

# Griffith Institute for Tourism



## Making an impact – practices and views of tourism Academics

Professor Susanne Becken

Professor Graham Miller

Dr Zsuzsa Banhalmi-Zakar

**Griffith Institute for Tourism Research**

**Report No 12**

October 2016

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October 2016

ISSN 2203-4862 (Print)

ISSN 2203-4870 (Online)

ISBN 978-1-925455-30-4

Griffith University, Queensland, Australia

## **Peer Reviewer**

Associate Professor Pierre Benckendorff, University of Queensland

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### **About this report:**

This report has been produced in response to an increasing need to understand and measure research impact. The data provide a global picture of how tourism Academics engage with stakeholders in an attempt to communicate research and make an impact.

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### **Acknowledgement:**

We would like to thank Prof Janne Liburd, Prof Bob McKercher, Prof Marius Meyer, Prof David Simmons, and Dr Kevin So for their feedback on the country-specific information. We also thank Associate Professor Pierre Benckendorff for this feedback.

## **Organisations involved:**

### **About Griffith University**

Griffith University is a top ranking University based in South East Queensland, Australia. Griffith University hosts the [Griffith Institute for Tourism](#), a world-leading institute for quality research into tourism. The Institute links university-based researchers with the business sector and organisations, as well as local, state and federal government bodies.

### **About University of Surrey**

The [School of Hospitality and Tourism Management](#) at the University of Surrey placed consistently in the top three Universities in the world for tourism scholarship on assessments of research outputs and quality of tourism staff. It is known for leading research into the social sciences of tourism.



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## **Executive Summary**

The number of tourism Academics worldwide has grown substantially, and in many countries, tourism is now well represented at Universities. At the same time, Universities face increasing pressure to demonstrate the positive impact that Government investment makes on society. Whilst the focus of this research is not on the role of Universities as such, it is noted that the increasing emphasis on performance measurement and management is reflective of a broader neoliberal governance approach.

Evaluation systems, and the often related funding arrangements, drive how research is ‘measured and evaluated’, and as a result how Academics behave to secure their jobs and advance their career. Thus, whilst there seems to be increasing consensus that Academics need to ‘make an impact’, little is known about what that means in practical terms. The purpose of this study was therefore to gain a basic understanding of how tourism Academics around the world engage in knowledge transfer and how they interpret the notion of ‘impact’. This involved seeking better understanding of the practices of tourism Academics such as research communication, stakeholder engagement and delivering an impact.

An online survey was sent out to key contacts (e.g. Heads of Departments) in the global tourism academy, and snowballed from there. The survey was open for 3 weeks between 26<sup>th</sup> of April and 16<sup>th</sup> of May 2016. A total of 189 Academics from 31 countries responded. Slightly more than half of the respondents were male (57%) compared to female (43%), and respondents were generally evenly spread across all stages of academic career.

Tourism Academics were asked how they typically shared their research findings. Just over 40% of respondents reported that they ‘always’ share their findings with peers through publication in tourism journals, and 46% also publish in non-tourism journals. Other outlets (e.g. industry reports) are used less frequently. The choice of communication channel differs by country of employment and career stage, but not by gender.

The majority of tourism Academics frequently engage with other Academics; mainly from the tourism area. However, less than 10% reported that they ‘always’ engage with other stakeholder groups, for example local or national Government or international organisations. Amongst all stakeholder groups, tourism Academics were most likely to ‘always’ (12% of respondents) connect with small and medium sized companies to discuss research findings. In contrast, two thirds of tourism Academics responded that they either never or very rarely engaged with large tourism corporations. Further research should explore whether this is due to lack of opportunity, confidence or relevant knowledge. Again, engagement differed by country and career stage, but also for gender. Especially, male Academics seemed to engage more frequently with ‘large players’ than female Academics. Early-career researchers were less likely to engage externally. They may benefit from mentorship and incentives to become more involved in industry events and networks.

Timing and reasons for engagement are also important. Whilst stakeholders are likely to prefer to be involved at the early stages of research rather than upon completion, tourism Academics tend to communicate their findings once finished with their research. More effort is required to consult stakeholders early on and involve them actively in the research process. Participants in this research noted that they have to engage with stakeholders

because they are often part of the research (e.g. they participate in interviews or focus groups), and also because they provide possible access to funding.

When asked how to measure academic impact, participants were in broad agreement that citation metrics are an acceptable approach. This is not surprising, given that metrics such as the H-index are commonly used and institutionalised. Measuring industry impact is more challenging, and there was less agreement on what the best evaluation indicator might be. The inclusion of research findings in the policy making process was seen as a good measure of impact by almost all respondents. Research-informed teaching and research that assists product development were also seen as useful ways to assess impact. Quantifying these might be harder and narratives might be required to link research with an outcome. The number of patents was the least favoured indicator, although tourism Academics from Asia seemed to support this indicator.

When asked what impact means to Academics, it became clear that most respondents believed that research should be ‘useful’ to the ‘real world’ and ‘make a difference’. The word ‘change’ was also mentioned frequently, in particular when respondents expressed desire that their research would change practices and behaviours for the better. It is difficult to measure ‘better’ and agreeing on normative outcomes might be challenging. As such, this research should be followed up by more in-depth research on how academics go about achieving an impact, why they do it (e.g. intrinsically or extrinsically motivated), and whether there are different types of academics that are more driven by being a change agent than others. Also, different University systems are likely to have an influence on behavioural patterns and norms and further work would be required to compare the effects of different evaluation and incentive schemes.

## TABLE OF CONTENTS

<b>1.</b>	<b>Introduction .....</b>	<b>7</b>
1.1.	<b>Changing role of Universities .....</b>	<b>7</b>
1.2.	<b>Impact.....</b>	<b>7</b>
1.3.	<b>Objective of this study .....</b>	<b>10</b>
<b>2.</b>	<b>Country approaches to measuring impact.....</b>	<b>10</b>
2.1.	<b>Australia.....</b>	<b>11</b>
2.2.	<b>Denmark.....</b>	<b>12</b>
2.3.	<b>Germany.....</b>	<b>12</b>
2.4.	<b>Hong Kong.....</b>	<b>13</b>
2.5.	<b>New Zealand .....</b>	<b>13</b>
2.6.	<b>Switzerland .....</b>	<b>14</b>
2.7.	<b>United Kingdom.....</b>	<b>14</b>
2.8.	<b>United States of America .....</b>	<b>15</b>
2.9.	<b>Summary.....</b>	<b>15</b>
<b>3.</b>	<b>Method .....</b>	<b>17</b>
3.1.	<b>Survey development .....</b>	<b>17</b>
3.2.	<b>Data collection.....</b>	<b>17</b>
3.3.	<b>Analysis .....</b>	<b>19</b>
<b>4.</b>	<b>Results .....</b>	<b>19</b>
4.1.	<b>Research communication .....</b>	<b>19</b>
4.2.	<b>Engagement.....</b>	<b>22</b>
4.3.	<b>What is impact?.....</b>	<b>26</b>
<b>5.</b>	<b>Conclusion.....</b>	<b>31</b>
<b>6.</b>	<b>References.....</b>	<b>33</b>

## 1. Introduction

### 1.1. Changing role of Universities

The number of tourism Academics worldwide has grown substantially, and in many countries, tourism has now a firm place in the academy. Mirroring growth of tourist arrivals globally and expansion of tourism economies, enrolments of tourism students in higher education increased considerably. Airey et al. (2015) reported that in the United Kingdom, the number of tourism students in degree-level programs increased from only 20 in 1972 to 9,000 in 2011. The first tourism program in Australia was introduced in 1978 and in 2010 there were 41 such programs. In China, there were 967 education institutes in 2010 that offered a tourism-related tertiary level degree.

Thus, from the early beginnings of Universities as institutions of science and professional training for a select few, tertiary education providers are now serving the masses. In 2010, The Economist reported that the number of PhDs awarded in OECD countries between 1998 and 2006 grew by 40%. At the same time, the demand for highly qualified academics does not match the growing supply, and the premium earned as a result of postgraduate University degrees is slim. Quantifying salary differences in the UK across a range of professions showed that having a master's degree (compared with no University degree) results in earnings that are 23% compared with those without a University degree. The earnings premium for a PhD is 26%, not significantly different, even though the study effort is much higher.

The role and value of Universities differs across countries, and even within countries not all members of society see intrinsic value in University education and scholarship. In a book on "Intellectuals and Society", Sowell (2009) proposed that intellectuals produce intangible and hardly useful ideas, for which they are not accountable but that have the potential to generate considerable damage. In the face of such sentiment, and due to an increasingly tight funding environment, Universities see themselves increasingly in a position to legitimise their position in society and work closer with those who might not only use knowledge but also pay for it. In short, many Universities have become a business, and education is now seen as an economic activity (see also Ayikouru, Tribe & Airey, 2009).

### 1.2. Impact

There is a general trend towards more reporting and monitoring across economic sectors, environmental impacts and policy evaluations, beyond the domain of academic research. A recent World Bank Document, for example, noted in the context of tourism growth and management:

*Effective management requires a sound understanding of impact. The measurement, monitoring and communication of impact is not as effective as it could be across the sector. (p. 2).*

Universities and knowledge providers are no different and there is increasing pressure to demonstrate the impact that Government investment makes on society. Such emphasis on performance measurement and management constitutes a neoliberal governance approach. Johnes (1994) offers an economic explanation of the value, cost and impact of research,

identifying research as a ‘public good’ and its impact on society as a ‘positive externality’. From this follows that measures of impact are geared at justifying expenditure on public goods, which tends to be politically motivated (Johnes, 1994).

One way to measure research impact is to focus on the quality of the research; that is the academic impact. Generally, research impact measurements include both quantitative and qualitative measures. The most commonly used approach is the quantitative bibliometric analysis of publications (primarily peer reviewed) and citation counts. Citation metrics are not only used to evaluate individuals (e.g. through the H index<sup>1</sup>), but also departments, institutions and countries. Also, journals increasingly use citation metrics as part of their key performance metrics. The benefit of citation counts is that they represent objective data that are easy to measure, obtain and compare. However, different databases lead to different results and citations depend on a wide range of factors, such as time since publication. Results can therefore be misleading (Bornmann et al., 2008).

