
CLIMATE CHANGE'S IMPACT ON TOURISM: THE ATTITUDE OF AUSTRALIA'S GENERATION Y

Laura Vermeersch*, Gregory Willson, Dale Sanders*****

**Postgraduate Student, Edith Cowan University, Australia.*

Email: lkvermee@our.ecu.edu.au

***Lecturer, Edith Cowan University, Australia.*

Email: g.willson@ecu.edu.au (Corresponding Author)

****Associate Professor, Edith Cowan University, Australia.*

Email: d.sanders@ecu.edu.au

ABSTRACT

Climate change is a major concern for governments, policymakers and citizens of the world. Within Australia, the climate change debate was at the forefront of the recent general election, with major political parties proposing significant policies in this area. Australia's tourism industry is heavily reliant on natural attractions, and thus, climate change and its potential for resource degradation are pertinent issues for tourism policymakers. While the scientific consequences of climate change have been well considered, an important voice - that of young people, has received a paucity of scholarly attention. In particular, there has been a lack of scholarly research focusing on the attitudes of Generation Y Australians (born between 1977 and 1995 inclusively) towards climate change and resource depletion. This paper addresses this gap by presenting results from in-depth semi-structured interviews conducted with fourteen Australian Generation Y members. The participants in this study overwhelmingly believe in climate change, conclude that humanity is suffering from associated impacts of it, fear for the future of Australia's tourism industry and want to make a difference. However, research participants reported that they face significant challenges in behaving consistently with their environmental attitudes. The paper aims to open a dialogue that reflects a greater understanding of Generation Y's conflicted ideas and actions on climate change.

Keywords: *Climate Change, Generation Y, Australia, Tourism*

Introduction

Scholarly insight into tourism and climate change has occurred since the 1980s, with a particular emerging focus over the last 15 years (Scott, 2011). However, the direction of research has been relatively narrow. Weaver (2011) evaluated the 128 academic publications on tourism and climate change between 1986 and 2009 and found that 66% of studies focused on the potential impacts of climate change on destinations or changing visitation patterns, predominantly from a winter-ski tourism context. A further 15% of articles focused on the contribution of tourism to climate change through greenhouse gas emissions. For many destinations, climate and natural resources are the main tourist attractions; hence a widening of scholarly understanding into climate change and tourism is advocated (Scott, 2011; Weaver, 2011). Australia is considered to be one of the most vulnerable developed countries to climate change in the world (Pittock, 2009). A particular area of scholarly neglect is the attitudes of different consumer groups, and how these attitudes influence consumer choice and behaviour (Kajan & Saarinen, 2013). One group in particular that has received a paucity of attention in the wider tourism literature is Generation Y; those individuals born between the years of 1977 and 1995 inclusive (Donnison, 2007). This group is particularly important, as they are argued to be the emerging leaders, managers and major consumers of tourism within the next decade (Moscardo et al., 2011). This paper addresses this gap by presenting results from in-depth semi-structured interviews conducted with fourteen Australian Generation Y members. The paper will discuss how participants in this study overwhelmingly believe in climate change, conclude that humanity and Australia's tourism industry is suffering from associated impacts of it, and want to make a difference. However, research participants reported that they face significant challenges in behaving consistently with their environmental attitudes. The paper aims to open a dialogue that reflects a greater understanding of Generation Y's conflicted ideas and actions on climate change.

Climate Change and Tourism in Australia

Since 1950, there has been 0.4-0.7 degrees Celsius warming in annual temperature and a rise in sea level of approximately 70mm across Australia (Amelung & Nicholls, 2014). In addition, there has been an increased intensity in droughts, heat waves, higher rain falls, and water shortages throughout the country (Amelung & Nicholls, 2014). From a tourism perspective, Amelung and Nicholls (2014) purport that changing weather patterns are likely to impact the size, timing, duration and/or directions of tourism flows, and

that Australia's tourism industry is particularly vulnerable in that there is a significant dependence on pleasant and attractive climates.

There has been significant previous research on climate change and within Australia but a paucity of research considering the tourism industry specifically. Indeed, Ameltung and Nicholls (2014) conducted a comprehensive literature review on climate change and tourism within Australia and found only twelve research papers relating to climate change and tourism in Australia; the majority of these addressed the potential impacts of climate change on winter sports and winter tourism, (for example, Bicknell & McManus, 2006), thus representing a particularly narrow focus.

