health benefits	5.07	5.07	5.19	0.98	0.12	0.13
2L. Achieve physical health benefits	5.31	5.33	5.46	0.80	0.05	0.07
3A. Conservation of culture	4.89	4.86	5.14	0.07	0.00	0.00
3B. Conservation of heritage	5.00	5.01	5.22	0.93	0.01	0.00
3C. Generation of employment	4.90	4.85	5.01	0.53	0.15	0.04
3D. Improved flood management	4.92	4.64	4.90	0.00	0.84	0.00
3E. Improved fire management	4.93	4.69	5.02	0.01	0.26	0.00
3F. Increased business investment	4.51	4.44	4.50	0.36	0.93	0.41
3G. Increased tourism	5.13	5.17	5.40	0.63	0.00	0.00
3H. Increased community wellbeing	5.17	5.10	5.23	0.28	0.48	0.07
3I. Increased community pride	5.13	5.04	5.28	0.20	0.05	0.00
3J. Protection of biological diversity	5.19	5.20	5.46	0.93	0.00	0.00
3K. Protection of drinking water	5.18	5.11	5.21	0.35	0.73	0.21
3L. Provision of clean air	5.30	5.25	5.48	0.51	0.02	0.00
3M. Provision of green spaces	5.45	5.49	5.62	0.61	0.03	0.07
3N. Reduction in the cost of healthcare	4.57	4.58	4.54	0.99	0.71	0.72
3O. Reduction in the effects of climate change	4.70	4.79	4.78	0.31	0.41	0.85

Table 3
Public Perceptions by Gender, Age, Region and Park Visitation Habits

Variables	Male	Female	Adjusted Wald test	Under 30	Over 30	Adjusted Wald test	Urban	Regional	Adjusted Wald test	Visitor	Non-visitor	Adjusted Wald test
	Mean	Mean	Significance (Prob > F)	Mean	Mean	Significance (Prob > F)	Mean	Mean	Significance (Prob > F)	Mean	Mean	Significance (Prob > F)
Personal Experiential, Personal Higher-Order and Societal/Community-wide Benefit Items												
1A. Access natural experiences	5.25	5.52	0.00	5.07	5.50	0.00	5.38	5.40	0.81	5.57	4.92	0.00
1B. Be in a comfortable and safe place	5.25	5.35	0.11	5.12	5.36	0.00	5.31	5.28	0.69	5.41	5.01	0.00
1C. Challenge yourself	4.78	4.85	0.32	4.72	4.85	0.11	4.80	4.84	0.55	4.95	4.48	0.00
1D. Escape the urban environment	5.35	5.59	0.00	5.19	5.57	0.00	5.43	5.58	0.02	5.63	5.09	0.00
1E. Experience something new and different	5.26	5.46	0.00	5.13	5.44	0.00	5.35	5.38	0.69	5.49	5.03	0.00
1F. Find peace and solitude	5.38	5.56	0.01	5.25	5.55	0.00	5.45	5.53	0.19	5.60	5.15	0.00
1G. Learn about nature, culture and heritage	5.24	5.49	0.00	5.16	5.44	0.00	5.35	5.40	0.41	5.48	5.07	0.00
1H. Participate in outdoor recreation activities	5.19	5.45	0.00	5.28	5.34	0.44	5.30	5.37	0.28	5.47	4.95	0.00
1I. Reflect on personal values	4.87	5.02	0.03	4.89	4.97	0.39	4.93	4.98	0.43	5.07	4.62	0.00
1J. Relax and unwind	5.46	5.58	0.09	5.32	5.60	0.00	5.50	5.58	0.23	5.69	5.10	0.00
1K. Have fun	5.45	5.62	0.01	5.44	5.57	0.14	5.52	5.56	0.50	5.69	5.15	0.00