So-called ‘industry’ or ‘real-world’ impact is even harder to measure. Several attempts have been made to assess the impact of academic research on policymaking, for example, or productivity or well-being. Since cause-and-effect is often complex and difficult to decompose into individual factors, and also because considerable time lags associated with research impact, other measures may be more practical. In particular, the use of external income (i.e. from private sources in addition to public funds and core funding) has become a common indicator of performance and impact. The logic is that if an external source (e.g. a company or other organisation) is willing to pay for research, it is obviously needed and hopefully answers a question relevant to society. As a result, the role of research income has moved to the centre of performance appraisals and key performance indicators.

Feller (2008) highlighted inherent problems with applying neoliberal approaches to academic performance management, which he stated “have the potential to (a) distort the workings of competitive academic research markets consistent with and conducive to enhanced scientific productivity, and (b) substitute administrative procedures and personnel for the professional autonomy of both faculties and universities in ways that detract from and run counter to the pursuit of research excellence”.

Thus, whilst Universities are increasingly required to attract external funding, much of the industry funds spent on Research & Development (R&D) are not going to Universities. Queensland’s (Australia) Chief Scientist, Dr Geoff Garrett (2016), recently pointed out that Australian companies claim over \$19.7 billion of R&D investment for tax benefit; however of this only \$505 million (the equivalent of 2.6%) are channelled to Universities. Figure 1 highlights that the amount of money spent on R&D differs substantially across countries, as well as the number of scientists and engineers per million people of population.

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<sup>1</sup> The H-index measures how many publications have achieved the equivalent number of citations. For example, an H-index of 10 indicates that the author in question has at least 10 papers with at least 10 citations each. In a 2008 study, McKercher found that the average H-index of the 58 most cited researchers in tourism was 13.7. In the meantime, more recent research by Benckendorff et al. is on its way to update the H-index statistics by academic level. The H-index for tourism researchers has increased substantially since McKercher’s study.

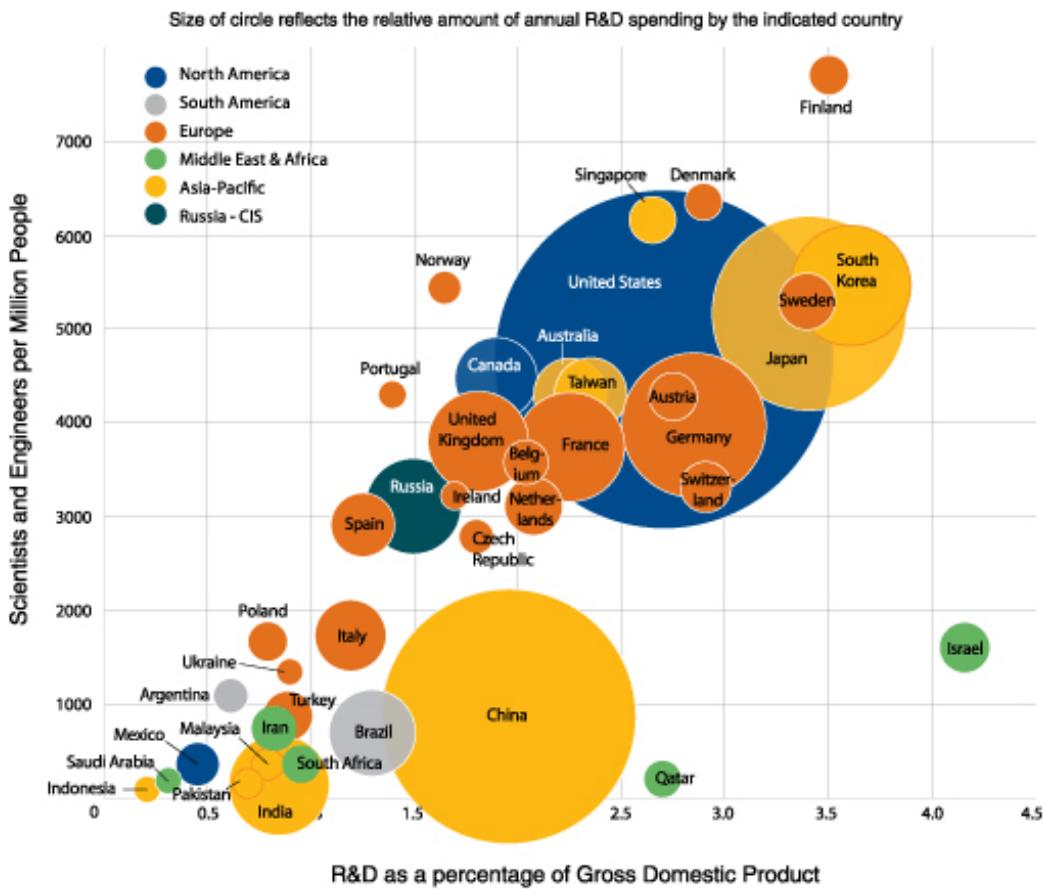


Figure 1 Global R&D investment in 2012 (Source: R&D Magazine/Battelle, 2013).

For a number of reasons, Universities might not always be competitive in obtaining R&D funds. As a result, and also to support ‘blue skies’ research, most countries maintain funding schemes that specifically support scientific research and knowledge generation at Universities and other science organisations. In Germany, for example, 30% of all investment into research comes from the public sector, and the other 70% originates from industry sources (DFG, 2016).

So, how competitive is tourism research in terms of funding? Airey et al. (2015) provide some interesting statistics for the UK, Australia and China on the proportion of tourism-focused grants funded by the Government science schemes.

- In the UK, out of 5,332 awards from the Economic and Social Research Council between 2000 and 2011, only 29 or 0.5% related to tourism.
- In China, 123 projects or 0.07% of the National Science Foundation funding were granted for tourism-related projects during 2000–2011.
- In Australia, between 2003 and 2012, only eight Research Council grants were tourism out of a total of 4,564 grants (0.002%).

### 1.3. Objective of this study

Whilst there are growing numbers of tourism programs offered, tourism Academics, and tourism journals, there is also increasing scrutiny of the value associated with tourism research. The notion of ‘making an impact’ is becoming more central and Universities actively seek ways to measure research outcomes. Impact is also increasingly discussed by tourism Academics and thematised at leading tourism conferences (e.g. *Making an Impact: Creating Constructive Conversations*, University of Surrey, 19-22 July, 2016).

Tourism at Universities will be affected by whether and how research is ‘measured and evaluated’. Therefore, this study aimed to gain a baseline understanding of what tourism Academics around the world are doing to engage in knowledge transfer and how they interpret the notion of ‘impact’. Thus this research had several objectives:

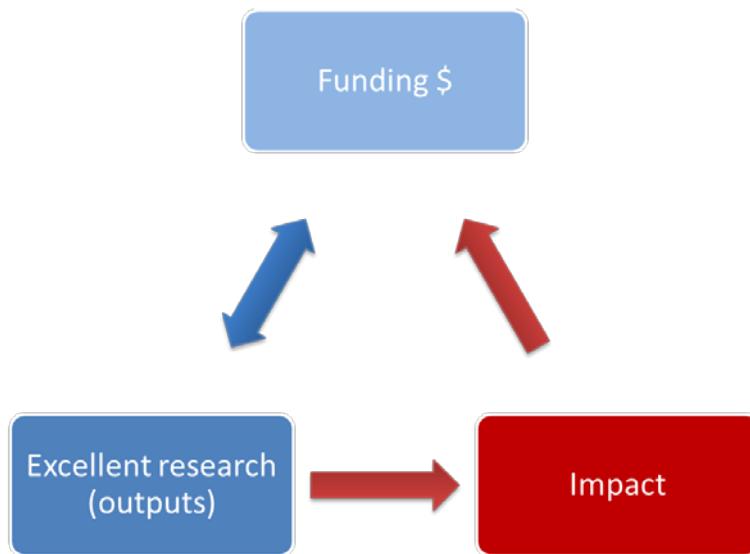
1. Gain an insight into current practices of research communication.
2. Understand how tourism Academics engage with research partners and users.
3. Explore how tourism Academics interpret the concept of ‘impact’.

It is not the intention of this report to critically question the University systems around the world or their trajectory in relation to changing expectations, policies, and performance levers. Instead, the results presented here will hopefully inform discussions of what tourism Academics do to communicate and engage with the sector and what they perceive to be elements of ‘making an impact’.

In the following section, a summary of the importance of impact is provided for a selected number of countries where tourism research takes place. Due to the limited scope of this research, this was restricted to eight countries. This is followed by an outline of the methods used for data collection and analysis, and a presentation of findings. A conclusion provides reflections on the results and recommendations for further research.

## 2. Country approaches to measuring impact

At the core of academic research is to achieve research excellence and produce outputs, for example journal articles. This often requires the input of funding, especially for larger-scale and long-term projects. There are multiple sources of research funding, and in the past those academics with outstanding research records have been most successful in attracting them. Increasingly, however, it is necessary to demonstrate impact that stems from previous research investment. This then either directly influences how new funds are provided, or – by engaging with key groups and achieving tangible research benefits – may open up new sources of external income. Figure 2 summarises the changing relationship with ‘impact’ becoming an additional mediator of future funding.



**Figure 2 The relationship between research funding, outputs and impact.**

Countries autonomously determine how to evaluate researcher performance. This evaluation is often linked to the allocation of government (public) research funding. A small number of countries were selected to introduce various approaches, based on two rationales. One was to include those countries where a critical mass of tourism research originates (i.e. United Kingdom, Australia, New Zealand, Hong Kong and the USA) and the other one was to consider additional countries that are characterised by high per capita spending on R&D (i.e. Switzerland, Denmark, Germany). The countries are discussed alphabetically.

## 2.1. Australia

In 2015–16, the Australian Government will invest approximately \$3.5 billion in University research (Australian Research Council 2016b). The Australian Research Council (ARC, 2015) defines research impact as “...*the demonstrable contribution that research makes to the economy, society, culture, national security, public policy or services, health, the environment, or quality of life, beyond contributions to academia*”. At present, Universities are assessed every two years for their academic performance but not impact as such.