Generation Y characteristics

The Generation Y cohort is said to express concern for large issues of environmental and social sustainability suggesting an increasing interest for volunteer and education tourism (Clemmons, 2008; Pendergast, 2010; Moscardo, et al., 2011). Generation Y have been described as active seekers of local culture and social experiences (Richards & Wilson, 2007; Huang & Petrick, 2010), high technology users (Richards & Wilson, 2007), and seekers of escape, novelty and excitement (Benckendorff & Moscardo, 2010).

The size of Generation Y in Australia (with almost an even balance of male and female members) in June 2012 was recorded to be almost 4.54 million which represents approximately 20% of the total population (Australian Bureau of Statistics, 2013). In Australia, Generation Y are considered to be a substantial-sized market with significant purchasing power said to be linked to members' value systems resulting in behaviour that is considerably different from that of earlier generations (Glover, 2010). Generation Y have been the subject of a number of past research ventures where conclusions are contradictory and relatively limited regarding members' values, characteristics, and attitudes towards travel (Benckendorff & Moscardo, 2010).

Methods

Given the exploratory nature of this particular research topic, a qualitative methodological approach was recommended and adopted (Kachel and Jennings, 2010). Using convenience sampling until a saturation point was reached and no new data emerged (Liamputtong, 2013), 14 Generation Y participants were involved in semi-structured, in-depth interviews that lasted between 45 and 60 minutes. During these interviews, participants were asked a variety of questions regarding their environmental values, and

how these values impact their everyday life and tourism experiences. The primary researcher is a member of Generation Y, and this provides an emic perspective throughout the addressing of research questions suggested by various authors (such as Andereck et al., 2006; Bahr & Pendergast, 2007; Donnison, 2007; Lyons & Wearing, 2011; Nickerson, 2006; Pendergast, 2007). An emic perspective associated with the interpretive social sciences research paradigm holds the belief that the insider's view provides the best lens for understanding the participants being studied (Jennings, 2010). Since the researcher is a member of the Gen Y cohort they may have legitimized to an extent the understanding formed based the shared experiences, insights, and reflections of the researcher and participants, or 'co-researchers' (Patton, 2002).

In order to attain rich data, the laddering technique was applied to help probe responses to the open-ended questions (Willson & McIntosh, 2010). The laddering technique is associated with means-end theory (Gutman, 1982) which focuses on the connections between the product attributes (means), with their consequences for consumers and the personal values these consequences reinforce (ends) (Reynolds & Gutman, 1988). This technique has previously been utilized in marketing to link peoples' values with their consumption and is designed to encourage participants to think on a more emotional level especially when asked why they responded so to the questions (Willson & McIntosh, 2010). For example, when one participant mentioned that climate change was a major concern for them, the laddering technique was employed via the probing follow-up question, 'can you tell me further about why climate change is a concern for you?'

To analyse data, thematic content analysis was used to make inferences about the characteristics and experiences of participants through the interpretation of their communications including textual data via 'coding' (Stepchenkova et al., 2009). QSR Nvivo 10 computer software was used to extract and organize categories based on the identification of common themes, processes and relationships (Jennings, 2010). Coding analysis was used multiple times on the data, ensuring the themes from the interview response transcripts are developed from the words of the participants (Willson & McIntosh, 2010). Demographic details of the participants are presented in Table 1 below. Pseudonyms are used to de-identify participants:

Table 1: Demographic details of participants.

Name	Age	Gender	Marital Status	Current place of residence	Occupation	Annual incomes	Religion	Ethnic Heritage	Education Level	Currently studying	Place raised in
Owen	19	M	Single	Perth	Self-employed at own event company	20-40k	N/A	Greek, German	High School	N	Perth
Theresa	22	F	Dating	Perth	Door girl & call centre at Telesales	20-40 k	Agnostic	English	High School & Tafe C3	N	Bunbury
Tim	28	M	Single	Perth	Public Servant	60-80 k	Sort of Buddhist	Malaysian, Chinese	Degree	N	Perth
Philp	26	M	Single	Perth	Accountant (CA)	40-60 k	N/A	Indian	Post Grad (CA)	N	Perth
Francis	26	F	Single	Perth	Project Support Officer (Dept. Education)	80-100 k	N/A	English	High School & Tafe	N	Perth, Southampton & Oxford (UK)
Cynthia	26	F	Single	Perth	Fundraising	60-80 k	N/A	Chinese	Degree	N	Perth

