

Measuring the Wellbeing of Tourism-Reliant Communities in the South Pacific During the COVID-19 Pandemic

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Image source: Pedram Pirnia

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Measuring the Wellbeing of Tourism-Reliant Communities in the South Pacific During the COVID-19 Pandemic

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Sincere thanks to members of communities in Fiji, Samoa, Cook Islands and Vanuatu who agreed to participate in this study, and who so willingly shared their views with our research team. We hope that we have represented your viewpoints accurately, and that this research will be used by tourism and development policy makers, planners and industry officials to improve tourism in ways that enhance the wellbeing of local communities and their environments.

Vinaka vaka levu / fa'afetai lava / meitaki maata / Tangkyu tumas!

Introduction

In the absence of tourists due to COVID-19, Pacific Island nations are thought to have been dealt a “severe blow” that has undermined their wellbeing (United Nations Conference on Trade and Development (UNCTAD, 2020). However, our research in 2020 suggested that despite the hardships, many Pacific peoples living in places normally reliant on income from international tourists had adapted effectively in the face of tough challenges, and some were actually thriving (see Scheyvens et al., 2020).

This led us to devise a specific study to measure wellbeing of Pacific peoples, which we report on in this working paper. **Phase 1** of this 2021-22 study has assessed wellbeing prior to the return of tourists in Fiji, Samoa, the Cook Islands and Vanuatu (see Figure 1), and in **Phase 2** it will measure wellbeing again six months after international tourists have returned to each destination. The knowledge gathered thus far allows us to gauge how different aspects of wellbeing have been impacted, and how wellbeings vary between countries. When the entire dataset is collected, the researchers will be able to see whether or not wellbeing is aided by the return of international tourism.

Background

The study on wellbeing which is the focus of this report emanates from a broader research project about the impacts of economic slowdown caused by COVID-19 on the wellbeing of tourism-dependent communities in the Pacific. This emerged from concerns shared by Dr Apisalome Movono and Professor Regina Scheyvens – tourism and development researchers in the Institute of Development Studies at Massey University – who had prior to 2020 researched how tourism could contribute to sustainable development of communities in the Pacific. By Easter 2020, most international flights to the region had ceased and tens of thousands of tourism sector jobs were threatened. Thus we felt compelled to examine COVID-19’s effects on Pacific people who were usually highly reliant on tourism income. Together with a specialist in Indigenous entrepreneurship at Massey University, Dr Jason Mika, they thus designed a research project that would allow them to understand the complex realities of the impacts of the pandemic on those people whose livelihoods were largely based on tourism, and how they were adapting. The research project “The re-development of tourism in Aotearoa and the Pacific post-pandemic: Seeking sustainable, self-determined Indigenous development” led by Api, Regina and Jason, was born.

Our broader research project seeks to put Aotearoa and the South Pacific at the forefront of developing future tourism in a way that benefits both people and planet. Findings from this project are regularly disseminated via articles for the Conversation, journal articles, and our research website: www.reimaginingsouthpacifictourism.com. See the reference list for further information on related publications.

Research questions & ethics

This research on wellbeing is part of a broader study which asks the following questions:

1. How has COVID-19 impacted on Indigenous people involved in tourism in the South Pacific?
2. How have Indigenous peoples involved in tourism in the South Pacific responded to the pandemic?
3. How could more sustainable, resilient forms of tourism be developed post-pandemic to support Indigenous wellbeing in the South Pacific?

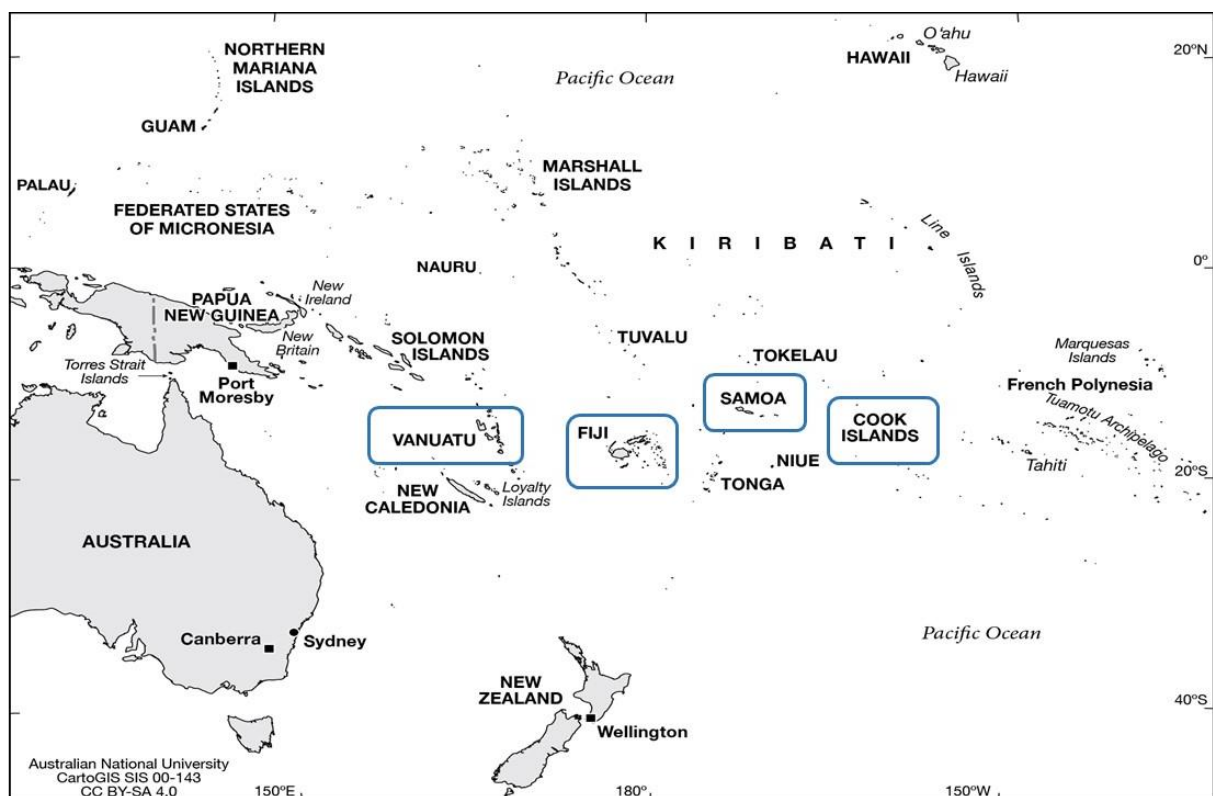
An in-house ethics review process took place in the Development Studies programme in early June, leading to submission of a low risk ethics notification to the Massey University Human Ethics Committee. On 16 June 2020 the researchers were informed that the research project had been listed as low risk, with the Ethics Notification Number: 4000022718. The information sheet we used for this wellbeing study, as part of the broader research project, is provided in Appendix 1.

In addition to fundamental ethical considerations such as informed consent, this research is committed to the Pacific research principles laid out by the Pacific Research and Policy Centre at Massey University (Appendix 2), namely:

- Respect for relationships
- Respect for knowledge holders
- Reciprocity
- Holism
- Using research to do good.

Ways in which we are disseminating our findings and attempting to use our research to do good are documented at the end of this report.

Figure 1: Case study locations



Source: <http://asiapacific.anu.edu.au/maponline/base-maps/southwest-pacific>

Note: Case study countries outlined in blue.

Methodology

This research aims to assess wellbeing prior to the return of tourists in Fiji, Samoa, the Cook Islands and Vanuatu, then again six months after tourists have returned. With this knowledge we hope to be able to gauge which aspects of wellbeing fare well without tourists present, and which are impacted positively or negatively by the return of tourists. We organized Phase 1 of the study as follows.

Methods

Two main research methods were used in the October 2021-February 2022 data collection phase of the project – an online survey, and in-person interviews. Due to restrictions on travel for the New Zealand-based team due to the ongoing pandemic, Research Associates (RA) based in the respective countries were employed to collect data.

Working with RAs (Research Associates)

Our study utilised a fieldwork approach and worked around restrictions by employing local RAs in the four Pacific island nations; Fiji, Samoa, Cook Islands and Vanuatu. In Cook Islands, a palagi volunteer also assisted the RA with data collection. The RAs were approached based on their previous research experience in this field, connections in the tourism sector and pre-existing links to the case study communities. They were asked to do their data collection in two different places where tourism usually made a major contribution to the economy. Employing local RAs who were competent in the appropriate language and familiar with local communities broke down cross cultural barriers in an effort to overcome researcher-participant power relations. The RAs were trained via Zoom about the aims, research practice and ethics behind the study, the roles they would undertake and what they could gain from working with us.

Wellbeing survey

The purpose of the RA-administered survey was to provide us with quantitative measures of wellbeing, allowing for comparisons among the countries, and the different dimensions of wellbeing studied. The idea was that this survey could be repeated in Phase 2 of this study, 6 months after tourists return to each country, in order to also be able to see whether the presence of tourists impacts on people's sense of their own wellbeing.

In our 2020 survey, 4 aspects of wellbeing were studied: financial, social, mental and physical (see Figure 3). The qualitative data from our 2020 work revealed, however, that spiritual wellbeing was also very important to people in the targeting countries, thus this 5th wellbeing was added to our 'Frangipani framework of wellbeing' (as explained in Scheyvens et al., 2021). Following discussion of this framework with others, and further reflection literature on the wellbeing of Indigenous people and on our findings to date, we added a 6th dimension which we surveyed in Phase 1 of the wellbeing study, environmental wellbeing. The 2021/2 survey can be viewed in Appendix 3.

In designing the survey around these 6 wellbeings we sought advice from specialists in Pacific wellbeing and/or measurement of wellbeing, namely: Dr Dean Stronge and Geoff Kaine from Manaaki Whenua, Dr Sam Manuela from Pacific studies and Psychology at University of Auckland, and Associate Professor Natasha Tassell-Matamua from Indigenous Psychology at Massey University. From these discussions, we decided that the survey would primarily collate question items from established surveys to make the survey appropriate for Pasifika peoples and ensure that questions had been tested and worked before. The items and surveys used were primarily sourced from the reference list of the NZ Attitudes

and Values Survey. See Appendix 4 for a full list of sources for the survey questions. We also filled in the gaps of areas of wellbeing not covered by other surveys by creating their own questions that were specific to this survey – particularly about environmental areas and resident attitudes towards tourists, but also in order to answer specific issues that arose in the 2020 survey.

The survey was piloted in Fiji, Samoa and the Cook Islands, but not Vanuatu due to the unavailability of our local RA. During the piloting stage, RAs brought feedback on the survey from both themselves and the subjects of the survey. The feedback concerned whether questions were appropriate and understandable across language barriers, if people believed anything was missing, and any other comments they had on the survey. Based on this feedback, the researchers deleted some items, added some items, and changed some items to better suit the target audience. This process strengthened the validity of the survey in its subject population. Some of the feedback included removing a mental wellbeing question about feeling like a failure, which was seen to potentially harm the mana of the participants, and adding questions in the environmental wellbeing dimension about waste, and making the wording of some questions clearer.

Next, the RAs each aimed to administer the revised survey to 50 people living in tourism-dependent communities in their respective countries. We asked RAs to reach out to a broad range of people – specifically targeting youth, elders, tourism business owners, former tourism employees, and owners of related enterprises (e.g. taxi drivers). It is important to note that the sampling method for the current survey was purposive rather than statistically representative, in order to target a range of demographics across tourism-dependent communities that may have different experiences of the 2021/22 period. The survey itself consisted of both quantitative (Likert-style) questions and qualitative (open-ended) questions for each dimension of wellbeing. In most cases, the RAs were asked to give the participant an electronic device through which they could independently answer the survey through the Qualtrics offline app software (as internet connections were often patchy or non-existent in some areas). We knew some participants were likely to be limited by age or knowledge of technology, so in these cases the RAs were trained to administer the survey to the person orally and then record the participant's responses on their electronic device. Participants gave consent to participate in the survey, were informed that they could opt out of the survey at any stage and were assured that their identity would remain anonymous.

In this Phase 1 of the study, there were 214 responses recorded. These included 57 from Samoa, 51 from Fiji, 52 from the Cook Islands, 50 from Vanuatu, and 4 that had to be excluded. In Phase 2, the RAs will target the same tourism-dependent communities to gauge wellbeing from similar demographic groups as in Phase 1, but will not necessarily collect data from the same individuals.