The ARC administers the Excellence in Research for Australia (ERA)<sup>2</sup>. The system uses a rating system that applies to units known as Fields of Research (FOR codes). Ratings are determined and moderated by committees of distinguished domestic and international researchers and rely on various indicators, including citation (common in the natural sciences), peer review of a sample of research outputs (common in the humanities and social sciences) and discipline-specific indicators (ARC, 2016a). The performance is not assessed for each individual but for nominated FOR codes. Tourism has its own four-digit code (1506), and sits under the broader ‘FoR15 Commerce, Management, Tourism and

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<sup>2</sup> The ERA was preceded by the Research Quality Framework which used a portfolio approach with a strong focus on assessing impact as described by the ARC.

Services'. Because of the interdisciplinary nature of tourism, a considerable proportion of tourism research is recorded under non-tourism codes.

The Federal Government is content with the quality of research produced by domestic Universities; however, it expressed concern over the lack of collaboration and knowledge dissemination to end-users (ARC, 2016b). With support from a range of stakeholders, the Government has recently embarked on developing a national framework to assess the engagement and impact of university research. This process builds on existing measurement of research impact (i.e. the ERA). Consultation and agreement over basic principles, such as definitions of engagement and impact and the identification of suitable metrics are part of the approach. A range of guiding principles were laid out, including due consideration to the different ways that different disciplines engage with end-users and measure impact.

## 2.2. Denmark

Compared to other European countries, Danish research has enjoyed relative success and impact. Danish research is ranked 30-40% above world average, measured as the top 10% citations globally, in all fields (similar to the performance of Swiss and Dutch counterparts) (Öquist & Benner, 2014).

Similarly to many other countries, research-funding is central to the Danish research performance measure. The Danish model is heavily based on quality of publications. The global success of Danish research is believed to be underpinned by very specific aims set by the government to ensure that at least one Danish University is ranked among the top ten in Europe or top 100 globally. To achieve this, the Government instilled competition among universities for funding (Wright et al., 2014). The system was relatively simple: publications in 'top journals' were rewarded and tallied for every academic as one of four indicators used to allocate a relatively small amount of government funding (Wright et al., 2014). The government supported research excellence and novel ideas through leadership and support systems (Öquist & Benner, 2014), although it has also been noted that it is too early to assess the success of the system.

Further, Öquist and Benner (2014) observed that competition between Universities or even Departments can be detrimental, as one unit's gain comes at the expense of another's. The system does not allow for an overall increase in excellence or impact by growing the investment, but it merely redistributes it according to bibliometric points. In the competition over points, Government aims, and contributions to wider society might get lost.

## 2.3. Germany

The Deutsche Forschungs Gesellschaft (DFG, 2016) asserts that research is one of the fundamental pillars of German society. Research is the systematic, planned and scientifically founded search for pathways and solutions relevant to all spheres of life. By definition, the DFG argues, investment into research is future-oriented and often has to take a long term view of years or even decades. Basic research (Grundlagenforschung) in particular may not have an immediate purpose other than scientific insights. Real-word outcomes are therefore difficult to measure. One might argue that the German approach therefore is less concerned with 'measuring tangible impacts' compared with some other countries.

Notwithstanding a general acknowledgement of the importance of research as an intrinsically valuable knowledge generating activity, a recent report by a University in Düsseldorf (Grapatin et al., 2012) stated that research evaluation is now common practice. Based on a survey of 7 German Universities and 129 philosophical, 87 economics, and 30 law schools, the authors recommended that the performance of research should be measured according to three criteria:

- Capacity building (e.g. doctoral completions, professorships etc.)
- Amount of external funding
- Publications

The assessment of publications has to be discipline-specific and the usage of journal rankings lists was recommended. Income as a performance measure was suggested to be normalised per head of staff.

#### 2.4. Hong Kong

The need to demonstrate the relevance (and impact) of research to funding agencies and the general public is increasingly recognised by Universities in Hong Kong (Wah & Chang, 2016). In Hong Kong, the University Grants Committee conducts the Research Assessment Exercise periodically, since 1993. It aims to funnel public funds (Block Grants) to institutions that demonstrate the ability to conduct high quality research, thereby enabling them to pursue world-class standing (UGC, 2012). The scheme applies a performance-based system, where the research output of individual Academics accounts for 80% of the weighting, while inputs (peer-reviewed research grants, awards and recognition) are less important. Individuals can submit up to four outputs over a six-year period. Although the metric is based on research outputs of individual Academics, the performance is measured at the level of the research centre or institute ('cost centre'). Like is compared with like, which means that institutes are measured against others with similar research focus.

The approach advocates Boyer's (1990) principles that expanded traditional interpretation of scholarship should include: scholarship of discovery, scholarship of integration, scholarship of application (engagement), and scholarship of teaching, as advocated by The Carnegie Foundation. Further refinements of the Research Assessment Exercise are expected, as the approach is not sufficiently holistic and unable to measure high-end performance and quality of research students adequately (Chin, 2007).

#### 2.5. New Zealand

Universities, where much of the research is undertaken in addition to Crown Research Institutes, undergo 6-yearly assessments of their research performance through assessment of academic portfolios. The Performance-based Research Fund (PBRF) is designed to redistribute funds to tertiary education organisations (TEOs) based on their performance.

The PBRF system is designed to:

- support the development of postgraduate student researchers and new and emerging researchers;
- support research activities that provide economic, social, cultural, and environmental benefits to New Zealand, including the advancement of mātauranga māori, and;

- support technology and knowledge transfer to New Zealand businesses, iwi and communities.

Clearly, the system promotes the idea that research excellence needs to be rewarded, but that it is broader than the production of academic outputs. Instead, societal impact and business opportunities need to be evident. The creation of leading-edge knowledge therefore must be followed by the application of that knowledge, and its dissemination to students and the wider community.

In the PBRF each staff member is assessed individually and classed as A, B, C or ‘inactive’. Government funding is directly related to the outcome of these rankings. In the upcoming round of 2018, two new categories (out of 12) are introduced to assess broader societal benefit. These sit within the “professional contributions” component of Academics’ evidence portfolios and relate to ‘Outreach and Engagement’ and ‘Uptake and Impact’. Outreach relates to the contribution each staff member makes to the wider community in New Zealand and/or internationally through their research-based expertise. This category addresses academic impact as it mainly refers to engagement with the academic communities. In contrast, Uptake/Impact aims to assess initiatives that demonstrate whether the staff member’s research has had an impact outside of academia, for example by policy changes based on research findings.

## 2.6. Switzerland

The Swiss Nationalfonds (see <http://www.snf.ch/de/fokusForschung/themendossiers/nutzen-der-grundlagenforschung/Seiten/default.aspx>) discusses impact as new insights through research. They acknowledge that sometimes breakthroughs are unplanned and surprising, depend on the curiosity and persistence of researchers, and can take a very long time. Impacts may not be measured until decades after the research.

Switzerland is using three indicators to measure trends and performance in research (Bundesamt fuer Statistik, 2016):

- Research income received from the European Union programmes (e.g. Horizon)
- Impact of publications measured through citations
- Accepted projects at the European Research Council

## 2.7. United Kingdom

The first comprehensive research assessment in the UK began in 1986 with the Research Selectivity Exercise. The aim of the exercise was to allow government to be more selective in its support for research, whilst also allowing for a redistribution of resources for research between universities. In 1989 the system was run again, but modified to include use of peer review of outputs. By 1992 the approach became the Research Assessment Exercise and was further conducted in 1996, 2001 and 2008 with each version of the exercise seeking to refine the methodology. With each iteration the main objective of the exercise was to grade research conducted in order to allocate future funding for research.

By 2014 the assessment became the Research Exercise Framework, which was initially proposed as a metric driven assessment in order to reduce the administrative burden of the exercise, as well as to better demonstrate the societal value from public funding. However,

consultation on the use of a purely metric driven approach revealed significant disciplinary differences and the need to rely instead on peer review, supported by citation information. The 2014 Research Exercise Framework was also noticeable for the introduction of an assessment of the impact of research, albeit the peer review of outputs was still the primary element of overall assessment. Assessment of impact was taken to be beyond dissemination, and beyond purely commercialisation, but also to include impact on society, culture, public policy and general quality of life.

The review by Lord Stern of REF2014 commissioned by the government shows that the cost of the exercise to UK higher education institutions was £246m, considerably more than the £66m spent on RAE2008. Stern concludes that the principle of peer review remains important, but that in order to ensure the cost of the system of assessment does not escalate, then metrics should be provided to reviewers to assist their assessment. Further, Stern concludes that assessment of outputs by discipline risks researchers avoiding interdisciplinary research and more 'future-oriented' research, in favour of 'safer' research within disciplinary boundaries and a more immediate potential benefit. As a result, Stern recommends the submission of institution-wide impact cases that allow for inter-disciplinary research to be conducted on a challenge of societal importance beyond the remit of just one discipline.

## 2.8. United States of America

The American higher education system is substantially different compared to the other countries. Firstly, a substantial number of universities are private, as opposed to public intuitions, and many are ranked as the best in the world. Most tourism programs are in public Universities. Public Universities have suffered significant funding cuts and the drive for external income is becoming more prominent.

The National Science Foundation (NSF<sup>3</sup>) provides funding to Universities, however these opportunities are rarely been taken by tourism researchers, who may perceive that they are not competitive in these programs. As a result, much of the tourism research if funded either by the private sector or through public sector projects, engagement is essential. Projects are then directly tied to a particular sector issue.

Some common government agencies with an interest in tourism research include the US Department of Commerce, the state's Department of Parks, Recreation, and Tourism (each state has one), a destination's Convention Visitor Bureau (the DMO), and the US Department of Agriculture. The largest tourism association is the United States Travel Association and they work with both consultancy firms and universities.

## 2.9. Summary

The brief overview of evaluation processes and research impact measures used in selected countries reveals a tendency to apply, and increasingly favor, approaches that amalgamate a mix of different measures in an effort to capture the full range of research impact. In other words, while there is no unitary approach to measuring research impact, most countries use

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<sup>3</sup> The National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare..."

an assessment that relies on a combination of measures. These measures typically include some type of bibliometric approach (e.g. citations). The most common bibliometric indicators are number of citations and h-index, which can indicate the quality of research although this is not always the case (see for example the widely controversial but also widely cited work *The Skeptical Environmentalist* by Lomborg, 2003).