Name	Age	Gender	Marital Status	Current place of residence	Occupation	Annual incomes	Religion	Ethnic Heritage	Education Level	Currently studying	Place raised in
Sarah	31	F	Single	Perth	Mother & self-employed	20-40 k	Greek, orthodox	Greek, Australia, English, South African	High School	Y	Perth
Edna	22	F	Dating	Perth	Student	≤20 k	N/A	English, Australia	High School	Y	Perth
Nate	23	M	Dating	Perth	Clerk/broker	40-60 k	N/A	Rhodesia Canadian	Degree	N	Perth
Michaela	22	F	Single	Perth	Call centre inbound consultant	40-60 k	N/A	Italian	Degree	N	Bunbury
Vic	24	M	Single	Collie	Welder	≥100 k	N/A	English	High School & Tafe	N	Collie & Camarvon
Alex	32	M	Single	Perth	Managing Director/Trainer/Assessor	≥100 k	N/A	Asian	Tafe	Y	Perth
Celeste	20	F	Single	Perth	Student	≤20 k	N/A	English	High School	Y	Perth & Milton (UK)
Kat	23	F	Dating	Perth	Accountant	40-60 k	N/A	Vietna – mese	Degree	Y	Vietnam

Results

Thematic analysis revealed four key discussion points regarding Australia Generation Y's views of climate change and its impact on tourism. Firstly, every participant believed climate change is undeniably real and a direct result of human activity. However, they acknowledged that climate change presents people with a chance to 'cover their eyes to the truth'. Secondly, respondents cited many examples of how climate change is negatively impacting on human and animal lives, and thus causing damage to Australian's image in the eyes of tourists. Thirdly, participants believed Australia was lagging behind other countries in terms of being seen as a leader on climate change reductions. This was putting the tourism industry in danger. Fourthly, discussion focussed on how inevitable climate change is; some respondents noted a willing attitude to adopt behavioural change, but expressed a lack of knowledge as to how to approach this, while others viewed climate change as inevitable, and thus, behavioural change was futile.

Climate Change Exists but Humans can Act Blind to it

Every participant believed that climate change is real; however, the extent to which it is caused either completely, or in part, by human activity differed. Additionally, participants believed that the Australian government and tourism industry were not addressing climate change as quickly as required due to the slow progression of climate change, and that business and political decisions are made on a more short-medium term horizon, such as within a three year electoral cycle. Thus, climate change decisions were often 'kicked down the road' for future decision makers. Certain respondents argued that there is a substantial scientific and physical proof as to the existence of climate change, and that deniers must be influenced by political, economic, or religious motives. This is illustrated by Nate's quote below;

"No doubt, no doubt [Climate change is human-caused]... And I think they [those who deny the idea of Climate change] have got some reason not to want to believe it, whether it's religious, or some economic reason... There will be some reason why they either don't believe in it or don't want to deal with it, it's really not good".

Confusion as to the facts surrounding human intervention in climate change was a common theme. In particular, certain participants felt that there was so much contradictory information that it was difficult for them to understand what was correct. This was evidenced in Michaela's comment: *"I believe we humans are contributing to climate change definitely, but how*

much? That's confusing, we get told so many different things it is hard to know what is real".

The 'slowburn' of climate change was also considered a significant reason why climate change was seen to be neglected by world leaders, and humans in general. Phil, for example, makes a contrast between the effects of climate change and a terrorist attack, emphasizing that the effects of climate change are gradual whereas a terrorist attack is instantaneous and immediate. He goes on to express that slow and gradual changes are likely to be overlooked or somewhat un-noticed. Some participants express the idea that in addition to this, people are pre-occupied with their own lives whether they acknowledge changes brought by climate change or not. The following quote from Francis illustrates this idea;

"Maybe because we don't see it every day, in our day-to-day lives. It's that kind of head in the sand mentality with climate change... When there are extreme weather reports, more natural disasters, differences in temperatures recorded over certain periods of time, we can see and feel them but most people just think it's a warm day today and that's it! I mean we see and hear about it on the news and we need to talk about it but then we just go ahead and talk about something else. We just get back to our day-to-day life".