Interviews

While the wellbeing survey included some open-ended questions, we also wanted to ensure we allowed for more time to people to reflect on the topic of wellbeing in a more conversational setting. Thus we asked the RAs to also do some semi-structured interviews with tourism sector workers/former workers, young people, women and elders in the communities. The RAs were at liberty to select participants based on their prior relationships and experience, and to decide whether individual interviews or small group talanoa (fluid, less structured conversations) were most appropriate given the cultural context and other factors. The RAs were asked to follow appropriate cultural protocols (e.g. in Fiji, organising sevusevu) as required, and providing koha (a small gift) or kai/refreshments for those taking part. Fitting this work in between their other commitments, the RAs did between 3 and 14 interviews centering around the following areas of enquiry (NB the first 3 are almost the same as those asked in 2020 – see Scheyvens et al. 2020):

1. Please explain impacts of the slowdown in tourism on your family and community over the past two years
2. Please explain ways in which you/your family have coped & adapted to the loss of income and other changes caused by COVID
3. Please explain how the slowdown in tourism and adaptations made have influenced wellbeing of yourself, your family and community (both positive and negative impacts on health, economic wellbeing, cultural, spiritual and social wellbeing)
4. Please describe any innovative ways in which people are fundraising to support your family or community during these financially difficult times (e.g. involving diaspora/family overseas support, social media fundraisers, remittances etc)
5. How do you feel about a return to tourism in your country: would you like this to occur and if so, when is the right time, and what provisions need to be put in place for everyone to feel safe and benefit from this?

RAs provided research materials to the research team in the form of audio recordings (where permission was granted), and/or summary notes and quotations from participants. Where we quote from the interviews in this report, the word 'interview' will explicitly appear in the source after the description of the person speaking and date; where we are quoting from a survey response, just the description of the relevant person and date are provided.

Methods of data analysis

Data was collected using Qualtrics survey software and analysed using SPSS. To find means and reliabilities, Likert scale questions that were phrased in a negative way (so that 5 = less wellbeing and 1 = more wellbeing, for a particular dimension) were reverse coded, so that responses closer to 5 on the Likert scale from 1-5 indicated higher wellbeing across all questions.

Cronbach's alpha reliabilities were used to determine the internal consistency of the subscales. All the scales showed high internal reliability scores; physical ($\alpha = .74$), mental ($\alpha = .77$), spiritual ($\alpha = .80$), social ($\alpha = .85$), financial ($\alpha = .73$), environmental ($\alpha = .74$) and attitudes towards tourists ($\alpha = .64$). This gave us confidence that our scales were measuring wellbeing in the way that we had intended them to.

From here, we used the reverse coded scores to determine a single wellbeing score for each dimension for each participant. This involved averaging each participant's scores across the Likert scale questions for each dimension; for example, there were 9 social questions which were averaged for each participant to create a single social wellbeing score.

Mean scores were then calculated for each wellbeing dimension overall and by country. Given the scale used (Appendix 3), a mean score of between 4 and 5 shows that respondents generally agreed or strongly agreed that their wellbeing was good; while a score close to 3 (which only occurred in terms of financial wellbeing – all others were higher) indicates that scores were split between those experiencing improvements and declines in their wellbeing.

ANOVAs were conducted to measure whether mean wellbeing scores differed significantly across countries and age groups. Cluster analyses were conducted to find similarities in responses across the whole dataset.

Thematic analysis was conducted on the interview data and the open-ended questions asked in the survey (Appendix 3).

Findings: Impacts on wellbeing

This section draws on the survey data and interviews to give an overview of findings regarding the 6 aspects of wellbeing explained earlier.

Table 1 gives a broad indication of the overall wellbeing scores, using the method explained above in the 'Data Analysis' section, showing that there was a relatively high perception of all of the wellbeings during the pandemic period (respondents were asked to either comment on how they felt about their wellbeing in 'the past month' or 'the past two years'), except for financial wellbeing. The average score of the latter was lower than for other wellbeings, but fared a lot better than indicated in the 2020 survey (compare Figure 2 and Figure 3).

Table 1: Average wellbeing dimension scores by country in Pacific Islands tourism-dependent communities over the 2021/22 period.

	Financial	Mental	Social	Physical	Spiritual	Environmental
Samoa	3.2	4.2	3.6	3.8	4.3	3.4
Fiji	2.9	4.1	4.3	4.1	4.1	4.2
Cook Isl	2.9	3.7	3.9	3.8	3.5	3.9
Vanuatu	3.7	4.1	4.6	3.6	4.6	4.3

Figure 2 and Figure 3 speak to results of the 2021/2, and 2020 surveys, with regard to 4 aspects of wellbeing. There was approximately 18 months between the two surveys, as the 2020 one was 'live' from June until August, while the 2021/2 one was administered between November and January.

The comparisons are indicative but not definitive, as the surveys were set up and administered in different ways.¹ In 2020, given the impacts on household income from the loss of jobs in tourism and shutdowns of many tourism-related businesses, it was not surprising to see a very clear trend at this early stage of the pandemic whereby most people's financial wellbeing had declined, and for many it had 'strongly declined' (Figure 3). However, for social, mental and physical wellbeing the results were more split, with some people showing declines in these aspects of wellbeing but quite a number of others showing improvements. By comparison, the same 4 (of the 6) measured wellbeings in the 2021/2 survey are shown in Figure 2. This suggests strong self-perceptions of wellbeing among the respondents, with financial wellbeing even doing much better than in 2020, perhaps indicating effective coping strategies and resilience over the longer term.

Further discussion of each type of wellbeing in the 2021/2 survey is provided below, including statements from respondents which helps to explain some of the key trends.

¹ Please note that the 2020 survey was different from the 2021/2 survey, so the results are not directly comparable. The 2020 survey was sent out via social media, rather than researcher-administered, and attracted about half the number of responses as the 2021/2 researcher-administered survey. The 2021/2 survey utilised purposive sampling that targeted a specified range of demographics, whereas the 2020 survey was opportunistic – it could be filled in by anyone who received it and identified with the target group (we could cross-check this with their demographic data provided as part of the survey). While the 2021/2 survey was targeted at 4 specific countries, the 2020 responses came from a wider range of countries across the Pacific, but the majority of responses were from Fiji. There was a much more extensive range of questions for each wellbeing in the 2021/22 survey. Also, only 4 wellbeings were considered in 2020, with spiritual and environmental wellbeing being added dimensions in the 2021/2 survey, as explained in the Methodology section.

Figure 2: 2021/2 Survey: Responses of people living in tourism-reliant communities in Samoa, Fiji, Vanuatu and Cook Islands to questions on whether their wellbeing had improved during the period of COVID-19.

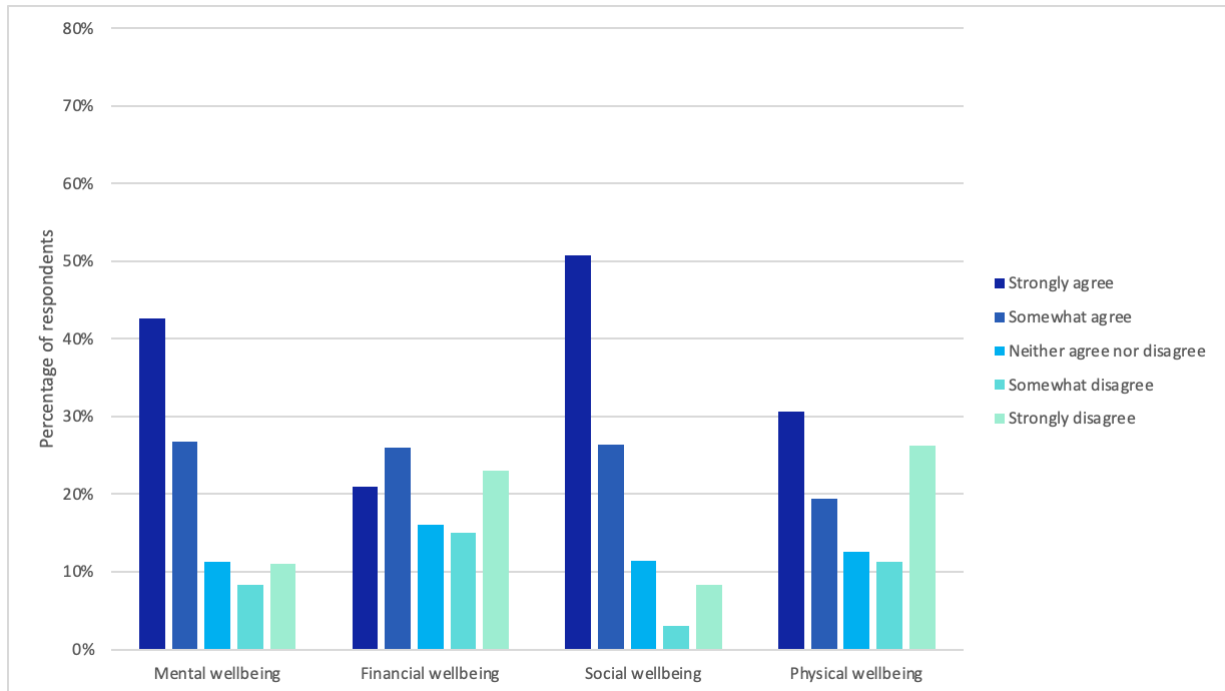
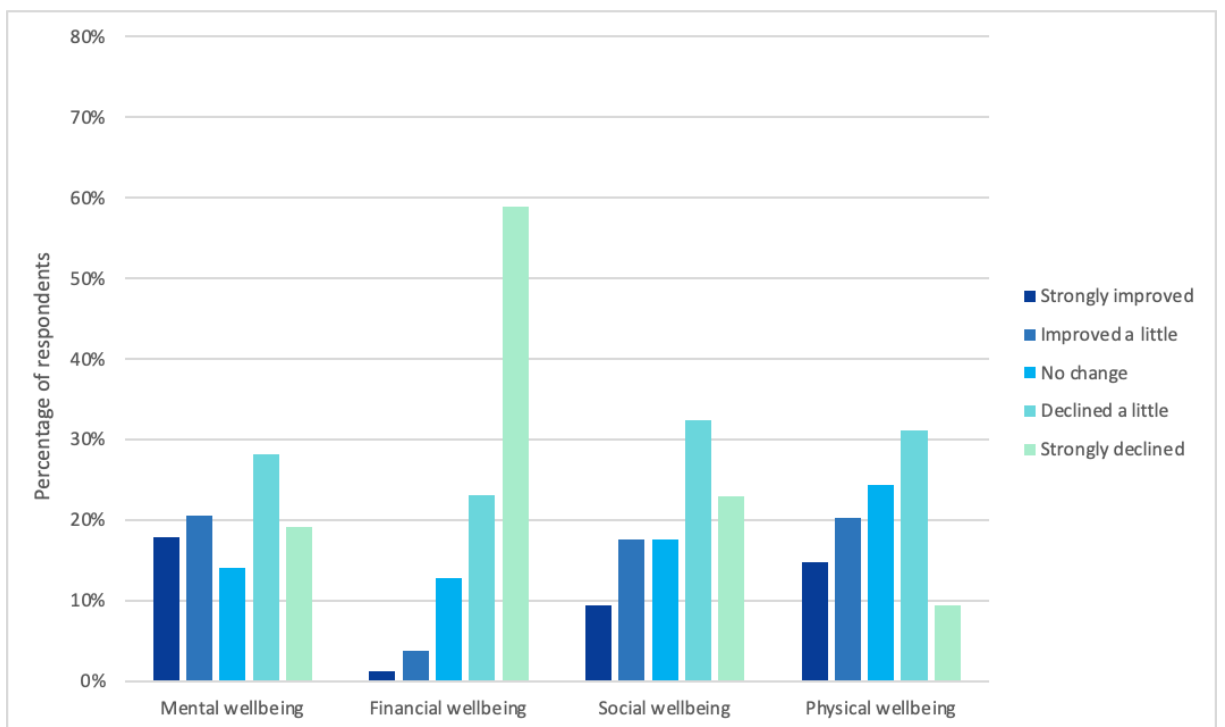


Figure 3: 2020 Survey: How COVID-19 impacted aspects of wellbeing of respondents' families, households & communities in the South Pacific