It is often acknowledged that bibliometric measures fail to reveal societal or ‘real-world’ impact (see Wah & Chang, 2016), and other complementary measures are used or being developed. Some countries have moved further than others in attempting to assess impact, for example the United Kingdom or New Zealand that make impact an integral part of performance evaluation and subsequent funding distribution.

At this point in time, it appears that many countries are grappling with developing meaningful indicators and measures that reflect quality and utility without stifling innovation. What is perhaps the most disturbing (but not surprising to Academics) is that research impact performance factor heavily in the allocation of (public) funding to Universities and even individual Academics, in many systems. This means that the most significant issue for Academics is the implication or consequence of research impact and the way it is measured.

### **3. Method**

#### **3.1. Survey development**

The aim of the survey was to obtain a snapshot of current practices and perceptions of research impact among tourism Academics. In addition, the survey was designed with ease of navigation and relatively quick completion in mind to facilitate reaching as many tourism Academics globally as possible within a relatively short (three week) window. The survey was completely anonymous and was conducted on-line (via surveymonkey software) in English only. Participants were asked ten questions and had the option of skipping questions if they chose to not answer them. The questions were informed by the research aims and literature, including grey literature such as guidance documents published by tertiary institutions that help academic staff document achievement for academic performance reviews and promotion (e.g. *My Voice – Checklist to capture evidence for academic achievement*, University of Western Sydney, 2014).

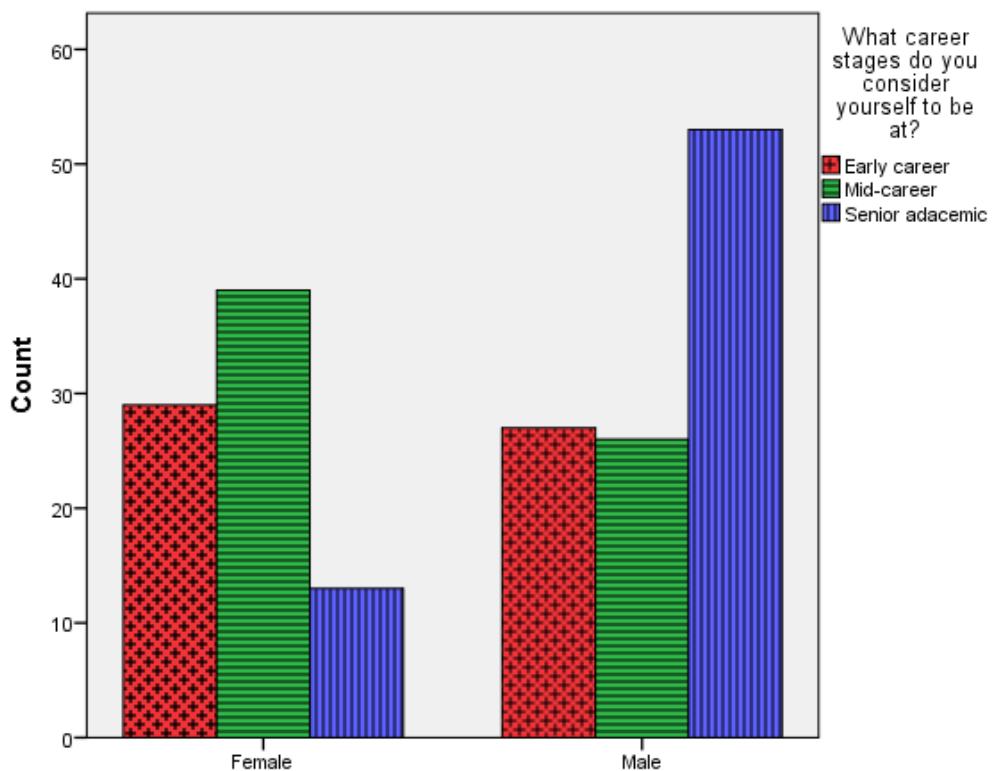
Of the ten questions, five were formatted as Likert-type scales (with three or five possible responses), one involved ranking (from 1-7), and one was an open-ended question asking respondents to describe what making an impact mean to them. The last three questions collected background information about the gender, career stage and country of employment of respondents.

The pilot survey was tested by five tourism Academics in the host country (Australia) prior to widespread distribution and feedback was incorporated into the final version of the questionnaire.

#### **3.2. Data collection**

The survey was administered in May 2016. An email was sent to tourism Academics (in particular Heads of Departments but also other staff) from around the world to seek support and participation. The email contained brief background information on the purpose of the research, and a weblink to the questionnaire. Contacted colleagues were also invited to ‘snowball’ the invitation and forward the email to other tourism Academics in their network. Several colleagues passed the survey on as an invite through regional online networks, for example the Scandinavian Tourism Researcher network and the German Arbeitskreis Tourismusforschung.

The survey was open for 3 weeks between 26<sup>th</sup> of April and 16<sup>th</sup> of May, and a total of 189 responses had been received. One was eliminated due to an insufficient number of fields completed. Slightly more than half of the respondents were male (57%) compared to female (43%), and respondents were generally evenly spread across all stages of academic career (early= 30%, mid=35%, senior=35%). Figure 3 shows that career stage differed significantly for female and male respondents ( $X^2 (2, 187)= 24.001, p <0.001$ ).



**Figure 3 Career stage and gender of survey participants.**

The survey participation was global. A total of 177 respondents (94%) disclosed a country of employment, representing 31 nations<sup>4</sup> (see Table 1). The single largest group was from Australia (probably reflecting the origin of this study), followed by the United Kingdom and the Netherlands.

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<sup>4</sup> Two participants indicated that they worked for multinational institutions. Some participants indicated multiple nationalities, but only the first country they listed were recorded in the table.

**Table 1 Survey participants**

<b>Country of employment (alphabetically) and number of respondents</b>			
Australia	34	Italy	2
Austria	9	Mauritius	1
Brazil	4	Mexico	3
Cambodia	1	The Netherlands	12
Canada	2	New Zealand	10
China	2	Norway	5
Czech Republic	1	Oman	2
Denmark	3	Poland	2
Fiji	1	Slovenia	4
Finland	4	South Africa	4
France	1	Spain	11
Germany	10	Sweden	9
Hong Kong	8	Thailand	5
Hungary	1	United Kingdom	13
Iceland	5	United States	7
Indonesia	2	<b>Total</b>	<b>177</b>

### 3.3. Analysis

The data were mainly analysed for frequencies, and simple statistical tests (e.g. Chi Square) were used to highlight differences between groups.

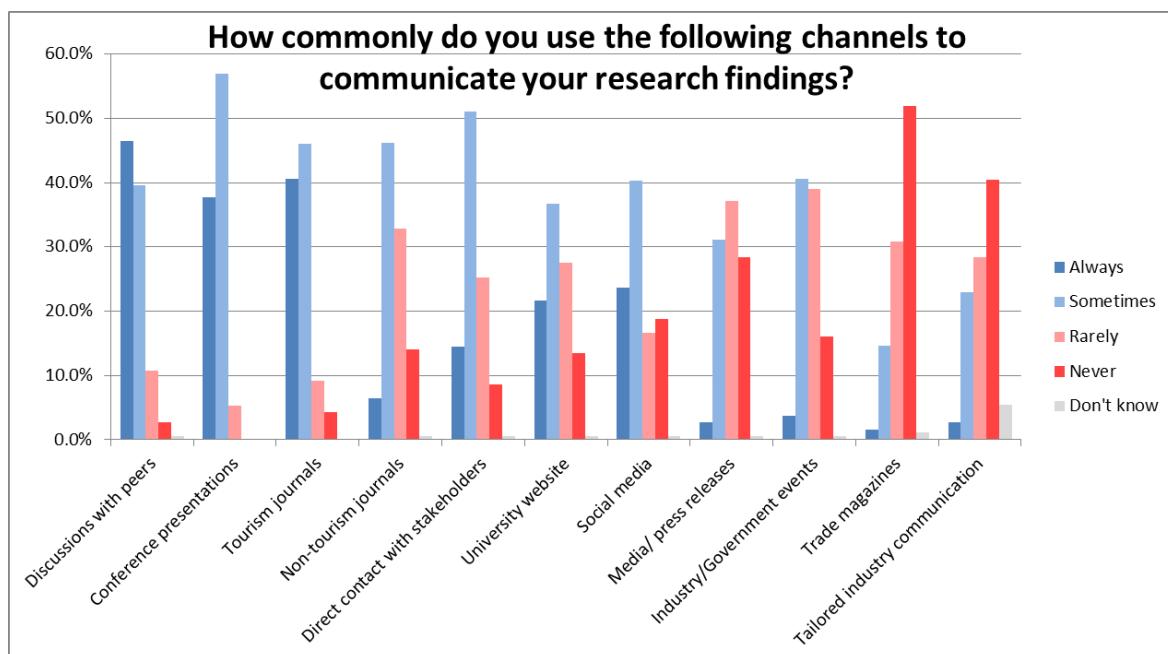
Answers to the open-ended question were analysed in NVivo, using the built-in word cluster and word tree functions. Word trees were expanded to include up to nine terms on either side of key phrases to capture meaning. Word trees reveal the context of key words or phrases, providing new insight into text. They are a graphical representation of “keyword-in-context” method available since 2007 (Wattenberg and Viégas 2008). The word trees in this study were generated using the most common words identified in the word cluster, following the recommendation of Wattenberg and Viégas (2008), who suggested combining other types of text visualisation with word trees as a helpful strategy to generate starting points for analysis.

## 4. Results

### 4.1. Research communication

Tourism Academics are most commonly sharing their research findings with other Academics through peer discussions and conference presentations (Figure 4). Just over 40% of respondents ‘always’ share their findings in tourism journals. Forty-six percent also use non-tourism journals as communication outlets. In contrast, communication tailored to industry is only pursued by about one quarter of participants (‘always’ or ‘sometimes’). Less than half consider trade magazines an option for sharing findings. Two-thirds of tourism Academics either never or only rarely make media releases, although a larger number use social media – over 20% use it ‘always’.