1L. Socialise with friends and family	5.39	5.55	0.02	5.31	5.51	0.07	5.47	5.49	0.73	5.62	5.10	0.00
2A. Appreciate biodiversity	5.04	5.18	0.04	4.99	5.15	0.04	5.12	5.10	0.77	5.24	4.78	0.00
2B. Appreciate scenic beauty	5.52	5.71	0.00	5.32	5.72	0.00	5.58	5.70	0.05	5.77	5.21	0.00
2C. Connect with heritage	5.01	5.19	0.01	4.96	5.15	0.02	5.07	5.16	0.18	5.21	4.81	0.00
2D. Connect with culture	4.87	5.09	0.00	4.86	5.02	0.05	4.99	4.96	0.61	5.09	4.72	0.00
2E. Connect with nature	5.48	5.72	0.00	5.31	5.70	0.00	5.57	5.68	0.08	5.76	5.20	0.00
2F. Connect with spiritual side	4.57	4.87	0.00	4.64	4.75	0.20	4.74	4.68	0.35	4.82	4.46	0.00
2G. Strengthen social networks	4.58	4.76	0.01	4.70	4.66	0.63	4.70	4.59	0.10	4.75	4.46	0.00
2H. Strengthen family ties	4.91	5.07	0.02	4.94	5.01	0.41	5.01	4.94	0.23	5.07	4.77	0.00
2I. Improve quality of life	5.16	5.30	0.03	5.15	5.26	0.19	5.24	5.20	0.51	5.37	4.88	0.00
2J. Increase self-confidence	4.82	4.86	0.59	4.78	4.86	0.38	4.86	4.80	0.36	4.94	4.59	0.00
2K. Achieve mental health benefits	5.05	5.21	0.02	5.09	5.15	0.50	5.14	5.11	0.60	5.26	4.81	0.00
2L. Achieve physical health benefits	5.30	5.47	0.01	5.30	5.42	0.16	5.39	5.39	1.00	5.53	5.01	0.00
3A. Conservation of culture	4.90	5.11	0.00	4.82	5.07	0.00	5.01	5.00	0.84	5.13	4.69	0.00
3B. Conservation of heritage	5.00	5.21	0.00	4.93	5.17	0.00	5.11	5.10	0.89	5.23	4.80	0.00
3C. Generation of employment	4.90	4.99	0.16	4.76	5.01	0.00	4.96	4.90	0.30	5.04	4.69	0.00
3D. Improved flood management	4.86	4.87	0.83	4.78	4.90	0.14	4.93	4.73	0.00	4.93	4.71	0.01
3E. Improved fire management	4.89	4.97	0.27	4.82	4.98	0.05	4.99	4.80	0.01	5.01	4.74	0.00
3F. Increased business investment	4.50	4.49	0.85	4.61	4.46	0.06	4.56	4.35	0.00	4.53	4.41	0.10
3G. Increased tourism	5.21	5.32	0.09	5.05	5.34	0.00	5.23	5.35	0.05	5.39	4.93	0.00
3H. Increased community wellbeing	5.11	5.27	0.01	5.08	5.22	0.07	5.22	5.12	0.15	5.32	4.85	0.00
3I. Increased community pride	5.10	5.27	0.01	5.02	5.25	0.00	5.20	5.16	0.53	5.31	4.88	0.00
3J. Protection of biological diversity	5.27	5.37	0.13	5.09	5.40	0.00	5.32	5.32	0.99	5.46	4.96	0.00
3K. Protection of drinking water	5.19	5.18	0.97	5.05	5.23	0.02	5.19	5.17	0.84	5.29	4.90	0.00
3L. Provision of clean air	5.30	5.46	0.02	5.21	5.44	0.01	5.40	5.32	0.25	5.52	5.01	0.00
3M. Provision of green spaces	5.47	5.60	0.06	5.26	5.63	0.00	5.56	5.48	0.26	5.70	5.11	0.00
3N. Reduction in the cost of healthcare	4.55	4.57	0.75	4.48	4.59	0.25	4.63	4.40	0.00	4.64	4.35	0.00
3O. Reduction in the effects of climate change	4.75	4.76	0.87	4.79	4.74	0.62	4.80	4.63	0.03	4.83	4.56	0.00