Financial wellbeing

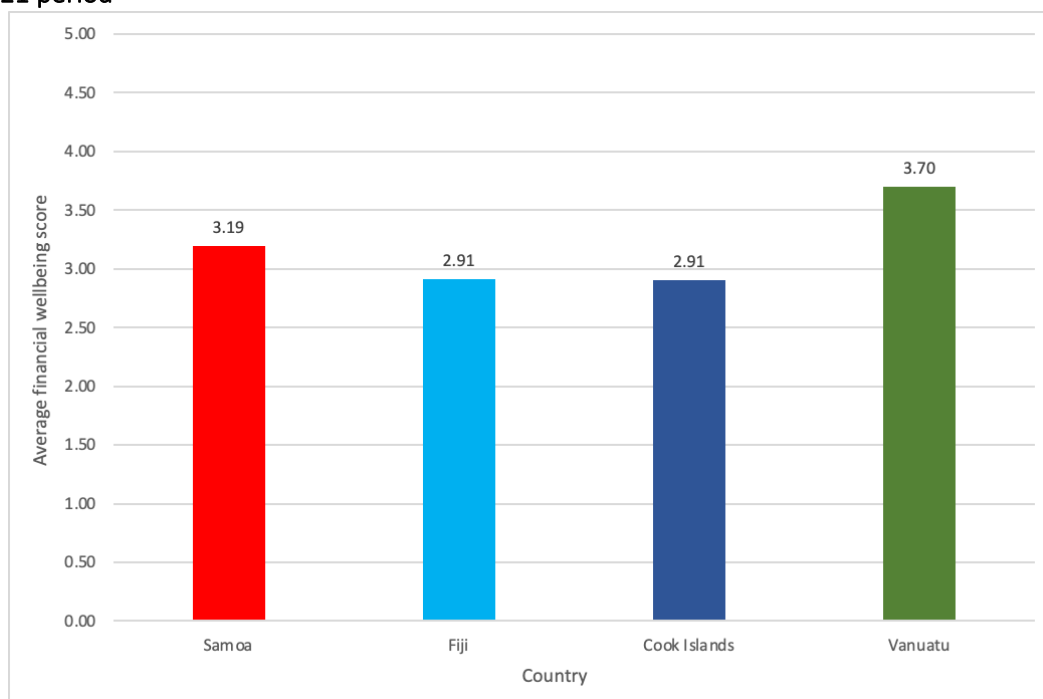
As anticipated, mean scores for financial wellbeing were considerably lower than the other wellbeing scores. Figure 4 shows that the average score for financial wellbeing was relatively low ($M = 3.18$, $SD = 0.96$), indicating that the majority of respondents reported experiencing some financial hardship in the face of the COVID-19 pandemic. What is perhaps surprising in this figure is that people in Cook Islands perceive that they have lower financial wellbeing than those from Samoa and Vanuatu, even though average earnings in the Cook Islands (and support from a systematic wage subsidy scheme) mean that they would have had much higher household cashflow on average than any of the other countries. Perceptions of financial wellbeing are thus relative to one's norms and expectations.

People expressed that they struggle day to day with finances due to COVID-19. This was not surprising as we specifically targeted tourism-reliant communities, all of which were struggling financially in some ways due to travel bans, businesses closing down or operating on skeleton staff, loss of jobs in the resort sector, and a decline in associated businesses e.g. taxi services, handicraft sales, floral arrangements:

"We all lost our jobs in my family, so we were left in shock when the... [resort] closed down. It was a real shock to us because we depended on money for everything up until that time. [Female, small business owner, Fiji, 2021]"

On the island of Pele in Vanuatu, where many of the small community's members had earned money from hiring out bungalows to tourists and selling handicrafts, every business was impacted as people could no longer afford to pay school fees and water supply maintenance costs, let alone buying sugar from the store, or bread from their neighbour, or going to a kava bar: "Before Covid-19 we did fundraising for school fees – but now we stop fundraising because we can't even buy the necessities for fundraising" [Female, business owner, Vanuatu, 2022: Interview]. A practical example of a coping strategy was that many households in Fiji went from having 3 meals a day to consuming just 2 meals, while others went back to using horses to cart agricultural produce rather than trucks.

Figure 4: Average financial wellbeing scores of Pacific peoples in tourism-reliant communities over the 2020-21 period



The pandemic was particularly difficult financially for people who had pre-pandemic loans to service: we heard about this from those who had borrowed money to buy boats or tourist accommodation in Cook Islands through to those in Fiji with hire purchase agreements for consumer durables which were later repossessed. Also, even when hotel or resort owners put their properties into hibernation, there were fixed costs they had to pay, whether servicing their loans or paying for utilities: one owner of a 30 bed property in Rarotonga explained that their normal electricity costs were NZ\$30,000 a month, and with good occupancy rates this was manageable; however with zero occupancy, they still had to pay \$6,000 a month because e.g. they had to run one fridge freezer so that valuable food didn't spoil and had to keep air conditioning on in the office so they could organise their accounts and take future bookings.

Young people also found it hard to live without a cash income, and a Fijian interviewee noted there instances whereby this led to an increase in theft and related crimes. Some respondents in Fiji also told us that there was increased conflict among landowning groups, due to increased competition for their resources now that almost all households were turning to agricultural activities to survive.

Many people attributed their situation to an underperforming government, and they have started to recognise that economic diversification is the only way forward for them:

"It has been negative, but it is the fault of the government and the hotel - we need to be looked after and our interests maintained not just used, abused and dumped" [Female ex tourism employee, Fiji, 2021 - Survey]

"We notice now that being landowners at the resort is also a curse, because we have become solely reliant on the tourist's money. This is not good because we do not know a lot about other things apart from tourism...the pandemic has taught us this lesson, we must not depend on tourism alone" [Female, 73, Fiji – Interview]

However, as noted earlier the financial wellbeing scores were not as low as the results of our 2020 survey, and on the whole it seems that many people have found ways of successfully adapting their livelihoods over the past two years, so they do not feel that financially they are suffering too badly.

Across all countries, as will be shown further below, people started growing and harvesting more food from the land and sea, thus reducing their household expenditure. Bartering goods and services became common practice, and many people also found supplementary ways of earning an income e.g. selling plants, vegetables, or cooked foods at roadside stalls. One Cook Islands man who had formerly been an airport shuttle driver turned his front yard into a watermelon patch, and was able to earn a reasonable return from selling this fruit. Rather than wallowing in their misfortune, people took hold of the opportunity to form small businesses that target other locals to earn income. Others used the abundance of natural resources in their countries to their advantage, and didn't have to rely on income:

"During the pandemic because we live next to a hotel, most of the villagers faced financial breakdown. But we were fortunate that we have our land and sea to survive." [Female small business owner, Fiji, 2021- Survey]

Some people saw the absence of income as a learning opportunity:

"Now we live within our means, we have to be wise about money and about how we live, this is a valuable lesson from the pandemic" [Male, small business owner, Fiji, 2021- Survey]

There were also instances of people turning to social media to garner international support. One example came in the form of virtual concerts that raised thousands of dollars from the diaspora for

affected communities (Movono et al., 2021). Another saw groups of people using Facebook as a platform to sell 'love parcels' of foods which could be purchased by family members living overseas then delivered to their loved ones in Fiji. And finally, former resort guests also started fundraising drives via social media for employees of their favourite resorts:

"Social media has enhanced communication abroad and allowed us to connect with relatives and friends who were able to help... [Also] former guests and friends participated in purchasing hampers for employees and villagers" [Female, 48, Fiji – Interview]

Despite all odds, many people expressed an amazing resilience to the great economic loss they were experiencing. This was, in part, thanks to good support systems within families, both local and overseas:

"When the pandemic struck, and I lost my job at the hotel, my family were supporting me with money. Now, I have opened my small canteen, sell food, and put on BBQs every Friday. I think it's good because we know our family are there to help us but also, we can find new means to earn such as small side businesses" [Tourism employee, Fiji, 2021- Survey]

Overall, the sentiment of hope and positivity still shone through in Pacific communities. They have adapted to life without tourism, and though their financial wellbeing declined, they formed alternative ways of living:

"We have little, but we survive" [Female ex tourism employee, Samoa, 2021- Survey].

For some countries, financial assistance came from government (there were good wage subsidies in Cook Islands), and some also benefitted strongly from remittances from family based overseas (e.g. those in Samoa and Cook Islands, and those from Fiji living near Nadi where most of their land was leased for tourism).

Comparing countries on financial wellbeing

A one-way ANOVA was performed to assess how financial wellbeing varied between countries, and it revealed a statistically significant difference between means ($F(3, 205) = 8.47, p < .001$). For example, Vanuatu ($M = 3.70, SD = 0.98$) reported a significantly higher average financial wellbeing than anywhere else, including the Cook Islands ($M = 2.91, SD = 0.91, p < .001$), Samoa ($M = 3.19, SD = 0.73, p = .023$) and Fiji ($M = 2.91, SD = 1.03, p < .001$). Fiji and the Cook Islands, in particular, reported significantly low financial wellbeing in comparison to Vanuatu.

"Have been able to save a lot and spend less due to no travel for church meetings" [Female, retired, Vanuatu, 2021- Survey]

Another ANOVA was performed to assess the effect of age on financial wellbeing. This found no statistically significant difference between age groups.

Mental wellbeing

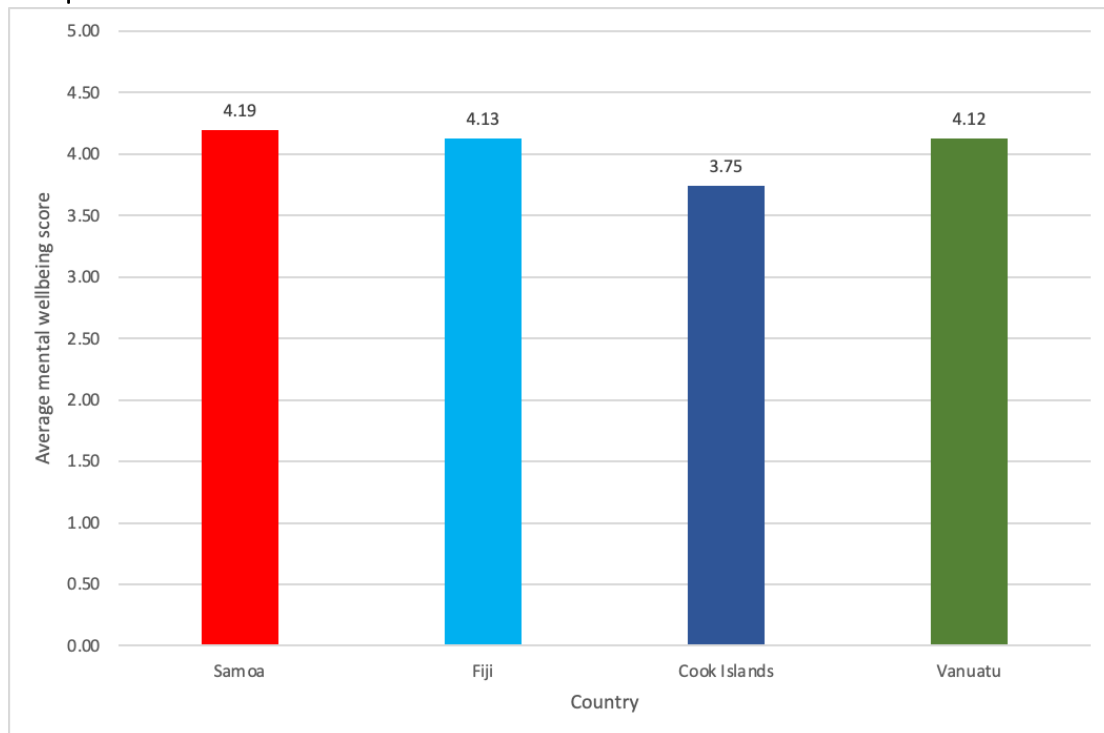
As Figure 5 shows, average mental wellbeing was relatively high ($M = 4.05, SD = 0.80$), which was somewhat surprising considering the multiple challenges and that COVID-19 has introduced. There appeared to be a mix of people, many of whom found the pandemic period beneficial for their mental wellbeing: this group expressed that they flourished due to having more time to relax, and more time

for family and friends. Others benefitted from the chance to reflect on their lives, and take more time to care for themselves:

“[My mental wellbeing was] positive due to more balance and reflection” [Female, tourism related business owner, Cook Islands, 2022- Survey]

“Less work leads to more rest, which means that the mind is healthy and relaxed” [Male, Samoa, 2021- Survey] .