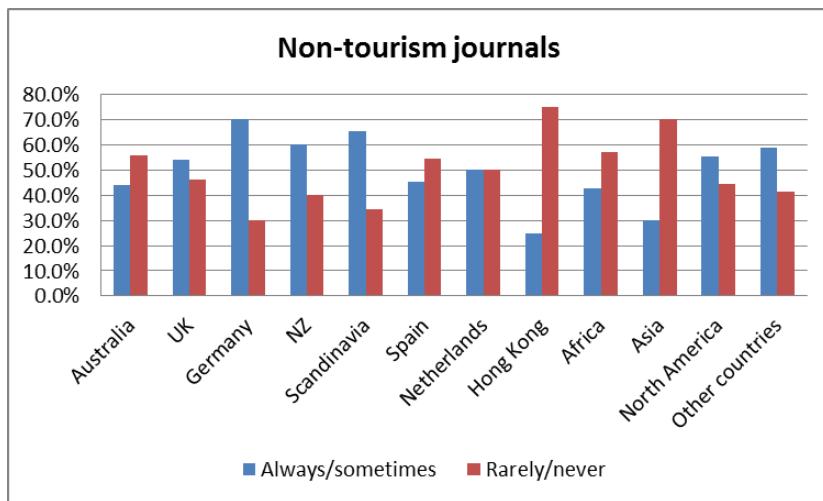
Some respondents added additional information on how they communicate research, including through books, their teaching, and directly to Government agencies.



**Figure 4 Channels for research communication.**

Chi-square tests indicated that senior and mid-career Academics were more likely to use industry-focused communication channels than early career researchers. For example 45% of early career researchers never use trade magazines, compared with 32% of mid-career and 22% of senior Academics. Possibly, early-career tourism Academics tend to focus on publications and building their academic networks (and career) rather than on communicating to industry. No gender differences could be found.

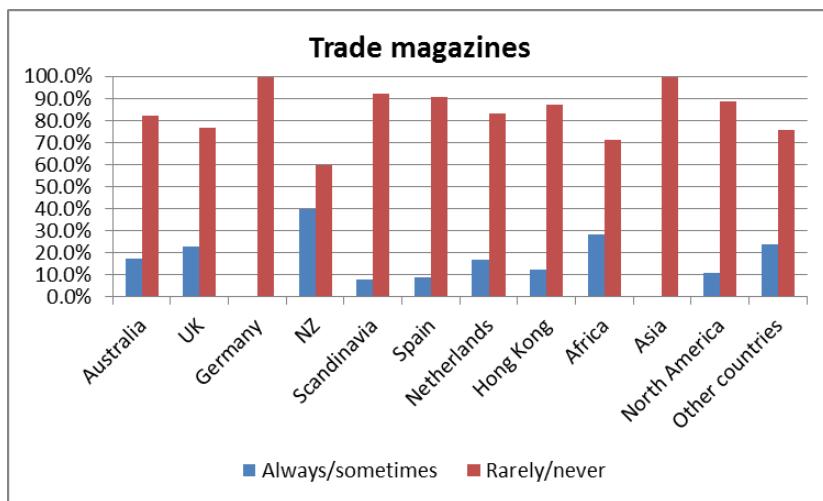
Academics from different countries/regions display different patterns of communication. The responses were pooled into two categories, namely 'always/sometimes' and 'rarely/never'. Also, countries with sample sizes under 10 were aggregated into groups. Missing responses and 'don't knows' were excluded from the comparison. Statistical tests were undertaken to broadly capture patterns, but not reported here due relatively small sample sizes. The comparisons show that participating Academics from Australia, Hong Kong and other Asian countries were less likely to publish in non-tourism journals than their counterparts from Germany, New Zealand and Scandinavia (Figure 5). For Germany, this finding is not so surprising because German Universities typically include tourism as part of core disciplines (e.g. geography) rather than maintaining stand-alone tourism schools – possibly encouraging publication in disciplinary journals outside the field of tourism.



**Figure 5 Likelihood of communicating research in non-tourism journals by country.**

Communication of research with industry and government stakeholders also differed amongst respondents from different countries or regions. Academics from the Netherlands (67%), the United Kingdom (62%) and New Zealand (60%) reported that they either always or sometimes share findings directly with industry and government. Only 13% of Hong Kong and 16% of Spanish academics who participated in this survey responded affirmatively.

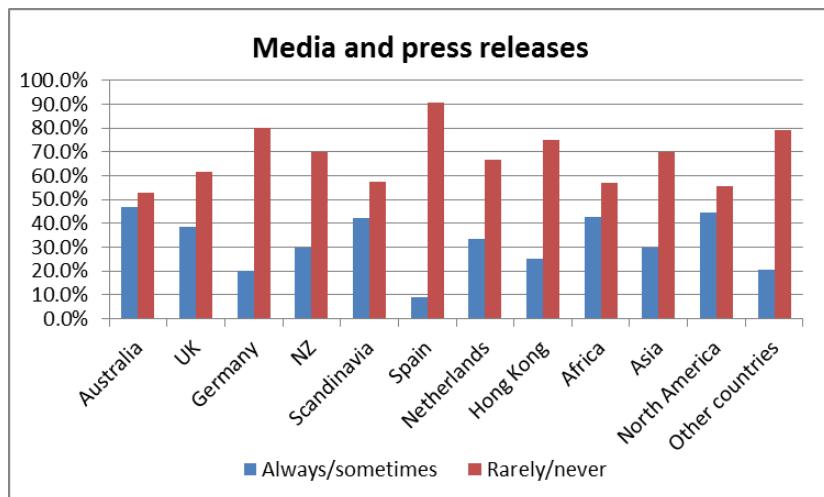
In addition, Figure 6 shows that New Zealand Academics were more likely to report their research through trade magazines. Respondents from Germany or Asian countries, however, did not use this channel of communication. The strong industry communication was also evident in New Zealand Academics reporting to provide tailored industry communication (50%), which was done less often in most other countries (the lowest were Spain with 9% and Germany with 19%). Greater sample sizes would be required to ensure that the findings are representative.



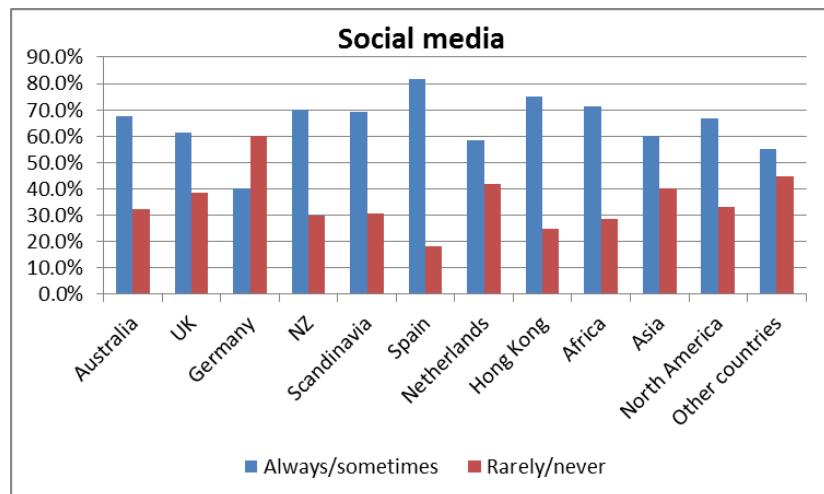
**Figure 6 Likelihood of communicating research in trade magazines by country.**

Media and press releases can be an important vehicle to share research. As Figure 7 shows, Australian and Scandinavian Academics used this tool more often than, for example,

researchers from Spain or Germany. Figure 8 indicates that the use of social media was more prevalent than communicating via traditional press releases. In most countries, except for Germany, the majority of tourism Academics use social media to discuss their research. In some countries, there are no options for publishing academic work in online newspapers that appeal to a broader public. *The Conversation*, for example, is an increasingly popular outlet for science communication and dissemination of critical thinking.



**Figure 7 Likelihood of communicating research through press releases by country.**



**Figure 8 Likelihood of communicating research through social media by country.**

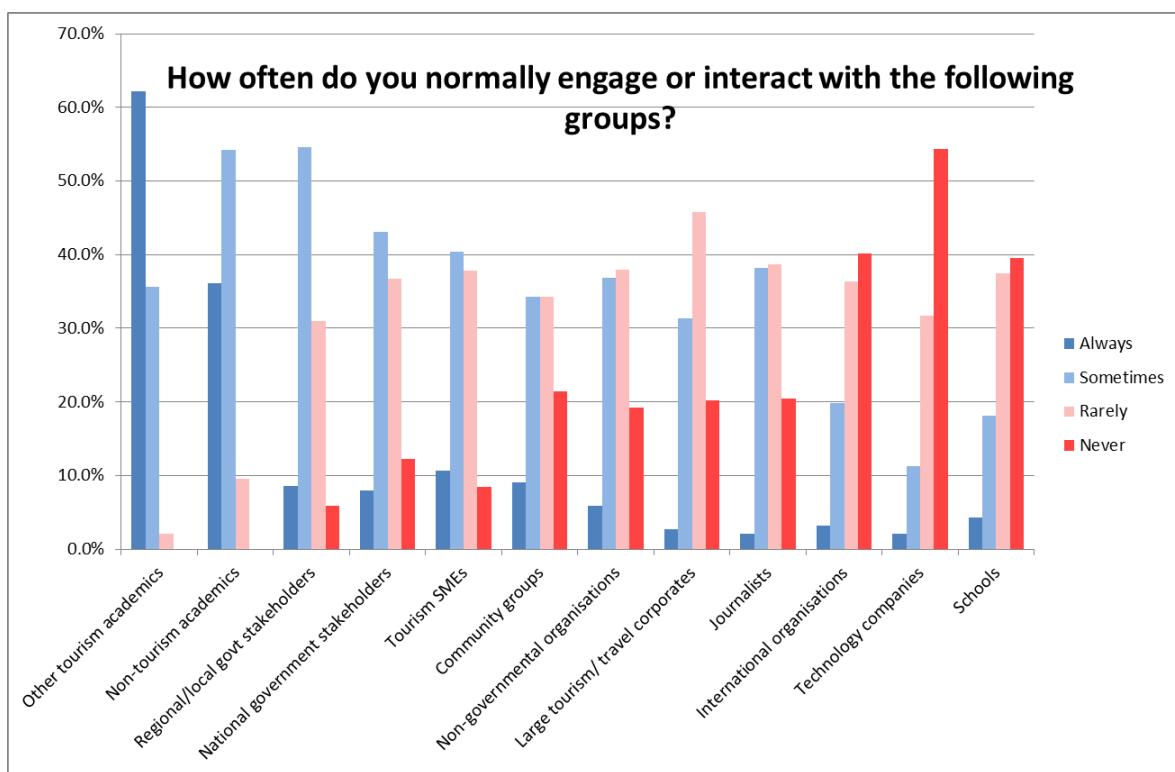
#### 4.2. Engagement

Over 62% of tourism Academics frequently engage with their peers, that is other tourism Academics. Only 36% engage on a very common basis ('always') with non-tourism Academics, although 54% do so occasionally ('sometimes') (Figure 9). One respondent hinted to the multiple pressures that Academics face (teaching, research, engagement,

income etc.) by pointing out "*It is impossible to tick "always" for this question - anyone who does cannot have much of a personal life!*".