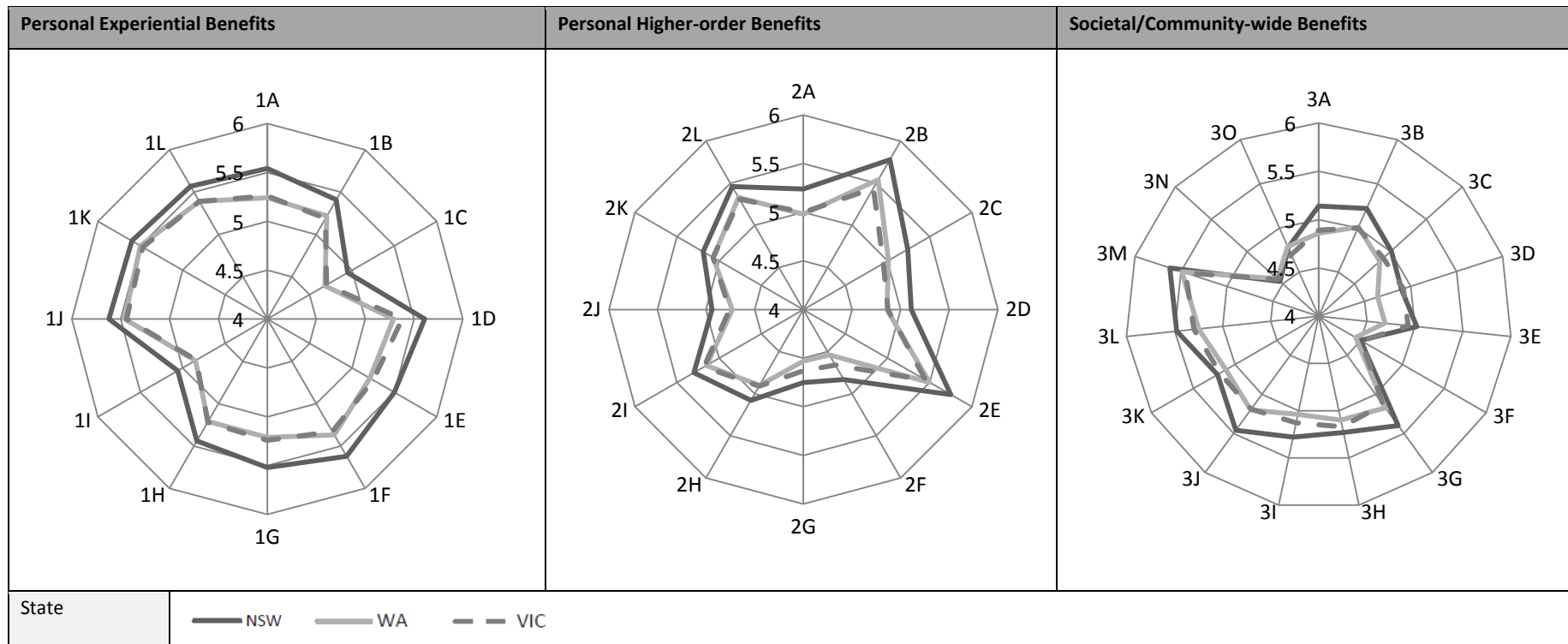


Figure 1. State Comparisons of Public Perceptions of Park Benefits – NSW vs. WA vs. VIC

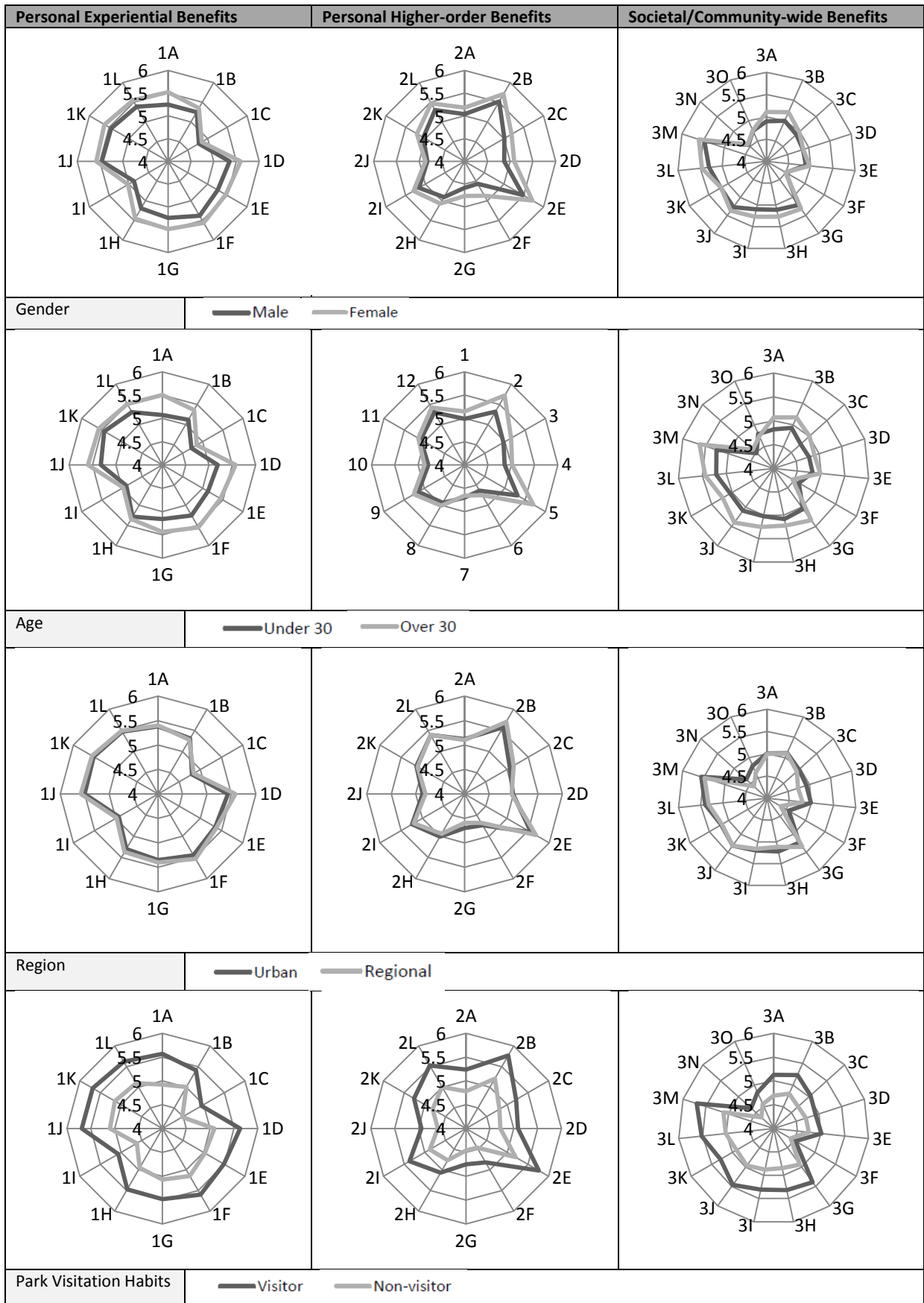


Figure 2. Comparisons of Public Perceptions of Park Benefits based on Gender, Age, Region and Park Visitation Habits