Figure 5. Average mental wellbeing scores of Pacific peoples in tourism-reliant communities over the 2020-21 period



A positive outlook on life was one factor that aided people’s mental wellbeing. People with this mindset saw the pandemic as a chance to adapt to a new way of life and create new ventures, which was beneficial for them:

“No matter what is going on around you, if you have a positive mindset then your mental [health] is perfect” [Male, unemployed, Samoa, 2021- Survey]

Some business owners appreciated the opportunity to stop and reflect on what they were doing, even though the financial pressures on them were very real:

“...so the positive was for the first time as a business person you had a forced pause on your business. You had the opportunity to step back and analyse...such as whether this was the future you wanted.” [Female, business owner, Cook Islands, 2022 – interview].

For others, the financial toll, and sometimes social isolation (due to border closures or fewer community events, from church services to sports competitions), and health concerns, overpowered the positive aspects and they were burdened with deteriorating mental health. For example, many people had to work harder/longer hours to make up for their financial losses:

“My workload is tripled because I wanted to make sure my family have enough to live, but I’m neglecting my mental wellbeing” [Male, unemployed ex-tourism employee, Samoa, 2021- Survey]

Worries about the risks of contracting COVID-19 caused many people anxiety, and the pandemic became quite isolating for some people, which was a serious hit to their mental wellbeing:

“I have been worrying a lot about catching COVID-19” [Male, recently unemployed, Vanuatu, 2021- Survey]

“It has had a negative impact as I have had circumstances that have led to my health plummeting e.g., depression from weight gain and struggling being all alone and having no one to help motivate me” [Female, tourism employee, Cook Islands, 2022- Survey]

Comparing mental wellbeing of countries

A one-way ANOVA was performed to assess the effect of the countries that participants lived in on their mental wellbeing, and it revealed a statistically significant difference between means ($F(3, 205) = 2.62, p = .015$). Tukey’s test for multiple comparisons revealed a statistically significant difference in mental wellbeing ($p = .017$) in Samoa, who had higher wellbeing on average ($M = 4.19, SD = 0.69$) compared to the Cook Islands ($M = 3.75, SD = 0.89$). As one Cook Islander expressed:

“Covid has been negative for my mental wellbeing because I can’t plan ahead, see my family or add value to my business” [Male, small business owner, Cook Islands, 2022- Survey]

It is worth noting that this survey of wellbeing was administered by our Cook Islands-based RAs mainly in the two weeks immediately prior to the border opening to New Zealand tourists in mid-January 2022: it is likely that, for some people, the imminent opening of the border, at a time when the Omicron variant of Covid-19 was spreading through communities in New Zealand, caused heightened stress.

An ANOVA was also performed to assess the effect of age on mental wellbeing. This found a statistically significant difference between age groups ($F(4, 204) = 3.09, p = .017$). Specifically, Tukey’s test for multiple comparisons revealed a statistically significant difference ($p = .008$) between the 34–49-year-old group ($M = 4.26, SD = 0.73$), who reported high mental wellbeing, and the 65-year-old+ group, who reported lower mental wellbeing ($M = 3.59, SD = 0.86$). This is exhibited in the following positive mental wellbeing quote from a middle-aged woman in Vanuatu, and the negative mental wellbeing quote from a pensioner in Cook Islands:

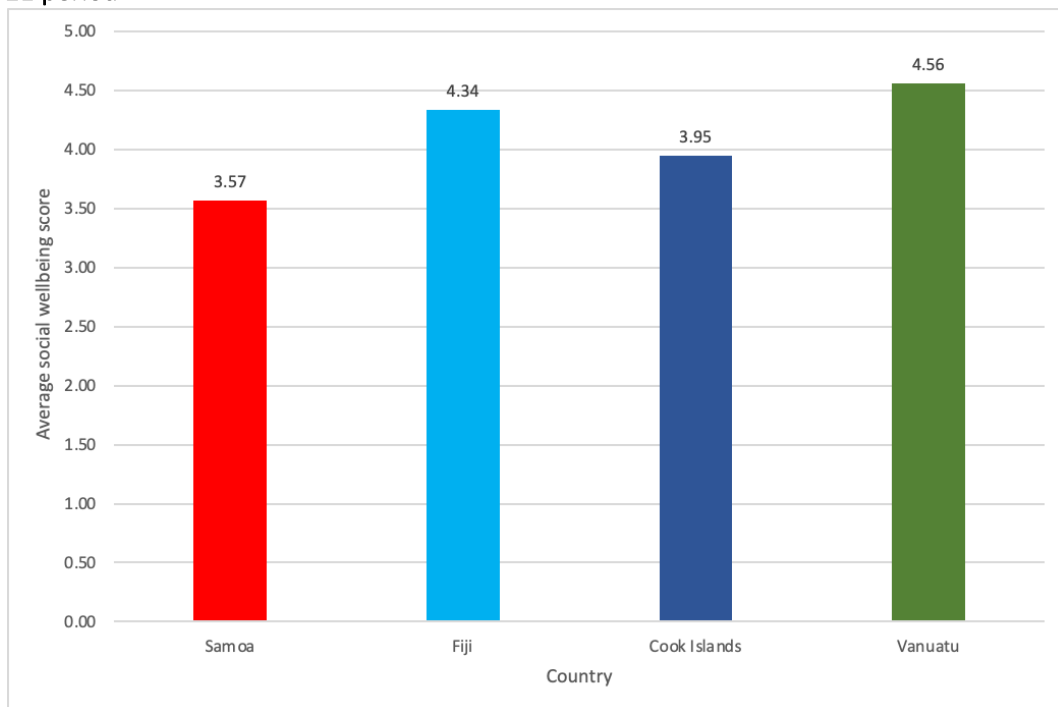
“Covid has been positive for my mental wellbeing as it has given me the chance to start a business to support me and my family” [Female, ex tourism employee, Vanuatu, 2021- Survey]

“I am on a pension, and I usually sell at the market to supplement that, but now I feel reliant on my pension. I feel more stressed keeping up with bills without extra income from the market and have had to cut back on things. This has created an unhappy state for me” [Female small business owner, Cook Islands, 2022- Survey]

Social wellbeing

Social wellbeing was high across our dataset ($M = 4.08$, $SD = 0.80$), as seen in Figure 6, indicating that Pacific peoples had good social wellbeing on average during the period of COVID-19. Social distancing meant that people were forced to socialise within their families and communities. This encouraged some them to go back to a simpler way of life, while others shifted to more online communication, with both positive and negative consequences.

Figure 6: Average social wellbeing scores of Pacific peoples in tourism-reliant communities over the 2020-21 period



Many respondents expressed that they formed closer bonds with their families, were very happy spending time with their families every day, and even got to know family who they had never met before the lockdowns:

"I am now very close with my cousins and family because we spend time together catching food and planting. That is what life is about and the pandemic gave me this time to be close with my community on a deeper level" [Male, ex tourism employee, Fiji, 2021 - Survey]

Being near family also meant that traditional knowledge was shared. People reported that they were happy to be learning or re-learning traditional skills from their family members, and equally those teaching traditional skills loved sharing their cultural knowledge, especially with the younger generation who might not have been interested in learning were it not for the pandemic:

"It has been good to spend time and teach my children and grandchildren, and share skills of weaving, cooking outdoors and gathering food. We are lucky Covid happened" [Female, elder, Fiji, 2021 - Survey]

On top of families getting closer, communities bonded thanks to so much time shared together. People expressed a new sense of cooperation, love, charity and connectedness that grew within their communities:

“Things have been very positive for [our village]. We are now closer as clans... Especially for us youth to learn and know how we are related to each other and what we are supposed to do to care for each other – that's the Fijian way!” [Male, tourism employee, Fiji, 2021 - Survey]

One of the ways communities came together was by starting social initiatives, which brought people together and benefitted the wider community:

“There are changes in my life, like not working and instead joining local men’s groups encouraging each other to work on plantations to get food and income for our families” [Male, ex tourism employee, Samoa, 2021 - Survey]

Social wellbeing rippled through communities, traversing not only family groups, but generational groups who would not normally work together and get involved in cultural activities:

“Socially, people are more caring, closer, and respect their relationships. Before the pandemic, money was king, people became viavalevu (disrespectful) towards elders because of money. Covid has taught us to return to the vanua and humble ourselves, especially here in Nadi where life is fast paced” [Female, tourism related business owner, Fiji, 2021 - Survey]

Some people adapted well to new ways of communication, such as making the most of connecting with others online:

“Due to COVID-19 I socialise with many more people on social media than in real life” [Female, ex tourism employee/current small business owner, Samoa, 2021 - Survey]

At the same time, there were also negative impacts on social wellbeing for some people. As one respondent noted, “distancing is not our culture, so it was very hard for us to adapt to the new normal” (Fiji, 2021 - Interview). The lack of physical contact with people outside of their inner circles caused some distress and anxiety:

“[COVID] has completely changed my social wellbeing, negatively. I used to be so outgoing and now I struggle to be social and bubbly. At times I can be, but then I still have the feeling of social anxiety” [Female, tourism employee, Cook Islands, 2022 - Survey]

In addition, some people felt isolated and unable to connect with their culture:

“It has been hard to reconnect with culture because there are less events going on” [Female, tourism employee, Cook Islands, 2022 - Survey]

Overall, however, the positive impacts on social wellbeing outweighed the negatives for many of the respondents. COVID gave them the chance to connect with others, reconnect with culture, and create long lasting bonds that the hustle and bustle of normal life would not have given them the time to do.

Comparing social wellbeing of countries

A one-way ANOVA was performed to assess the effect of country on social wellbeing, and it revealed a statistically significant difference between means ($F(3, 204) = 20.61, p < .001$). Tukey’s test for multiple comparisons revealed some statistically significant differences. For example, Vanuatu ($M = 4.56, SD = 0.52$) reported a significantly higher average social wellbeing than the Cook Islands ($M = 3.95, SD = 0.69, p < .001$) and Samoa ($M = 3.57, SD = 0.94, p < .001$). This was seen, for example, in the sentiments of this man:

“[I am now] more connected with my family and community, with people and leaders helping each other” [Male, small business owner, Vanuatu, 2021 - Survey]

On the flip side, people in Samoa expressed a significantly lower social wellbeing than Fiji ($M = 4.34$, $SD = 0.55$, $p = <.001$), Cook Islands ($p = .029$) and Vanuatu ($p = <.001$). It is unclear why this might be the case when other wellbeing scores were quite good in Samoa. One possibility might be that this derives from the fact that the government of Samoa adopted an approach of extreme caution in the face of COVID-19 risks, at least in part due to the devastating impacts of a measles outbreak at the end of 2019 (REF). This led to them enacting particularly strict rules around social distancing and the size of groups that could gather which in turn disrupted church services and cultural gatherings which many in Samoa rely upon for social interactions.