Greed, overpopulation, and a seemingly insatiable and growing desire for material gain were considered to be the major drivers of climate change. Michaela explained, *"we are using huge amounts of fossil fuels and putting them into the atmosphere far more than it was I guess originally intended or than the Earth seems to be able to cope with"*. Alex similarly commented *"we are so materialistic, and the drive for this - for more - contributes greatly to climate change"*.

Climate Change is Impacting Upon the Attractiveness of Australia as a Destination

Each participant presented a clear conviction that there are many examples of how climate change is impacting the planet. The home country of respondents, Australia, was considered to be one of the clearest examples of the impact of climate change.

Phil, Michaela, Kat, Francis and Sarah all explained how they have personally noticed changing weather patterns within Australia. For example, Michaela explained, *"I mean changing weather patterns, like I even notice in Australia, I feel like our winters start later and later every year."* Kat, who

had lived in Australia for just several years also expressed noticeable changes in the weather. Kat commented;

“I remember five years ago when I first came to Australia, the summer wasn't that bad... It wasn't that hot at all but in recent years like last year for example the summer was really dry, it was 47 degrees on some days and I definitely felt the difference. Even rain, I've noticed changing weather patterns”.

From a tourism perspective, participants expressed a concern that Australia's tourism industry was particularly vulnerable. Michaela, for example, explained that *“I think we are feeling the effects of it now and I think it is going to become not a very nice place to live in later in the future if the change keeps occurring”.*

The iconic Australian marine attraction, The Great Barrier Reef was also considered by several participants to present a clear snapshot of the impacts of climate change. For example, Sarah said;

“Pollution, over fishing, whaling, and of course climate change are really affecting the Great Barrier Reef and it's just sad that we're losing that part of our environment... When I was a kid there used to be frogs in the swimming pools and now that's sort of disappeared, not as many birds around and nests, we're just slowly watching those little bits of nature eventually disappear”.

Some participants expressed the idea that while humanity is already experiencing the effects of climate change, people are very reluctant to take the necessary measures in order to address climate change. Theresa expresses, *“I reckon we already are [feeling the effects of Climate change]! But doing something about it would mean people have to change their lifestyles.”*

Theresa similarly noted that the world is caught in a very shallow culture and commented, *“People might talk about climate change, but then it'll get bumped for something trivial”.* Michaela similarly explained that while there is a wealth of information and reports supporting the idea that climate change is occurring and needs attention, people are more concerned with continuing their everyday lives and the more minor, individualized issues that comprise it.

Australia Must Take the Lead in Reducing Climate Change

Most participants expressed frustration at a perceived lack of attention by Australian businesses and governmental organisations in addressing climate

change. In particular, participants criticised multi-national mining companies, and an overall Western culture that seemingly puts profit ahead of all other aims. Alex, for example, explained:

“It’s all about who can make the biggest profits. I think in Australia, these companies that are pulling it out (minerals and resources) from the ground and making millions and not giving a sh## about the environmental, well they’ve got to do better than that”.

Australia was seen as a “privileged nation” that should be more of a global leader in climate change policy. A recent repeal by the Australian government of a policy that charged businesses a carbon emissions levy was seen to be a large step backwards to Australia’s international reputation. Nate’s view was that the carbon levy was economically uncompetitive but given the choice, he would put the environment above profit. He explained:

“You can’t just say we’re only 1.2% (of the world’s population). And the fact is that everyone else seems to have signed on (to commit to climate change reduction) and we haven’t. We’ve taken such a step backwards. Economically, the carbon tax made a difference; it made us less competitive but I don’t care about that... If we don’t do anything, tourism, business, everything will be ruined (by climate change)”.

Desire to Change – but how, and will it Make a Difference?

The third theme strongly evidenced that participants wanted to change their behaviour – to help reduce climate change, but either felt the damage to the climate was already irreversible, or did not know effective change strategies. Phil discussed how, for Generation Y, the media was likely to be the most powerful medium in terms of influencing behaviour change amongst his peers. He explained,

“I don’t know what to do about climate change, but it’s definitely happening... the talk that you get through the media and the talks that you see on websites like TED and a few other things, there is definitely an acknowledgement that something is happening and the information is there for use”.