Less than 10% of tourism Academics 'always' engage with various stakeholder group, except for tourism small and medium sized companies, which was just above 10%. The lowest engagement was observed for technology companies, international organisations and schools. Further, the findings indicate that tourism Academics are more frequently dealing with small tourism businesses than large corporations and with local government stakeholders than with national-level departments or ministries. The scale of tourism research and perceived (lack) of contribution that tourism Academics make at these higher levels could be one reason why academics are more comfortable working with smaller scale players. Further research should investigate this asymmetry.

A small number of respondents added additional groups with whom they engage or interact to communicate research, including industry associations, students, charities, and tourists.



**Figure 9 Engagement with different groups.**

There were some group differences in terms of engagement. Academics from the Netherlands and the United Kingdom were more likely to engage with large corporate organisations (50% and 46%, respectively), compared with German and Spanish tourism Academics (10% and 18% respectively).

Only 4% of Scandinavian Academics reported that they engaged always or sometimes with international organisations, compared with 39% and 38% of Academics from the United Kingdom and Hong Kong.

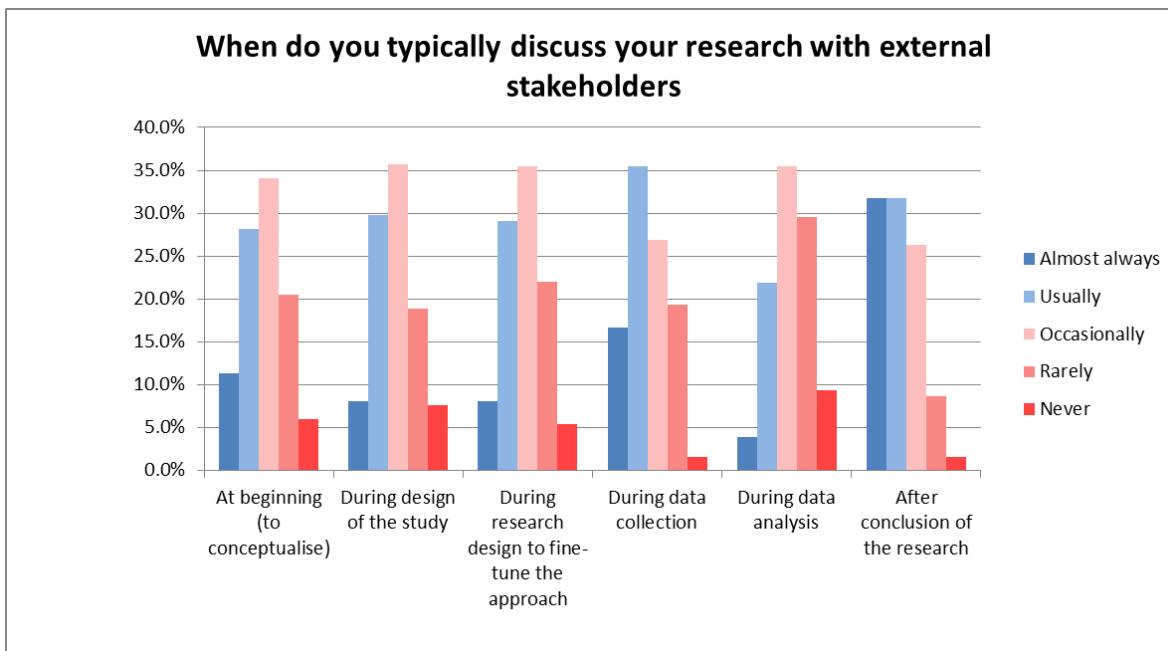
Male Academics were more likely to frequently engage with large corporations (39% compared with 28%) or international organisations (28% compared with 17%), compared with female academics, although the Chi-Square statistic was not significant.

Career stage has a significant effect on how often academics engage with higher level organisations. Table 2 shows the results for engagement with large corporates and international organisations by career stage, clearly highlighting that more senior Academics are far more likely to reach these organisations than those early into their career. Perhaps it is because senior level Academics find it easier to reach large corporation and potentially have the better networks and relationships to work with and communicate with these stakeholders.

**Table 2 Engaging with corporates or international organisations by career stage**

	Always/ sometimes	Rarely/ never	Chi-Square	p-value
<b>Corporate organisations</b>			X2 (2, 188)= 10.006	0.007
Early career	5.4%	94.6%		
Mid-career	18.8%	81.3%		
Senior Academic	42.4%	57.6%		
<b>International organisations</b>			X2 (2, 188)= 24.467	0.000
Early career	5.4%	94.6%		
Mid-career	18.8%	81.3%		
Senior Academic	42.4%	57.6%		

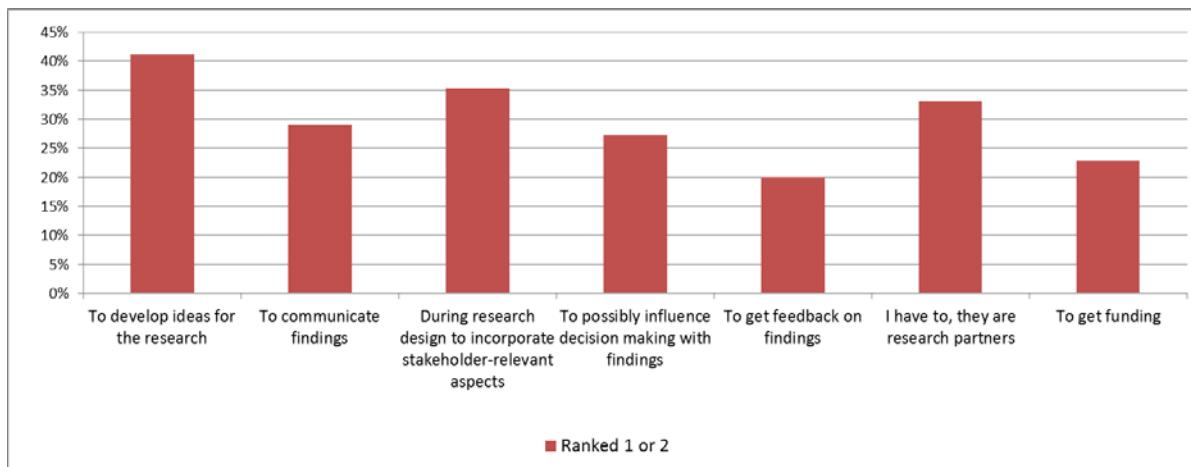
The timing of engagement is important, as stakeholder often prefer to be involved at the early stages of research rather than upon completion. However, most tourism Academics tend to engage at the end of their research (Figure 10), or maybe during data collection, possibly because data have to be collected from stakeholders.



**Figure 10 Timing of engagement.**

Three respondents added commentary to explain that some projects ‘do not have stakeholders’, and that type and timing of engagement depended on the particular type of research being undertaken. For example, one respondent from the USA noted: “*In my case, I have research projects that have a strong academic focus (for producing publications in top-tier journals) and projects that are funded by industry sponsors. How I communicate with external stakeholders differs based on what type of project I am working on.*”

Academics were also asked to rank seven reasons why they engage with stakeholders. Figure 11 shows the percentage of respondents who ranked the different reasons as either top or second top motivator. For example, 41% of respondents felt that the most important reasons for engaging was to develop research ideas. Instead, getting feedback on findings was only seen as key motivator by 20% of respondents. Furthermore, less than a third of Academics ranked engaging with stakeholders to potentially influence decision-making as their top two reasons.