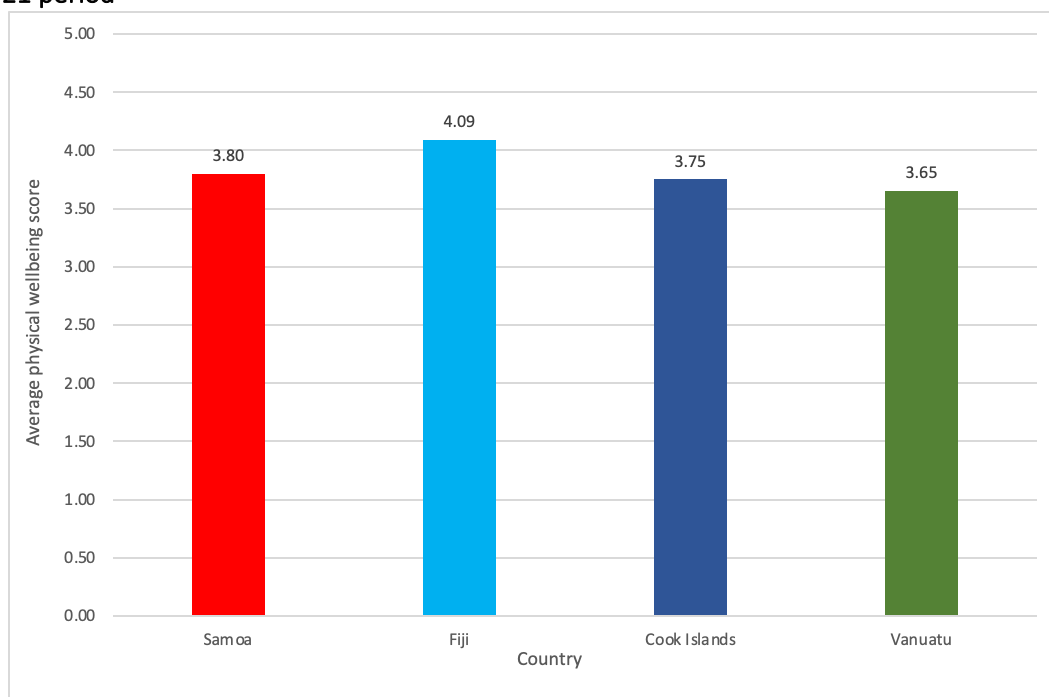
Another ANOVA was performed to assess the effect of age on social wellbeing. This found a statistically significant difference between age groups ($F(4, 203) = 3.16$, $p = .015$). Tukey’s test for multiple comparisons revealed a difference between the 34-49 age group and the 65+ age group, in that the middle-aged group ($M = 4.23$, $SD = 0.82$, $p = .044$) reported significantly higher social wellbeing than the elderly cohort ($M = 3.65$, $SD = 0.88$). An example of the impacts of reduced social contact for the elderly is shown here:

“The only people I socialise with are my grandchildren these days” [Female, retired, Samoa, 2021 - Survey]

Physical wellbeing

The average physical wellbeing score for this data set based on the Pacific Wellbeing Scale was relatively high ($M = 3.82$, $SD = 0.85$), as demonstrated in Figure 7, which indicates good levels of physical wellbeing for Pacific peoples in the absence of tourists over the course of COVID-19.

Figure 7: Average physical wellbeing scores of Pacific peoples in tourism-reliant communities over the 2020-21 period



Lockdowns and social distancing rules meant that people spent a lot of time at home and in their local areas. Many people used this time constructively by working on their local plantations to grow and harvest crops. The time spent out in the sun on their feet all day reportedly aided people's physical wellbeing:

"Physical wellbeing has improved because people in my community have made it a habit to spend more time outdoors, being active just like our elders long ago. Being dependent on the land means an active lifestyle" [Female, small business owner, Fiji, 2021 - Survey].

A run-on effect of working on the plantations was an abundance of healthy food accessible to all, which had positive impacts on physical wellbeing. On a smaller scale, people also took to gardening in their household vegetable gardens for exercise and to create healthier diets for their families:

"The pandemic pushes us to go plenty [work hard] on our gardens which improves our daily exercise, and puts healthier food on the table rather than processed food from shops" [Unemployed male, Vanuatu, 2021 - Survey].

One tourism business even sought to build up the morale and physical wellbeing of their staff during this period by running group fitness classes on a piece of land next to their resort, which all people in the local area were welcome to attend. As a manager explained, there were two staff members who had been struggling with the border closures, but she encouraged them to attend the fitness classes and the results were clear:

"...they're doing amazing...they're physically there, at these fitness groups, they're exercising, they're posting about it, they are sharing videos - and those are the flags that I'm always keeping an eye out for [regarding] their level of engagement" [Female, resort manager, Cook Islands, 2021 - Interview].

Despite the happy majority, some people felt that the pandemic had the opposite effect, making them feel unmotivated and less inclined to do physical exercise:

"With everything going on, it made me discouraged to do any physical activity" [Female tourism employee, Cook Islands, 2022 - Survey].

In sum, most Pacific respondents indicated that their physical wellbeing improved over the pandemic period. This was the result of factors such as spending time outside on plantations or in gardens, doing housework, eating healthier produce and relaxing.

Comparing physical wellbeing of countries

A one-way ANOVA was performed to assess the effect of country on physical wellbeing, and it revealed no statistically significant difference between means. An ANOVA was also performed to assess the effect of age on physical wellbeing. This found no statistically significant difference between means.

Spiritual wellbeing

Spiritual wellbeing was an addition to our 2021/2 survey, which we did not specifically consider in 2020. We introduced it based on the overwhelming emphasis of participants on spiritual components of their lives in the interviews associated with the 2020 research: this helped us to explore wellbeing literature further, and to realise that spiritual wellbeing was often considered integral when focusing on Indigenous societies (Grieves, 2008).

On average, spiritual wellbeing was high for Pacific peoples during COVID-19 ($M = 4.12$, $SD = 0.86$), as shown in Figure 8. Many people expressed that they now had more time to devote to their spiritual activities:

“I was never focused on my spirituality before, this period made me practice my religion more because during this period we’ve had to check in on our neighbours more, and it feels like we’ve been practicing and living out religious values more”
[Unemployed woman, Cook Islands, 2021 - Survey].

Many people articulated that their faith was sustained during hard times as God was their provider and protector. This was thanks to more time spent at home, wherein many relished the opportunity to share more time in devotions with their families and communities:

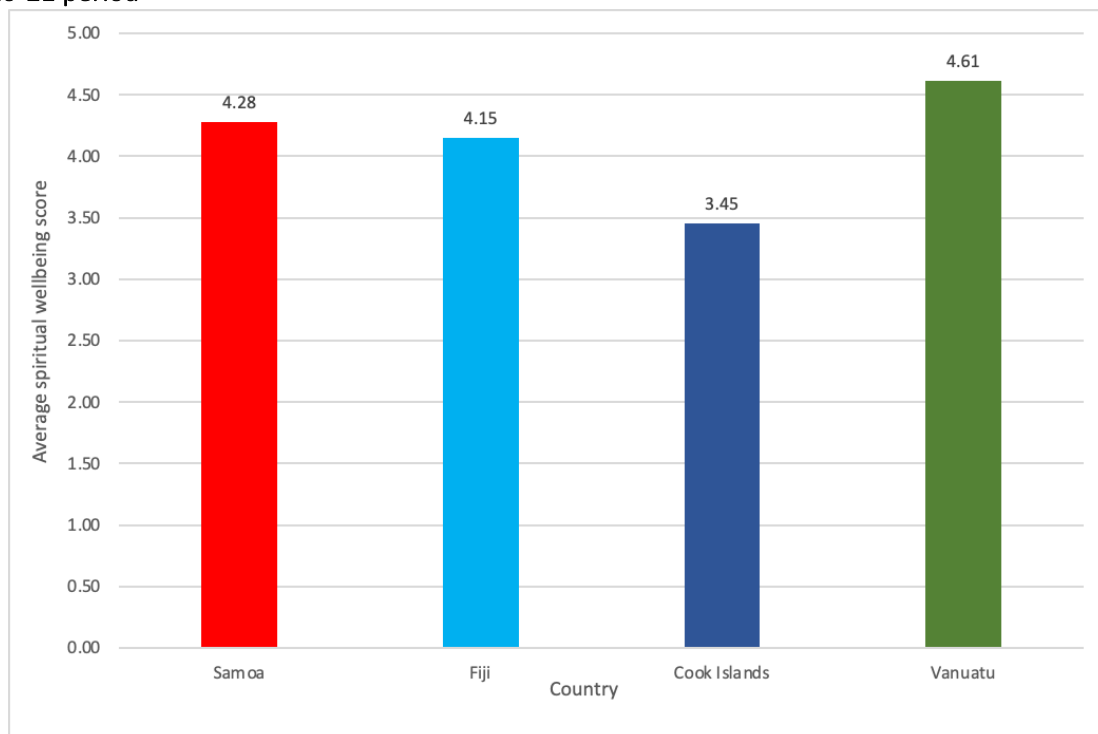
“During the pandemic we were not able to go to church because of covid-19. But it didn't stop people from worshipping our God from our own homes, strengthening family bonds”[Small business owner, Fiji, 2021 - Survey].

Some people who had in the past not shown great commitment to their religion, found renewed faith in the face of the challenges associated with the pandemic:

“Although I am not a religious person, I admit myself and many in my community have turned to the church, the land and each other - this is a good thing instead of the selfish ways before the pandemic. We are now more god-fearing people”
[Female, small business owner, Fiji, 2021 - Survey]

People had to adapt to a new way of worshipping, with social distancing requirements meaning that many services were held over zoom. The new method didn't stop people from worshipping:

Figure 8: Average spiritual wellbeing scores of Pacific peoples in tourism-reliant communities over the 2020-21 period



“There was a time where all the church gatherings on Sundays were stopped, so it made us stay home and do our prayers at home with the family. We prayed more often than if we were attending church on Sundays” [Unemployed woman, Samoa, 2021 - Survey].

A small number expressed that they had not been able to attend church because there was no money to contribute to the church. This appears to be the case particularly in places and denominations where tithing is expected, such as Samoa, and can cause tension between those who can afford to give, and those who can not.

“People are now slow on giving and offering for the Lord” [Retired woman, Samoa, 2020 - Interview]

Overall, many Pacific peoples felt that their spiritual wellbeing flourished during the pandemic. They relied on God to guide them through tough times and were able to worship together with their families whilst becoming more spiritually connected.

Comparing spiritual wellbeing of countries

A one-way ANOVA was performed to assess the effect country on spiritual wellbeing, and it revealed a statistically significant difference between means ($F(3, 205) = 21.82, p < .001$). Tukey's test for multiple comparisons revealed some statistically significant differences: Vanuatu ($M = 4.61, SD = 0.48$) had a significantly higher average spiritual wellbeing than Fiji ($M = 4.15, SD = 0.76, p = .012$), which one respondent sought to explain:

*“In the past a lot of people didn't want to attend church or pray, but Covid has brought them closer to God and helped them improve in their spiritual life”
[Female, small business owner, Vanuatu, 2021 - Survey]*

Meanwhile, Cook Islands ($M = 3.45, SD = 0.91, p < .001$) had a significantly lower average spiritual wellbeing score than all other countries, with several people expressing that they had drifted away from former church commitments:

“My spiritual wellbeing has been bad, I haven't been going to church” [Retired female, Cook Islands, 2022 - Survey]

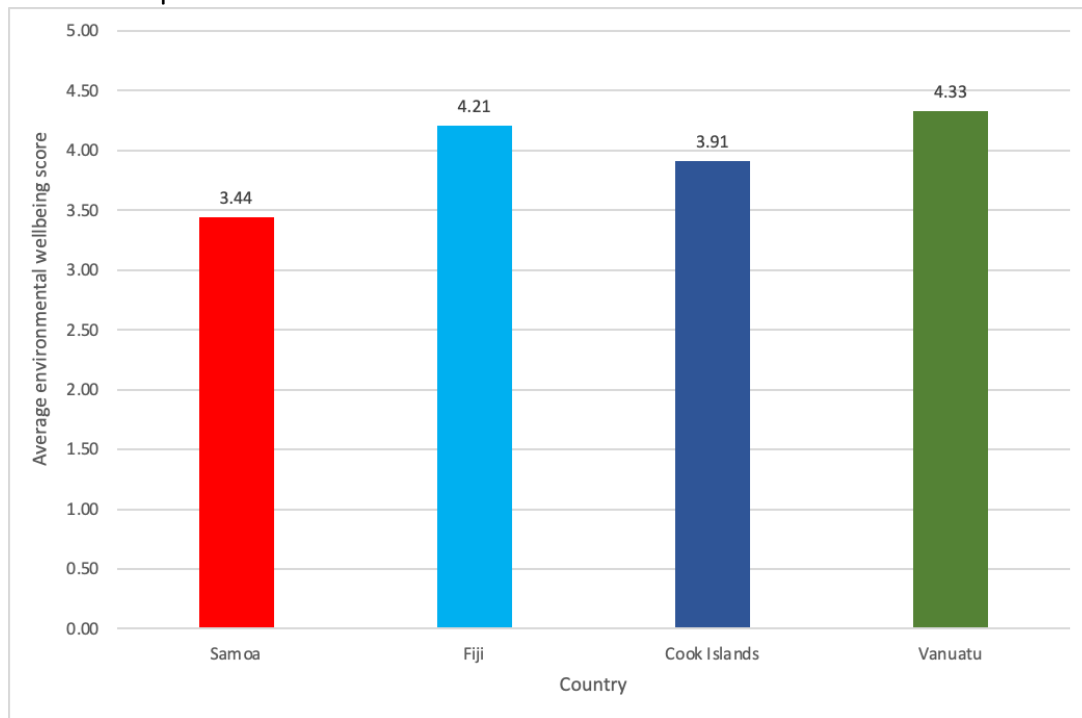
Cook Islands society is perhaps the most westernised of the 4 countries and thus a little more secular than is the norm for Pacific Island countries. Nevertheless their mean score of 3.45 only indicates that some people felt a lower level of spiritual wellbeing during the pandemic period; others in the Cook Islands still demonstrated strong spiritual wellbeing. The relatively higher standard deviation indicates this split.