Indeed, most of the information that participants had acquired about climate change had come from entertainment, social or ‘soft news’ sources. For example, Nate explained, *“yes, I haven’t personally delved into the science of it but I’ve certainly heard about it”.*

Other participants noted a frustration at a perceived lack of global action, and noted that this could lead to a ‘why should I do something if government isn’t?’ attitude. For example, Phil noted that since the Climate Change Conference in Copenhagen in 2009 he had noted no significant collective efforts or action since. He explained his frustration and also his helplessness:

“We’ve definitely been the cause of it [Climate change]. It’s hard to pin down what we can do to curb it, I’m not too sure. There was a big push around 2009 and 2010 when they were having those conferences in Copenhagen but since then there doesn’t seem to have been a big collaborative, global push for environmental change to combat climate change”.

This belief that it was already too late to act was made by several respondents. Alex, for example, explained how humanity is within ‘the end times’ and likely to face an ecological catastrophe in the future. Sarah similarly expressed, “Climate change, the water levels rising, we can’t change that... I don’t think it [nature] will ever be brought back to the way it was.”

Tim painted a similar despondent picture and believed the best humanity could do would be to adapt to its new circumstances. He explained,

“With climate change nature is still all around, it just exists in a different state... I don’t think there’s much we can do to change rising water levels, because we’ve got this established beauty that’s made for this low coastline and then the sea levels rise and everything, I think people are the ones that need to adapt to that”.

Discussion

The results suggest that there is a strong belief and concern about climate change amongst Generation Y participants; to a person they believe climate change is visible, and is partly, or directly a result of human action. This study therefore concurs with Weaver (2011) who proposed that there is widespread evidence existing to support that idea that majorities, certainly in economically developed countries have become aware and concerned about climate change. One important discussion point is how Generation Y learns about climate change facts, impacts, and solutions. The results in this paper have noted the importance of social media and ‘soft news’ or entertainment sources to Generation Y. The importance of this media to Generation Y has been widely discussed in the literature. They are acknowledged as being the first generation to have spent their entire lives in the digital environment; with digital devices forming a critical role in how Generation Y contributes, shares,

searches for, and consumes information (Bolton et al., 2013; Wesner & Miller, 2008). There are cultural differences in how Generation Y uses social media (Bolton et al., 2013), and future studies could further explore the role of social media in shaping the views towards climate change of Generation Y.

The results also suggest a degree of anxiety and worry expressed by certain Generation Y participants towards climate change; a feeling of inevitability and/or concern about the future may impact on an individual's mental health. Ojala (2012) discusses that learning about climate change is a cognitive endeavour that is likely to invoke emotions; the impact of these emotions to young people has not been widely explored. Pruneau et al., (2001) suggests that climate change arouses little worry because many participants estimate the phenomenon has no tangible impacts on their life. However, this paper has illustrated that its Generation Y participants largely concurred that they had personally experienced current and meaningful impacts on their life because of climate change. With certain comments of frustration and helplessness like those expressed by certain participants in this study, there is merit in further scholarly attention towards the impact on climate change on the mental health of Generation Y.

It is of interest to note that while participants in this study expressed the desire to make behavioural change towards climate change, they all aspired to travel widely and frequently while failing to acknowledge or mention the contribution of the tourism industry to climate change. There is therefore a need to further study the nexus between tourism, Generation Y and climate change. These findings are comparable to McKercher et al. (2009) who propose that among the four segments they identified that the regular international tourist group was more aware of climate change although they were least willing to alter its travel behaviour. Also in relation to the present study's findings, Hindley & Font's (2014) findings reveal that tourists believe they are blameless for their purchasing habits and express that corporations should be providing sustainable products as the norm and not sell products that harm. It may be, as suggested in the results, that certain Generation Y participants, feel disenchanting by governments and organisations in their response to climate change, and feel unmotivated to act if the bigger parties in the climate change puzzle do not also act.