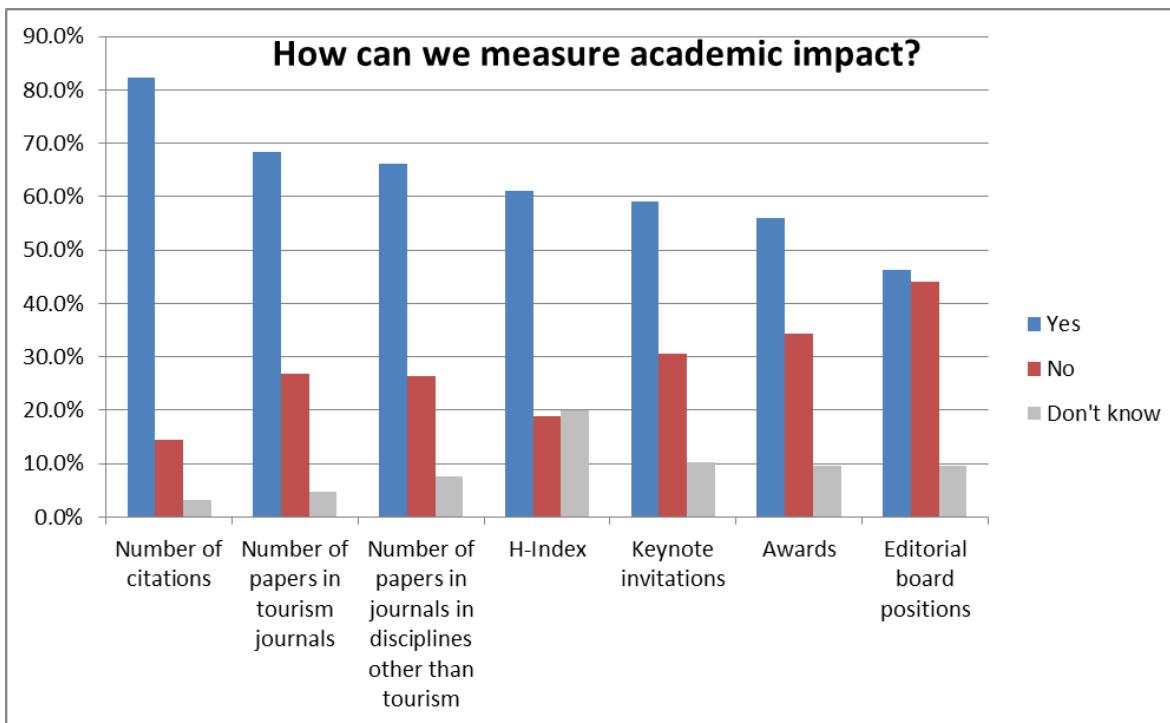


**Figure 11 Top reasons for engaging with stakeholders.**

#### 4.3. What is impact?

It was deemed important to find out what tourism Academics believe constitutes impact, and two questions were asked to this effect: first, what is academic impact, and second what is industry impact. Participants could choose amongst several suggested measurements for impact and were also given the option to provide additional commentary.

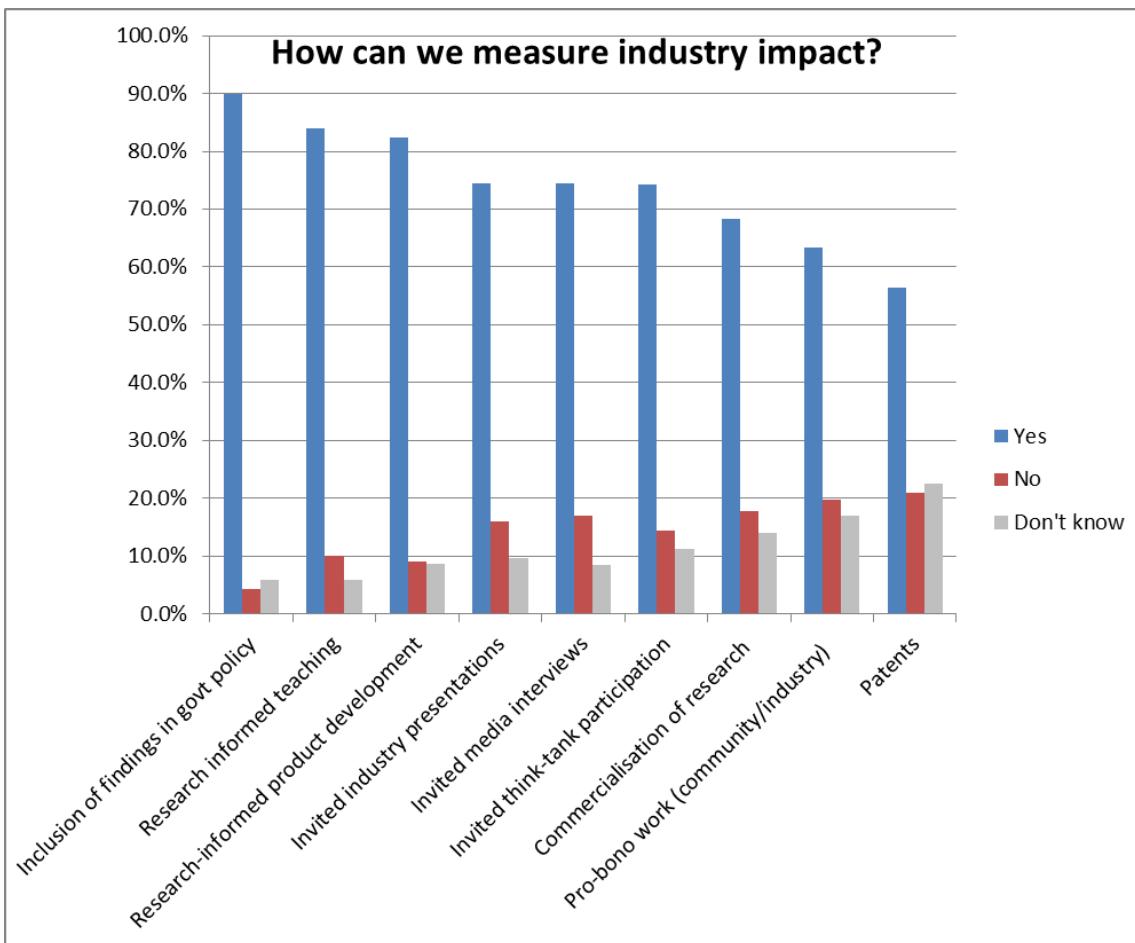
Figure 12 shows that most academics believe that number of citations is a useful metric for assessing academic impact. Number of papers in tourism journals was seen as slightly preferable to measuring number of papers in non-tourism journals. The H-Index received the largest proportion of ‘don’t knows’, indicating that respondents either are not familiar with this metric or are unsure whether it is useful. Over 42% of Scandinavian researchers were unsure about the H-Index, whereas 91% of Spanish tourism Academics saw it as a useful metric. No gender differences were apparent.



**Figure 12 Views on measuring academic impact.**

Most measures suggested to assess industry impact were perceived as useful (Figure 13). For example, the inclusion of research findings in the policy making process was seen as a good measure of impact by 90% of respondents. Patents were the least favoured indicator (except for academics from Asia of whom 100% felt it was a good indicator), although this is not surprising given that the likelihood of patents in tourism research is relatively low compared with other areas of research.

The biggest difference between countries was for pro-bono industry work. Ninety-two percent of Academics from the United Kingdom felt that pro bono research was a good measure of impact. Similarly, over three quarters of respondents from New Zealand, the Netherlands, Australia and North America agreed with this measure. The lowest support for using pro bono research as an impact metric was from Germany (10%) and African countries (29%).