Environmental wellbeing

There was relatively high average environmental wellbeing ($M = 3.95, SD = 0.79$) for Pacific peoples during the period of COVID-19, as shown in Figure 9. One big difference was the absence of tourists, which people noticed gave the environment a chance to revive after so much overuse:

“With no tourists around the lagoon, the reef and land has had time to relax and recover so that has been positive to see fish come back” [Male tourism employee, Fiji, 2021 - Survey]

Figure 9: Average environmental wellbeing scores of Pacific peoples in tourism-reliant communities over the 2020-21 period



As the environment flourished, people decided to make use of their customary lands:

“People are now becoming self-reliant in terms of food and other small businesses. This is good because it brings people to depend on the land, care for it and be sustained by it. This is important for my people, to be one and within their land.”
 [Female small business owner, Fiji, 2021 - Survey]

“I love that this pandemic takes me back to work on the land” [Female, unemployed, Samoa, 2021 - Survey]

Some people decided to become tourists in their own country and appreciate their own environment:

“I enjoyed spending holiday time at the beach camping, taking time to appreciate the beauty of our place” [Female in administration, Cook Islands, 2022 - Survey]

Others put time into restoring their villages to benefit the natural environment. Overall, there was a sense of guardianship over the environment:

“Before Covid, people didn't care about our environment, but with this pandemic everyone is trying to keep the environment clean” [Male tourism employee, Vanuatu, 2022 - Survey]

There were some downsides to some of the environmental practices taking effect in response to COVID-19. Some thought that there was environmental degradation due to the unexpected increase in population thanks to people returning home, which impacted their wellbeing:

“The environment has degraded a lot because the population of my community has increased a lot. I don't have [as] much connection the environment as in the past” [Male, unemployed, Vanuatu, 2022 - Survey]

It was expressed that while people were utilising their land for farming, the clearing of trees to provide land to cultivate was out of control in some places, causing increased siltation of rivers and resultant damage to the marine environment:

“I think now there is greater destruction of the forests as more people are clearing for farms. Village landscaping is changing, flowers are gone and now there are vegetables in their place” [Female tourism employee, Fiji, 2021 - Survey]

In sum, most respondents felt that their environmental wellbeing improved over the period of COVID-19 thanks to an absence of tourists and pollution, utilising customary lands, and a higher level of care for the environment showed by all.

Comparing environmental wellbeing of countries

A one-way ANOVA was performed to assess how environmental wellbeing varied between countries, and it revealed a statistically significant difference between means ($F(3, 205) = 16.49, p < .001$). Tukey’s test for multiple comparisons revealed some statistically significant differences. Samoa ($M = 3.44, SD = 0.83, p = .023$) reported significantly lower environmental wellbeing than Vanuatu ($M = 4.33, SD = 0.62$) the Cook Islands ($M = 3.91, SD = 0.68, p = .004$), and Fiji ($M = 4.20, SD = 0.68, p < .001$). The Cook Islands also reported significantly low environmental wellbeing in comparison to Vanuatu. Certainly, there seemed to be a real commitment to keeping the environment in good health in Vanuatu:

“People have been cleaning up the environment more since the start of the pandemic” [Youth, Vanuatu, 2021 - Survey]

By contrast, some in the Cook Islands felt that without tourists, people were less worried about keeping their yards and communities free of rubbish:

“Less tourists has meant excessive waste that is not cleaned up, so much so that we can’t operate the market” [Male, small business owner, Cook Islands, 2022 - Survey]

Strong connections between particular types of wellbeings

In this research we also conducted cluster analysis tests to see if there were statistically significant linkages among the dataset, representing people who experienced similarities across the different types of wellbeing. The following insights were revealed.

High physical and environmental wellbeing cluster: 50% of total

A cluster of survey participants comprising 50% ($N=106/210$) of the total scored their physical and their environmental wellbeing highly. Their survey responses indicated these people were happy with their health in general, they had no difficulty performing activities, and experienced no bodily pain. They felt that they were able to exercise more than usual during the pandemic period, and that their physical health improved. They also spent lots of time in nature, felt connected to the land and sea, and participated in traditional practices care for the land and sea. They were inclined to participate in conservation projects, and felt proud of the beauty of the place where they live.

The following quotes help to explain these high, connected scores on physical and environmental wellbeing, demonstrating how people went back to the land and sea to source food when other income

sources dried up, and how this has had a range of benefits. There were many remarkably similar comments from research participants across the four case study countries, only a few of which are provided here:

“Prior to COVID-19 I had a job, ate a lot of fast food and hardly exercised. Now, at home, I can do a lot of gardening and grow local produce, so I eat healthy, and it helps with my physical health” [Female ex-tourism employee, Vanuatu, 2022 - Survey]

“It changed my normal routine, exercising more while doing work in the plantation every day” [Male ex-tourism employee, Samoa, 2021 - Survey]

“We eat healthier since we’ve been engaging ourselves in more farming and consuming more vegetables and home made food. We do more physical activities such as walking and going to the farm” [Female, unemployed, Fiji, 2021 - Survey]

High mental and spiritual wellbeing cluster: 60% of total

A cluster of survey participants comprising 60% (N=126/210) of the total scored their mental and spiritual wellbeing highly. Their survey responses indicated these people felt very satisfied with their lives, thought that they had a clear sense of purpose, and did not have to cut down on any activities due to mental health concerns. They felt they had a good work/life balance and were relatively happy. Spiritual connection was also high among this group: they saw themselves as religious, they attended church regularly, and they also felt their ancestors watching over them. They were the type of people who went out of their way to care for their neighbours. Overall, they said that both their spiritual and mental wellbeing improved during the period of the pandemic.

Many people alluded to the importance of turning to God as a source of comfort during tough times, and some noted that this enabled them to expand their capabilities:

“My family was very badly affected because there are 9 of us in the family and all work in Denarau, so when the pandemic hit we had all these people at home and not earning. This put a lot of pressure on us to feed people, but more difficult is encouraging them to be strong. This is where our faith came in and helped us to stay positive and survive” [Female, 34, Fiji – Interview]

“I am growing and improving myself...there is no other way rather than seeking God [to ask] for his protection upon us right now to get through all of these hardships” [Female, tourism related business owner, Samoa, 2021 - Survey]

Having more time on their hands due to less work pressures also enabled people to invest more in their mental and spiritual wellbeing:

“[my mental wellbeing was] positive due to more [time for] balance and reflection” [Female, tourism related business owner, Cook Islands, 2022 - Survey]

“[The pandemic] allows me to focus on my inner person and encourages me to become a better person spiritually” [Female tourism employee, Fiji, 2021 - Survey]

High mental and social wellbeing cluster: 57% of total

Interestingly, another strong cluster was evident among those exhibiting both high mental and social wellbeing: 57% (N=120/209). These people's survey responses indicated that they felt that there were people they could depend on, felt part of a group who shared their beliefs, felt a sense of community in the area where they lived, and received support in their community. They also expressed that their needs were met by their families, and that they were connected to their cultural identity. This group felt satisfied with their lives, had a sense of purpose, had a good work/life balance and didn't have to cut down on activities due to mental health concerns. They overall felt that their mental and social wellbeing improved.

There were very clear linkages between people's enhanced time for social connection with their families and communities, and their mental wellbeing, as evident in these quotes:

This pandemic has been "positive, because more time to spend with family and friends" [Male, small business owner, Cook Islands, 2021 - Survey]

"I enjoy having time with my children every day. That is what is important to me"
[Female, shop owner, Samoa, 2021 - Survey]

A few, however, noted that their social wellbeing was negatively impacted because they missed regular interaction with tourists:

"I personally like meeting new people and working in tourism allows me to be myself. Without tourists I have been forced to confine myself to my close relatives and the local community, who are not always understanding of my situation"
[Male, 26, tourism employee, Nadi - Interview]

A couple of respondents also reflected that there was increased anti-social behaviour associated with people turning to alcohol in the face of financial pressures on the household. Due to people spending more time at home, participants lamented that there was a higher instance of people consuming kava which is sometimes frowned upon because it can drain precious family resources, especially if cigarettes and tobacco are being consumed as part of this social ritual.

High environmental and spiritual wellbeing cluster: 56% of total

A final cluster which was revealed by our analysis was a group of people who exhibited high environmental wellbeing and spiritual wellbeing: 56% (N=117/210). The people in this group spent a lot of time in nature, felt very connected to the land and sea, and participated in both formal conservation programmes as well as traditional practices to care for the land and sea. They reported that their villages had less waste than before COVID-19 and that they felt proud of the beauty of the place where they live. This cluster also felt that religion was important to their identity and they felt like spiritual people. They regularly attended church or other religious commitments, and took time to care for their neighbours and for the environment where they could. Overall, their environmental and spiritual wellbeing improved during the pandemic.

"...people are now becoming self reliant in terms of food and other small businesses. This is good because it brings people to depend on the land, care for it and be sustained by it. This is important for my people, to be one and within their land" [Female, Fiji, 2021 - Survey]

“Covid-19 made us go back to the land, take the time to work and be connected to our lands, the main possession we have. No wonder our people said our land is our identity...where we belong.” [Male, Samoa, 2021 – Survey]

Attitudes towards the return of international tourism

Alongside the wellbeing dimensions, we assessed how people felt without tourists in their countries, and what their attitudes were towards having tourists return in the near future. As anticipated, both the survey and interviews revealed that individuals, and communities, which were more highly dependent on tourism wanted a quicker opening of the border to international tourists. For example, people from two small islands in Vanuatu were interviewed and those living further away from Port Vila (the capital city), with fewer alternative options for earning a cash income, wanted their borders opened within a year, while others on the island close to the capital were happy to wait 2-3 years. Many people across the case study sites stressed, however, that there had to be high vaccination rates among their community and tourists, and good hygiene and health protocols, before international tourism kicked off again.

After a period without tourists, opinions seemed to be split. Some were focused on the financial loss that came with a lack of tourism, whilst others had adapted well without tourists and were ambivalent about the opening of borders, while a smaller number were happy for tourists to stay away. The average score across the questions was quite low and the standard deviation was relatively high ($M = 2.44$, $SD = 0.88$), indicating that a wide range of positive and negative views about tourists were expressed, with some Pacific peoples struggling without tourists during the period of COVID-19.

Some of those who were positive about the lack of tourists during the pandemic period expressed that this was necessary to protect the health of their people. Many also noted they were taking better care of themselves and their communities when they didn't have to focus so much of their energy on tourists:

“The positive thing is now I have a garden and I am growing my own food; my van business is now more focussed on the local market rather than Denarau tourists. It has been good for my wellbeing because I am learning how to live better” [Male tourism related business owner, Fiji, 2022 - Survey]

Many people talked about taking on education and training opportunities during border closure periods, which they would not have done otherwise:

“COVID makes me learn new things like study mostly online during lock down and it's a good change that saves time and money from going all the way to town” [Male, student, Samoa, 2021 - Survey]

Others were glad to experience their own countries rather than merely catering to tourists:

“The absence of tourists has had a positive impact in that we are being more present at beaches and trying activities that we would never have done due to tourists” [Female businessperson, Cook Islands, 2022 - Survey]

However, a good number of those who appreciated having a period of tourist-free time due to the pandemic still wanted to see tourists returning, when it was safe for this to occur.

On the other hand, a large amount of people experienced major financial loss so wanted tourism to return:

“I think it is negative for us because tourism is our bread and butter, we need tourism back and it’s good that Care Fiji² is being rolled out so that we can go back to work” [Male tourism employee, Fiji, 2022 - Survey]

Comparison of attitudes to a return of tourism between countries

A one-way ANOVA was performed to assess how attitudes towards the return of tourists varied between countries, and it revealed a statistically significant difference between means ($F(3, 205) = 8.47, p = <.001$). Tukey’s test for multiple comparisons revealed some statistically significant differences. The Cook Islands ($M = 2.77, SD = 0.86$) reported that they were doing better without tourism than responses from both Vanuatu ($M = 2.15, SD = 0.77, p = .002$) and Fiji ($M = 2.20, SD = 0.91, p = .005$) indicated. Samoa showed a similar sentiment, with people indicating that they were okay without tourism, ($M = 2.62, SD = 0.85$) but they still wanted a return of tourism because of its importance for providing jobs and for the economy in general.