Conclusion

Climate change is an issue that is of significant importance to Generation Y. This study's participants believe it, want to make a difference, but feel a lack of understanding to do so. Much of their information about climate change is

received through non-traditional news mediums, and there is a strong level of frustration that governmental and industry groups are seemingly being poor role models in their behaviour. It is hoped that this paper has started a conversation about Generation Y and their attitudes towards climate change. There is a lack of scholarly attention exploring this important demographic group, and their attitudes and behaviours towards climate change, and this paper has contributed to this research gap. There are many areas in which this paper advocates future academic attention. In particular, replicating this study within additional countries is recommended to explore the differences and consistencies amongst different Generation Y samples. Longitudinal research for future studies is also recommended so that the changes that occur to the Generation Y market over time can be considered. Research exploring the influence of social media, and soft news on the perception of Generation Y towards climate change is also advocated.

From a tourism perspective, it is pertinent to build scholarly knowledge into how different stakeholders view climate change. For example, there is a lack of understanding as to how different groups of tourists perceive climate change, and how this impacts on their attitudes towards destinations, and their behaviour while travelling. From an Australian tourism perspective, a strong reliance on the natural environment means that the country is vulnerable to climate change. How much and what the various players within the tourism industry can, and should be expected to do, to reduce their contribution to climate change is debatable, although, certainly, adopting eco-friendly and sustainable practices individually and collectively should be encouraged. It is hoped that a stronger research agenda that focuses on the relationship between tourism and climate change is adopted, as this paper agrees with the conclusion presented by Shani and Arad (2014) that it is too simplistic to advocate for a fundamental transformation within the tourism industry to mitigate human-induced climate change, when the scholarly relationship between tourism and climate change is still in its infancy of understanding.

References

- Amelung, B., & Nicholls, S. (2014). Implications of climate change for tourism in Australia. *Tourism Management*, (41), 228-244.
- Andereck, K., Bricker, K. S., Kerstetter, D., & Nickerson, N. (2006). Connecting experiences to quality. Understanding the meanings behind visitors' experiences. In: *Quality Tourism Experiences*, edited by G. Jennings & N. Nickerson. Oxford: Elsevier, pp. 81-98.

- Australian Bureau of Statistics. (2013). *Population by Age and Sex Distribution-Greater Capital Cities and rest of Australia – 30 June 2012*. Date of access: 11/11/2016. Retrieved from <http://www.abs.gov.au/asstats/abs@nsf/Products3235.0~20120~Main+Features~Main+Features?OpenDocument#PARALINK3>
- Bahr, N., & Penderast, D. (2007). *The millennial adolescent*. Camberwell, Portland: Australian Council for Educational Research.
- Benckendorff, P., & Moscardo, G. (2010). Mythbusting: Generation Y and travel. In:
- Benckendorff, P., Moscardo, G., & Pendergast, D. (Eds.). (2010). *Tourism and generation Y*. Cabi, Wallingford, Oxfordshire, pp. 16-26.
- Bicknell, S., & McManus, P. (2006). The canary in the coalmine: Australian ski resorts and their response to climate change. *Geographical Research*, 44(4), 386-400.
- Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migghels, N., Kabadyi, S., Gruber,
- T., Loureiro, Y. K., & Solnet, D. (2013). Understanding Generation Y and their use of social media: A review and research agenda. *Journal of Services Marketing*, 24(3), 245-267.
- Clemmons, D. (2008). Voluntourism & the M3 travellers. Voluntourist Archives. Date of access: 15/11/2016. Retrieved from <http://www.voluntourism.org/news-feature224.htm>.
- Donnison, S. (2007). Unpacking the millennials: a cautionary tale for teacher education. *Australian Journal of Teacher Education*, 32, 1-13.
- Glover, P. (2010). Generation Y's future tourism demand: Some opportunities and challenges. In: P. Benckendorff, G. Moscardo, & D. Pendergast (Eds.). *Tourism and generation Y*. Cabi, Wallingford, Oxfordshire: pp. 155-163.