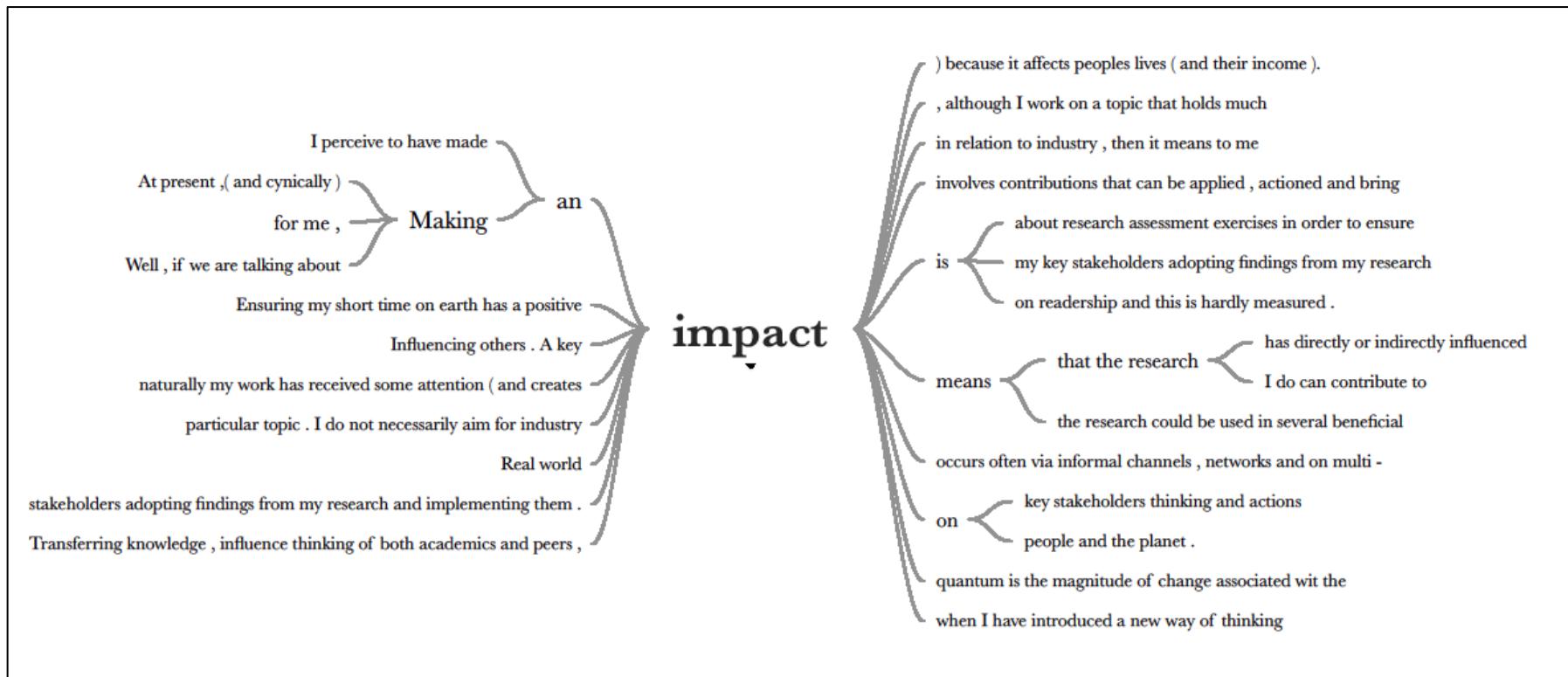


**Figure 13 Views on measuring industry impact.**

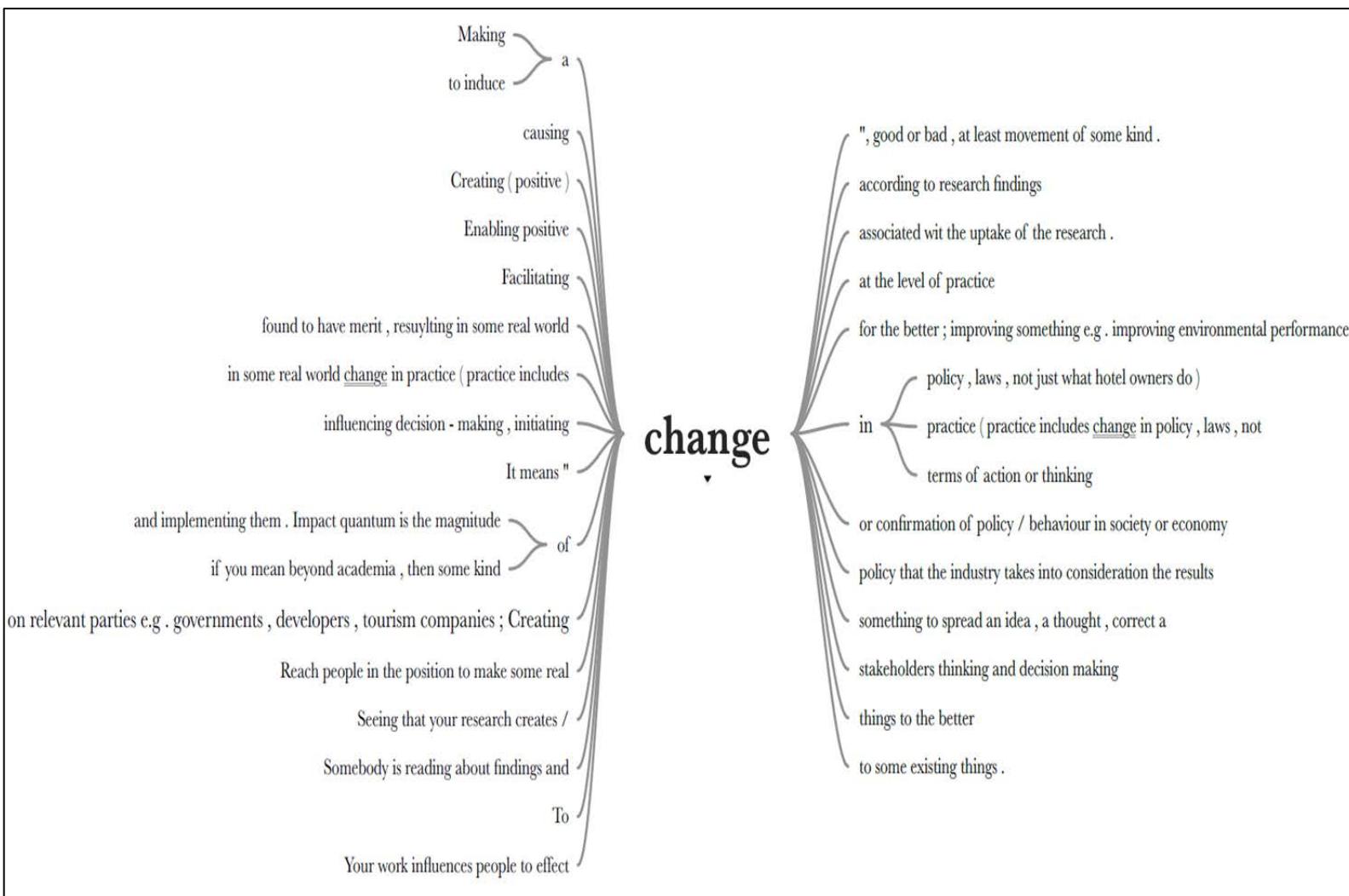
Visual text analysis of the answers to the open-ended question “what does making an impact mean to you?” reveals that tourism Academics consider how their research relates to various types of stakeholders (Figure 14). The word ‘real’ was mentioned frequently, for example:

- *The "real world" cares and needs my research. My research is relevant to their needs.* (mid-career male from the USA).
- *[...] to transfer academic research into real world, governmental documents in order to make changes in community for the better.* (early-career male, Slovenia).
- *[...] research findings that contribute to real-life issues either by creating (part of the) solutions or by creating a better understand of the issue.* (mid-career female, Netherlands).

In addition, the analysis revealed that ‘change’ is inherently linked to ‘making an impact’. Closer examination of the responses in Figure 15 also shows that for tourism Academics ‘making an impact’ is primarily about *facilitating* or *enabling* change, although some responses described it as *creating* change. There is also a general feeling, hope or desire that the change will be positive, and will contribute to improvement in ‘real world’ applications. Several respondents referred to changes in practice and/or policy and decision-making, which indicate that tourism Academics believe this is where their research could or should add the most value.



**Figure 14 Participant's open-ended responses to what making an impact means to them.**



**Figure 15 Word tree showing that most tourism Academics interpret 'making an impact' as a way to achieve change.**

## 5. Conclusion

This study sought to provide insight into how tourism Academics engage with stakeholders and seek to make an impact with their research. Overall, the results indicate that tourism Academics largely communicate with other (tourism) Academics, and they also prefer to publish in tourism journals. It was surprising to see, however, that about 15% never or rarely publish in tourism journals and about half of the respondents never or rarely publish in non-tourism journals. This is perhaps the result of current academic impact measurements, particularly bibliometric measures that do not sufficiently reward or encourage interdisciplinary research. Non-academic communication channels were used less frequently – highlighting that outreach and knowledge transfer could be enhanced substantially. Relatively recent ‘hybrid’ outlets, such as *The Conversation*, offer great opportunities to make academic research more accessible to a broader public.

While this research did not attempt to extensively compare and critique University systems around the world, it became apparent that there are substantial differences in terms of the publishing and engagement practices of Academics. Clearly, the evaluation systems in different countries constitute driving forces that ‘push’ Academics (especially early-career) into producing particular types of outputs. For example, some encourage academic outputs exclusively at the expense of industry reports. Others link output assessments to particular codes or journal lists (both in terms of topic and rating). It is therefore not surprising to see diverse responses based on country of employment. For example, differences were noted in publications in interdisciplinary and non-tourism journals. For instance, in Australia and Hong Kong, Academics strive to publish in journals that resonate with their Field of Research (i.e. specifically tourism), while other countries accept greater diversity or even demand publication in non-tourism journals (e.g. Germany). In some countries, publication in disciplinary outlets (e.g. management, business, economics, and geography) may be specifically incentivised.

Performance indicator driven behaviours become problematic when the indicators change and/or when Academics move to another country and their curriculum vitae does not match the new system. For example, in Australia it is increasingly expected to see evidence of the ability to generate external income, in addition to quality publications. It is challenging for early-career researchers to understand and decide how to best balance the multiple performance signals, especially when they can be conflicting. In addition, the work profile of the vast majority of Academics contains significant, if not dominant, teaching and supervision loads. One way to communicate research findings and generate impact is to integrate research and teaching. Students can provide feedback, be part of data collection, and often become great ambassadors and members of the ‘stakeholder network’.

The findings show that there is great variation in how often and when tourism Academics engage with various types of stakeholder groups. Generally there seemed to be a preference towards ‘smaller’ players, rather than large corporations or national governments. Working with local councils and small tourism businesses can be rewarding and help to demonstrate more tangible and instant ‘impact’. However, it is also desirable that tourism Academics engage at a higher level and demonstrate the value they can add to policy making and corporate decision processes. Teaming up with other Academics, researchers or consultants might be one avenue to access these stakeholders.

Career stage had a significant impact on engagement practices, particularly in terms of engagement with large, international tourism corporations. Early stage Academics were less likely to engage with this stakeholder group. Given that early-career Academics may not have the necessary networks yet and are still learning the skills of effective industry engagement, there appears to be a great need and opportunity to enhance mentoring or sponsorship of junior tourism Academics in this particular area. There are several possible ways to encourage this, such as including mentoring/sponsorship as a performance metric for senior Academics and formalising the creation of mentoring/sponsorship partnerships and activities within institutions. Any such initiative should be supported by institute or centre level performance metrics (as opposed to individual metrics). In turn, early career Academics may consider being more proactive in contacting industry stakeholders. Fruitful links include setting up internships for students, inviting industry experts for guest lectures, and offering research opportunity in relation to doctoral theses.

Generally no significant differences were found between engagement practices of women and men, although there is some evidence that men interact with large corporations more often than women. Overall, the sample of this survey indicated that senior tourism Academics are more likely to be male.

Engagement practices were also strongly skewed toward activities that appear to benefit the Academics. Academics tend to engage with stakeholders to develop research ideas, gather information (data) and because ‘they have to’ (e.g. to obtain funding). There is much less desire to engage with stakeholders either in the conceptualisation of a particular study or post-research, limiting the ability of Academics to achieve ‘real world’ impact. This result is a stark contrast to the responses to the qualitative question on ‘what making an impact means to you’, where most Academics relayed a desire to make a positive change. The study cannot provide answer as to why Academics stop short of engaging with stakeholders to create change with or through their research. Perhaps it is a combination of not knowing how to reach out to industry in a meaningful way, a belief that the industry does not appreciate the results, or a preoccupation with producing publications to satisfy research performance expectations.

The findings suggest that current practices reflect current performance measures, for example bibliometric indicators. This was particularly evident, when respondents were asked about how to measure academic impact and the responses supported the use of citations and H-index. This is surprising considering the open-ended responses, and also general knowledge that these ‘quantified performance metrics’ are imperfect measures. For example, citations and H-index metrics tend to increase with time, and therefore disadvantage younger Academics. Also, the measures depend on the search mechanism used, and the types of outputs included. A change in performance metrics would be required to shift behaviours. For example the number of press releases or attendance at industry events could be counted as part of an engagement index. Service to the industry through board roles, judging panels, and policy feedback could also be included in such a measure.

It is maybe timely for tourism Academics as a group to initiate or participate in discussions on the role of their research in society, and whether or how it should be evaluated. If impact results from knowledge that influences practices or views, as noted by several respondents, clearly it is important to move beyond simple publication-based metrics. Obtaining feedback and views from the stakeholders, that we like to work with and ‘change’ would be an important next step in this journey.

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