It is important to note that the survey was administered in the Cook Islands just prior to the return of tourists from New Zealand in mid-January 2022, when there was an Omicron variant outbreak in New Zealand. There was likely to be heightened anxiety about the pressures associated with catering to international tourists amidst the health risks at this time, which could have led to more people than usual expressing negative views regarding tourism.

Interviews with Cook Islanders helped to explain why feelings about tourism in this country, the most heavily dependent on tourism income among those we studied, were so split. Firstly, those who directly relied on tourism income because they ran a business or had been employed by a hotel or tour operator, were in favour of tourism returning. Some also did not feel that other residents, especially government employees who retained their salaries and faced few pressures during the pandemic period, necessarily understood how hard it had been for business owners:

“There’s a group of people there that hasn’t really gone through the tough times.... The slogan was ‘we’re all in this together’. Well no, we’re really not...” [Male, holiday bungalow owner, Cook Islands, 2022 – Interview].

Others, however, thought the government should be urgently supporting the people to find alternatives:

“We have very little options for industry other than tourism, our export industry needs to be supported by the governments to make it viable. We need viable alternatives; I don’t believe we can only depend on tourism” [Female, retired small business owner, Cook Islands - Survey]

In addition, many Cook Islanders really enjoyed the ‘slow down’ that had occurred and the way in which Cook Islanders had more time to appreciate each other and enjoy their own country when tourists were not around. One noted that ‘staycations’ offered at cut rate prices had given them the chance to appreciate their own country like never before, and many people took the opportunity to e.g. take a lagoon cruise, stay in a resort, or take kitesurfing lessons for the first time:

“A positive from when it first started...was all the staycation deals that everyone could do. Even though we were on a tight budget from our wage subsidy, we were still able to visit all these big holiday homes that no one knew were around. They

² Care Fiji is a programme introduced by the Fijian government to ensure the health and safety of guests and staff involved in tourism in the wake of the pandemic. Resorts and other providers can sign up to the Care Fiji Commitment, a WHO-approved set of protocols: <https://www.fiji.travel/covid-19/safer-than-ever>

got to experience time as a tourist. So I know for a lot of the locals that was a big deal, because they [usually] didn't have the time or the money to do it. But it was also a very fun time, no stress from Covid, no restrictions." [Female, business owner, Cook Islands, 2022 – Interview].

Aspirations for improvements to the tourism sector

Beyond diversifying the economy, which was a theme that ran across survey responses and interviews from all four countries, some specific suggestions were made for improving the tourism sector. These included:

Employee wellbeing

- Increased wages for tourism employees
- Better opportunities for upskilling of tourism employees, in particularly in skillsets that could also be employed outside of the tourism sector
- Establishment of an insurance scheme or a reserves fund for tourism employees, so that financial support is on hand during times of crisis or hardship
- Greater unionization of tourism employees to provide a level of support and protection for them

"We would probably not return to our normal jobs when tourism resumes, we'd like to try something different. This is a backup, because if another pandemic happens, where will we stand? We would like to acquire new skills – sewing, real estate, selling land and properties." j[Interview, Male, Fiji, 2020 - Survey].

Environmental wellbeing

- Strong environmental protections to safeguard natural resources for future generations
- High penalties for violation of conservation estates
- Usage fees, directed towards conservation efforts, for access to environmentally sensitive areas such as coral reefs

"Put price tags on violations to conservation practices". [Survey, Female, Small business owner, Fiji, 2021 - Survey]

Summary

Wellbeing is a multi-dimensional concept. In this research report we have examined wellbeing of people in Samoa, Fiji, Vanuatu and Cook Islands during the COVID-19 pandemic when borders were essentially closed to commercial flights for tourists: this constitutes Phase 1 of our wellbeing study. In all cases, the finances of these countries had experienced a major blow, and most of our recipients were either directly or indirectly impacted by the loss of tourism-related jobs and slowdown of a range of businesses. Nevertheless there were strong signs of successful adaptation and resilience in response to the pandemic, with many people reporting good or very good wellbeing across a range of dimensions.

Key take-away points from Phase 1:

- Most aspects of wellbeing were reported as being relatively high for Pacific peoples living in tourism-reliant communities during the period of COVID-19.
- While financial wellbeing results were, understandably, more mixed, they were not as low as reported in our 2020 survey (Scheyvens et al., 2020), suggesting that people have devised good strategies for finding alternative revenue sources or reducing their costs, such as growing and harvesting more of their own food. Some were also able to get financial support from relatives living overseas. Interestingly, the country receiving the greatest financial support from government, the Cook Islands, reported lower financial wellbeing than the other countries.
- Some of the consistent themes emerging in terms of things which have supported strong levels of wellbeing are:
 - Most people were able to draw upon customary lands and sea to gather and grow food; this provided a significant food source during times when there was low availability of cash
 - Skills and knowledge regarding traditional ways of farming, fishing and craft-making were passed on between older and younger people
 - A number of people felt that their physical wellbeing improved because they were doing more manual work e.g. in their gardens, and eating more natural foods rather than processed, store-bought goods
 - People's awareness of the need to avoid heavy reliance on one economic livelihood activity grew, along with the confidence – for quite a number of people – of seeing they could make do with less income and/or successfully barter for things they needed and/or start their own small business
 - Social wellbeing improved for many people as they had more time to enjoy with family and friends, and in many cases their community bonds were strengthened because of the need to rally around the support the more vulnerable amongst them
 - Despite the various stressors associated with life during a pandemic, mental wellbeing was good for many people: some said they were more relaxed and at peace than during frantic tourism times, that they were happy they had more time with family and friends, and/or they commented that their religious practices and beliefs were a source of great comfort and hope during difficult times
 - Many people felt they were able to appreciate the natural environment during the pandemic period, whether e.g. for family picnics on beaches usually utilised by tourists or just by getting out on the water or putting their hands in the soil due to their new commitment to growing and harvesting their own food
- Quantitative analysis comparing countries has revealed that although there are some significant differences across different wellbeings, Pacific peoples have deliberately sought out ways to improve their situation. In most cases, participants from all countries are drawing from their resources and communities to cope which has contributed to their levels of wellbeing. This has led to high wellbeing on average across the board
- Quantitative analysis drawing on demographic data has revealed that in some cases, age of participants is associated with higher or lower wellbeing. In particular, our 65 year and above cohort did not overall enjoy the same levels of mental and social wellbeing as did younger age groups. This might be linked to instances of lifestyle diseases prevalent among higher age groups in the Pacific which prevented them from participating in some of the key alternative livelihood activities, such as farming and fishing, along with worries about household finances, and frustrations about cancellations of church and community events which might have once been important social outings for them.

- Despite positive findings overall, there were definitely a number of areas of concern reported in both the survey and in interviews conducted by RAs, notably:
 - Financial woes caused stress, at least for a period of time, in many households; sometimes this was manifested in antisocial behaviour and acts of aggression. For tourism business owners, uncertainty and fixed costs plus loans lead to ongoing pressure.
 - Due to the fact that more people were utilising the environment as a livelihood resource (for farming and fishing), there were associated concerns about environmental degradation and unsustainable practices in some areas.
 - Some people struggled with cancelation of social, cultural and religious events and limits on numbers for social gatherings.
 - Some families chose not to engage with the wider community, setting out to build their own coping mechanisms, in the process, isolating them from the community
 - As a result of immense financial and social pressures, participants reported an increased instances of drug and alcohol trading and use among community members.
 - In some instances, people with decades of learned skills and experience in tourism have chosen to leave the industry for their farms or other activities, indicating a drain of skills from the sector because of the pandemic.

Overall this Phase 1 of the wellbeing study has demonstrated the resilience of Pacific peoples: during a time of crisis, they have looked inwardly to draw upon and develop their strengths, using traditional resources and skills as well as innovative thinking to adapt to the challenging circumstances. Many people feel healthier, more socially connected and confident in their abilities to survive going forward, due to their experiences of the pandemic-related restrictions to date.

We now look forward to engaging in data collection for Phase 2 of the study, assessing wellbeing in destinations 6 months after the return of international tourism. This will occur in June 2022 in Fiji, and mid-July 2022 in Cook Islands. As Vanuatu and Samoa have not yet opened their borders to international tourists we cannot plan Phase 2 data collection in these locations as yet.

Project website/sharing our findings

Working with Pacific peoples has influenced our quest to go beyond conventional academic publications when sharing the findings of this research. We want to ensure that benefits accrue to research participants in different ways, in forms that are most appropriate, effective, and meaningful for them. Findings generated by this study will be shared with researchers, government officials, tourism industry businesses, Indigenous organizations, and the general public via the following mediums:

- conferences, workshops and webinars on reimagining South Pacific tourism post-pandemic
- dedicated website containing our Pacific tourism and COVID-19 research findings and related resources: see www.reimaginingsouthpacifictourism.com

Project publications and blogs to date:

Movono, A., and Scheyvens, R. (2022) Adapting and reacting to Covid-19: Tourism and resilience in the South Pacific. *Pacific Dynamics*, 6 (1): 124-150. <http://dx.doi.org/10.26021/12509>.

Movono, A., & Scheyvens, R. (2021). Tourism in a World of Disorder: A Return to the Vanua and Kinship with Nature in Fiji. In Y. Campbell & J. Connell (Eds.), *COVID in the Islands: A comparative perspective on the Caribbean and the Pacific* (pp. 265–277). Springer Singapore. https://doi.org/10.1007/978-981-16-5285-1_15

Movono, A & Scheyvens, R - September 29 (2021). The Conversation [Vax and vacation? Why that Pacific island holiday will still mean 'traveller beware'](#)

Movono, A, de la Torre Parra, L, Scheyvens, R, and Auckram, S - July 19 (2021). The Conversation [Fijians harness the fundraising power of social media as their government struggles with the COVID-19 crisis](#)

Movono, A, Scheyvens, R & Auckram, S - March 16 (2021). Good Tourism Blog: [What do the people want? Reimagining Pacific Island travel & tourism](#)
<https://goodtourismblog.com/2021/03/what-do-the-people-want-reimagining-pacific-island-travel-tourism/>

Scheyvens, R. A., Movono, A., & Auckram, S. (2021). Pacific peoples and the pandemic: Exploring multiple well-beings of people in tourism-dependent communities. *Journal of Sustainable Tourism*, 1–20. <https://doi.org/10.1080/09669582.2021.1970757>

Scheyvens, R., Movono, A., Strickland, D., Bibi, P., Tasere, A., Hills, G., Rihai, N., and Teama, F. (2020) Development in a World of Disorder: Tourism, Covid-19, and the Adaptivity of South Pacific Peoples. Institute of Development Studies Working Paper Series, 2020/1. Palmerston North: Massey University <http://hdl.handle.net/10179/15742>

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- Manuela, S., & Sibley, C. G. (2015). The Pacific Identity and Wellbeing Scale-Revised (PIWBS-R). *Cultural Diversity and Ethnic Minority Psychology*, 21(1), 146.
- Movono, A, de la Torre Parra, L, Scheyvens, R, and Auckram, S - July 19 (2021). [The Conversation Fijians harness the fundraising power of social media as their government struggles with the COVID-19 crisis](#)
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Appendices

Appendix 1: Information sheet



MASSEY UNIVERSITY
COLLEGE OF HUMANITIES
AND SOCIAL SCIENCES
TE KURA PŪKENGĀ TANGATA

Pacific People's wellbeing, COVID-19 and tourism

INFORMATION SHEET

Introduction

This research asks the following questions:

1. How has the absence of tourists due to COVID-19 travel bans impacted Pacific people's wellbeing?
2. How could more sustainable, self-determined forms of development be implemented post-pandemic to support the future wellbeing of Pacific peoples?

The research is being conducted by a team of researchers from Massey University who have significant experience researching tourism among Pacific communities: Dr Apisalome Movono, Prof. Regina Scheyvens, and Dr Lorena de la Torre Parra (Development Studies).