- Gutman, J. (1982). A means-end chain model based in consumer categorization processes. *Journal of Marketing*, 46(2), 60-72.
- Hindley, A., & Font, X. (2014). Ethics and influences in tourist perceptions of climate change. *Current Issues in Tourism*, August, 1-17.
- Huang, Y. C., & Petrick, J. F. (2010). How Generation Y behaves differently in travel behaviours: a comparison of baby boomers and Generation X. In: P.
- Benckendorff, G, Moscardo, & D. Pendergast (Eds.). *Tourism and generation Y*. Cabi, Wallingford, Oxfordshire: pp. 27-37.
- Jennings, G. (2010). *Tourism Research*. Milton, Queensland: John Wiley & Sons.
- Kachel, U., & Jennings, G. (2010). Exploring tourists' environmental learning, values and travel experiences in relation to climate change: A postmodern constructivist research agenda. *Tourism and Hospitality Research*, 10(2), 130-140.
- Kajan, E., & Saarinan, J. (2013). Tourism, Climate Change and Adaptation: A Review. *Current Issues in Tourism*, 16(2), 167-195.
- Liamputtong, P. (2013). *Qualitative research methods*. South Melbourne, Victoria: Oxford University Press.
- Lyons, K. D., & Wearing, S. (2011). Gap year travel alternatives: Generation Y, volunteer tourism and global citizenship. In I. Yeoman., C Hsu, K. Smith & S.
- Watson (Eds.). *Tourism and demography*. Woodeaton, Oxford: Goodfellow Publishers Ltd, pp.101-115.
- McKercher, B., Prideaux, B., Cheung, C., & Law., R. (2010). Achieving voluntary reductions in the carbon footprint of tourism and climate change. *Journal of Sustainable Tourism*, 18(3), 297-317.
- Moscardo, G., Murphy, L., & Benckendorff, P. (2011). Generation Y and travel futures. In I. Yeoman., C Hsu, K. Smith & S. Watson

(Eds.). *Tourism and demography*. Woodeaton, Oxford: Goodfellow Publishers Ltd, pp.87-100.

- Nickerson, N. (2006). Some reflections on quality tourism experiences. In G. Jennings (Ed.). *Quality tourism Experiences*. Burlington, MA: Elsevier Butterworth-Heinemann, pp. 227-252.
- Ojala, M. (2012). Regulating worry, promoting hope: How do children, adolescents, and young adults cope with climate change? *International Journal of Environmental and Science Education*, 7(4), 537-561.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, California: Sage Publications.
- Pendergast, D. (2007). Teaching Y generation. *Journal of the Home Economics Institute of Australia*, 14(3), 15-21.
- Pendergast, D. (2010). Getting to know the Y generation. In: P. Benckendorff, G. Moscardo, & D. Pendergast (Eds.). *Tourism and generation Y*. Cabi, Wallingford, Oxfordshire: pp. 1-15.
- Pittock, A.B. (2009). *Climate change: The science, impacts and solutions* (2nd ed.). London: Earthscan.
- Pruneau, D., Liboiron, L., Vrain, E., Gravel, H., Bourque, W., & Langis, J. (2001). People's ideas about climate change: A source of inspiration for the creation of educational programs. *Canadian Journal of Environmental Education*, (6), 121-138.
- Reynolds, T. J., & Gutman, J. (1988). Laddering theory, method, analysis and interpretation. *Journal of Advertising Research*, 28(1), 13-32.
- Richards, G., & Wilson, J. (2007). Youth and adventure tourism. In: D. Buhalis & C. Costa (Eds.). *Tourism business Frontiers: Consumers, products and industry*: Routledge. pp. 40-47.
- Scott, D. (2011). Why sustainable tourism must address climate change. *Journal of Sustainable Tourism*, 19(1), 17-34.

-
- Stepchenkova, S., Kirilenko, A. P., & Morrison, A. M. (2009). Facilitating content analysis in tourism research. *Journal of Travel Research*, 47(4), 454-469.
 - Vermeersch, L., Sanders, D., & Willson, G. (2016). Generation Y: Indigenous tourism interests and environmental values. *Journal of Ecotourism*, 1-15.
 - Wesner, M. S., & Miller, T. (2008). Boomers and millenials have much in common. *Organizational Development*, 26(3) 89-96.
 - Weaver, D. (2011). Can sustainable tourism survive climate change? *Journal of Sustainable Tourism*, 19(1), 5-15.
 - Willson, G., & McIntosh, A. (2010). Using photo-based interviews to reveal the significance of heritage buildings to cultural tourism experiences. In G. Richards & W. Munsters (Eds). *Cultural Tourism Research Methods*. Wallingford, Oxfordshire: CABI International, pp. 141-155.