Project Description

This project seeks to put the South Pacific at the forefront of development in a way that benefits the wellbeing of both people and the planet. This survey builds on these researchers' findings in 2020 which uncovered that Pacific peoples have shown resilience in the face of COVID-19, and that some aspects of their wellbeing improved while others declined due to border closures. Hence, the current research takes a deeper look into the wellbeing of Pacific peoples, and involves surveys that will be conducted prior to, and several months after, the return of international tourism.

The research focuses on Samoa, Fiji, Vanuatu and the Cook Islands, countries which depend on tourism for thousands of jobs and between 10 and 70% of their GDP. The knowledge generated by this study will be used to inform government officials, tourism industry businesses, Pacific organisations and other relevant bodies about ways they can best support Pacific wellbeing and development through tourism and/or other avenues in the future.

The researchers keep their current research findings accessible and up to date on their website, <https://www.reimaginingsouthpacifictourism.com/>. For more information, see the researchers' contact details below.

Invitation

We are inviting you to participate as we would value drawing on your experience and insights to help build our understanding of how your wellbeing has been influenced by the pandemic, as well as how development can be re-imagined in future to better contribute to Pacific people's wellbeing.

You have been asked to participate in an online survey that will be administered either in part or fully by a trained, local research assistant. It is expected that this survey will take between 10-15 minutes to complete.

Data Management

The information you provide will be kept confidential and stored safely. All data, including interview recordings and notes, will be stored in the research project's password-protected Dropbox site.

Participant's Rights

We would be delighted if you agreed to participate, but please be assured that you are under no obligation to do so.

If you decide to participate, you have the right to:

- *decline to answer any particular question;*
- *withdraw from the study at any time;*
- *ask any questions about the study at any time during participation;*
- *provide information on the understanding that your name will not be used unless you give permission to the researcher;*
- *be given access to a summary of the project findings when it is concluded.*
- *ask for the recorder to be turned off at any time during the interview.*

Project Contacts

If you have any questions about this research please contact the following investigators:

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Committee Approval Statement

This project has been evaluated by peer review and judged to be low risk. Consequently it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director (Research Ethics), email humanethics@massey.ac.nz



PACIFIC RESEARCH PRINCIPLES

RESPECT FOR RELATIONSHIPS

Ensuring that cultural protocols and processes are followed throughout the research process. Respect for research participants is exercised and grounded in humility, the roles of gatekeepers and elders are appropriately acknowledged and confidentiality is respected.

RESPECT FOR KNOWLEDGE HOLDERS

Ensuring that Pacific knowledge, aspirations and wellbeing are integral to research design, research processes, outcomes and outputs. Both research partners and research participants are prioritised as knowledge holders and a participatory approach is adopted in seeking informed consent.

RECIPROCITY

Ensuring that reciprocity is an integral part of the research process and participants and communities benefit from the research. Reciprocity can encompass gifts, time and service and extends to accessible dissemination of research findings.

HOLISM

Ensuring the interconnected nature of the physical, social, environmental, cultural and spiritual aspects of research with Pasifika and Pacific communities is understood and acknowledged.

USING RESEARCH TO DO GOOD

Ensuring that the wellbeing of Pasifika and Pacific communities and their environment is of central importance in why and how research is conducted, at the same time as ensuring that the research is rigorous and scholarly. The goal of research beneficence applies to both the integrity of the research process and the potential research outcomes and impact.

Source: Meo-Sewabu, L., Hughes, E. and Stewart-Withers, R. (2017) *Pacific Research Guidelines and Protocols*. Pacific Research and Policy Centre, Massey University.

<https://www.massey.ac.nz/massey/learning/departments/centres-research/pacific-research-policy/doing-research.cfm>

Appendix 3: Pacific wellbeing, tourism and COVID-19 Survey

Physical Wellbeing

During the past month:	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
I have had difficulty performing work or other activities due to my physical health	•	•	•	•	•
I have been happy with my health in general	•	•	•	•	•
I have had to cut down on work or other activities due to my physical health	•	•	•	•	•
I have experienced bodily pain	•	•	•	•	•

During the period of COVID-19:	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
I have been able to exercise more than usual	•	•	•	•	•
My diet has been healthier than usual	•	•	•	•	•
My physical health has improved	•	•	•	•	•

Overall, has the 2020-2021 period of the pandemic had positive and/or negative impacts on your **physical** wellbeing? Please explain.

Mental Wellbeing

During the past month:

	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
I have felt satisfied with my life	●	●	●	●	●
My life has had a clear sense of purpose	●	●	●	●	●
I have had a good balance between work and other important aspects of my life	●	●	●	●	●
I have had to cut down on work and other activities due to my mental health	●	●	●	●	●
I have felt happy	●	●	●	●	●

During the period of COVID-19:

	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
My mental wellbeing has improved	●	●	●	●	●

Overall, has the 2020-2021 period of the pandemic had positive and/or negative impacts on your **mental** wellbeing? Please explain.

Spiritual Wellbeing

During the past month:

	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
Religion has been important to how I see myself	●	●	●	●	●
I have frequently attended church and/or religious commitments	●	●	●	●	●
I have been a spiritual person	●	●	●	●	●
I have felt my ancestors watching over me	●	●	●	●	●
I have followed the principles of caring for my neighbours, especially those who are struggling	●	●	●	●	●

During the period of COVID-19:

	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
My spiritual wellbeing has improved	●	●	●	●	●

Overall, has the 2020-2021 period of the pandemic had positive and/or negative impacts on your **spiritual** wellbeing? Please explain.

Social Wellbeing

During the past month:	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
There have been people I could depend on when I needed it	●	●	●	●	●
I have felt part of a group who shares my attitudes and beliefs	●	●	●	●	●
I have felt a sense of community with others in my local area	●	●	●	●	●
I have received support within my community	●	●	●	●	●
My personal needs have been met by my family	●	●	●	●	●
Being a connected to culture has been an important part of my identity	●	●	●	●	●

During the period of COVID-19:	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
I have had the chance to learn or practice traditional skills	●	●	●	●	●
I have been more connected to those around me (both online and offline)	●	●	●	●	●
I have been able to reconnect with my culture	●	●	●	●	●

Overall, has the 2020-2021 period of the pandemic had positive and/or negative impacts on your **social** wellbeing? Please explain.

Financial Wellbeing

During the last month:

	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I have been satisfied in my financial situation	●	●	●	●	●
I have been able to contribute to my family financially	●	●	●	●	●
I have been stressed in my financial situation	●	●	●	●	●
I have been able to contribute to my religious or wider community financially	●	●	●	●	●

During the period of COVID-19:

	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
My financial wellbeing has improved	●	●	●	●	●
My family's income has been secure	●	●	●	●	●
I have gathered debt (indicate whether personal or business related)	●	●	●	●	●

Overall, has the 2020-2021 period of the pandemic had positive and/or negative impacts on your **financial** wellbeing? Please explain.

Environmental Wellbeing

During the past month:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
I have spent lots of time in nature (e.g. ocean, river, beach, garden/plantation, the bush)	●	●	●	●	●
I have felt connected to my land/sea	●	●	●	●	●
I have participated in traditional practices to care for land and sea	●	●	●	●	●
I have participated in conservation projects	●	●	●	●	●
I have felt proud of the beauty of the place where I live	●	●	●	●	●
My village has had less waste/rubbish than pre-Covid19	●	●	●	●	●

Overall, has the 2020-2021 period of the pandemic had positive and/or negative impacts on your **environmental** wellbeing? Please explain.

Perceptions of Tourism

During 2020-2021:	Strongly disagree(1)	Somewhat disagree (2)	Neither agree nor disagree(3)	Somewhat agree (4)	Strongly agree (5)
I have missed not having tourists around	●	●	●	●	●
I have enjoyed not having tourists around	●	●	●	●	●
International tourism in this region should have been encouraged	●	●	●	●	●
I have felt that my country is doing fine without tourists	●	●	●	●	●
I have felt that my country needs tourists back	●	●	●	●	●

Overall, has the absence of tourists in the 2020-2021 period of the pandemic had positive and/or negative impacts on your wellbeing? Please explain.

What, in your opinion, could be done to support you and your community's wellbeing when tourism returns?

Demographic Data

What was your employment prior to the COVID-19 pandemic? Select all that apply:

- Tourism business owner e.g. resort owner
- Tourism employee
- Small business owner
- Tourism related business owner e.g. village store owner
- Other (unemployed/job not listed) Please explain:

Which type of tourism organisation are/were you employed in? Select all that apply:

- Aviation
- Large-scale accommodation (e.g. hotel or resort)
- Small-medium scale accommodation (e.g. guest house, lodge or backpackers)
- Transportation (e.g. bus/shuttle/boat/taxi)
- Tour operator
- Other (please explain)... _____

What is your current employment? Select all that apply:

- Tourism business owner e.g. resort owner
 - Tourism employee
 - Small business owner
 - Tourism related business owner e.g. village store owner
 - Other (unemployed/job not listed) Please explain:
-

Which type of tourism organisation are you currently employed in? Select all that apply:

- Aviation
- Large-scale accommodation (e.g. hotel or resort)
- Small-medium scale accommodation (e.g. guest house, lodge or backpackers)
- Transportation (e.g. bus/shuttle/boat/taxi)
- Tour operator
- Other (please explain)...

What gender do you identify with?

- Male
- Female
- Other:

- Prefer not to say

How old are you?

- Less than 20 years old
- 20-34 years old
- 34-49 years old
- 50-64 years old
- 65+ years old

What country do you live in?

- Fiji
- Samoa
- Cook Islands
- Vanuatu

Which of the following best describes where you usually live?

- Major town/city
- Small town
- Rural area near your tribe/clan/customary land
- Rural area away from your tribe/clan/customary land
- Other:

Please state your ethnic group/s

Appendix 4: Sources of information used to inform design of the wellbeing survey

Dimension of wellbeing	Indicators/frameworks used
Social	<p>Cutrona, C.E., & Russell, D.W. (1987). The provisions of social relationships and adaptation to stress. <i>Advances in Personal Relationships</i>, Vol. 1, p. 37-67</p> <p>Quality of Life 2008 Survey National Report (2009). Nielsen: New Zealand.</p> <p>Manuela, S., & Sibley, C. G. (2015). The Pacific Identity and Wellbeing Scale-Revised (PIWBS-R). <i>Cultural Diversity and Ethnic Minority Psychology</i>, 21(1), 146.</p>
Physical	<p>Ware Jr, J. E., & Sherbourne, C. D. (1992). The MOS 36-item short-form health survey (SF-36): I. Conceptual framework and item selection. <i>Medical care</i>, 473-483.</p>
Spiritual	<p>Hoverd, W. J., & Sibley, C. G. (2010). Religious and denominational diversity in New Zealand 2009. <i>New Zealand Sociology</i>, 25, 59-87.</p> <p>Postmes, T., Haslam, S. A., & Jans, L. (2013). A single-item measure of social identification: Reliability, validity, and utility. <i>British Journal of Social Psychology</i>, 52(4), 597-617.</p> <p>Bulbulia, J. Troughton, G., *Greaves, L. M., Milfont, T. L., & Sibley, C. G. (2016). To burn or to save? The opposing functions of reading scripture on environmental intentions. <i>Religion, Brain and Behaviour</i>, 6, 278-289.</p> <p>Houkamau, C. A., & Sibley, C. G. (2015). The revised multidimensional model of Māori identity and cultural engagement (MMM-ICE2). <i>Social Indicators Research</i>, 122(1), 279-296.</p>
Mental	<p>Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. <i>Psychological Assessment</i>, 49, 71-75.</p> <p>Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life. <i>Journal of Counseling Psychology</i>, 53, 80-93.</p> <p>Sibley, C. G. (2009). The New Zealand attitudes and values study 2009: Questionnaire items and details for researchers.</p> <p>Ware Jr, J. E., & Sherbourne, C. D. (1992). The MOS 36-item short-form health survey (SF-36): I. Conceptual framework and item selection. <i>Medical care</i>, 473-483.</p>
Financial	<p>Prawitz, A., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). InCharge financial distress/financial well-being scale: Development, administration, and score interpretation. <i>Journal of Financial Counseling and Planning</i>, 17(1).</p>
Environmental	<p>Questions specific to this survey</p>
Attitudes towards tourists returning	<p>Kamata, H. (2021). Tourist destination residents' attitudes towards tourism during and after the COVID-19 pandemic. <i>Current Issues in Tourism</i>, 1-16. (reworded their question)</p>