

Enhanced wellbeing of Pacific Island peoples during the pandemic? A qualitative analysis using the Advanced Frangipani Framework

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Abstract: COVID-19 isolated island states from international tourism, which is a primary provider of employment and driver of economic development for the Pacific region. Most governments lacked the finances to provide sustained assistance to tourism businesses and workers, thus one might assume that these people's wellbeing was very low during the pandemic: in fact, this research found the opposite. Utilising the Frangipani Framework of Wellbeing, a survey was utilised to investigate 6 dimensions of wellbeing in tourism-dependent communities in Samoa, Fiji, Vanuatu and Cook Islands during periods of border closures. Results found that while people faced financial struggles, their mental, social, physical, spiritual and environmental wellbeing had improved in many cases. Respondents indicated that they felt more connected to one another and their spiritual beliefs, were able to utilise communal resources to support their livelihoods, and that the pandemic provided a well-needed break for both themselves and the environment. This research demonstrates that people can successfully adapt and show resilience in the face of significant shocks and financial challenges if they have access to a range of cultural knowledge and systems, strong social connections and natural resources.

Keywords: wellbeing; resilience; livelihoods; measurement; COVID-19; island

1. Introduction

Over 2020 and 2021 people all around the world experienced significant impacts on their daily lives and freedoms due to the COVID-19 pandemic. There were reports of heightened anxiety and stress, negative health consequences of the virus, and social implications due to the restrictions on movement that were put in place to contain the pandemic (Suppawittaya et al., 2020). It was of no surprise, therefore, to see reports of declines in mental and social wellbeing from the United States through to Europe (Geirdal et al., 2021) and Asia (Yong & Sia, 2021). However, there were also occasional references to aspects of wellbeing faring well, at least for some groups of people. The World Happiness Report (Helliwell et al., 2022) for example, found that although stress increased, positive emotions remained twice as frequent as negative emotions during the pandemic years.

The research reported on in this article has, meanwhile, focused on the wellbeing of people living in tourism-dependent communities in the Pacific islands region during the pandemic period. This region is characterised by 14 independent island states and 29 territories spread across the world's largest ocean (World Population Review, 2022), all except one – Papua New Guinea – with populations of less than 1 million people. These islands are home to people

speaking thousands of Indigenous languages and representing unique cultures. Many Pacific islands rely on international tourism as a major means of foreign exchange earnings, and tourism is also a significant source of employment (International Monetary Fund, 2020). It is common for the income from a single tourism sector employee in these countries to directly support several other family members. When the pandemic led to closure of the borders of these countries and territories for much or all of 2020 and 2021, it thus effectively had a devastating impact on this source of revenue. Commentators predicted dire consequences of this with Herr (2021) arguing that borders should have opened much sooner to allow markets and the tourism industry a chance to return to pre-COVID-19 levels.

Tourism-dependent communities were thus chosen as the key population of interest in this study because we were aware that most tourism employees and business-owners had faced significant financial losses, and we wanted to see if this corresponded with declines in their overall wellbeing. Certainly it would be easy to assume that, given the Pacific's heavy dependence on the international tourism industry, and the sustained absence of this industry over a two year period, people's wellbeing in these countries would be at an all-time low (Kumar & Patel, 2022; Samy et al., 2021). However, the research findings herein, based on a survey conducted between October 2021 and January 2022, suggest almost the opposite. Based on the six dimensions of the Advanced Frangipani Framework of Wellbeing (Figure 1), the survey revealed that people living in tourism dependent communities in Samoa, Fiji, Vanuatu and Cook Islands generally experienced improvements in wellbeing during the pandemic period. The exception was financial wellbeing, which understandably saw more mixed results.

The aims of this article are twofold: firstly, to explain how and why we developed a six dimensional framework of wellbeing, and secondly, to discuss findings of a wellbeing survey of people living in tourism-dependent communities across selected Pacific countries. We start by examining the meaning of wellbeing, then we detail the development of our original framework, and discuss how knowledge of Pacific wellbeing models helped us to revise our wellbeing framework. Next we explain how this was researched across the four countries during the COVID-19 pandemic period, before describing key findings related to each of the six aspects of wellbeing. To finish, we discuss the implications of these novel findings. There are insights regarding how culture and customary systems can provide important structural support for communal wellbeing during challenging times.

2. Western notions of 'wellbeing'

Wellbeing is a ubiquitous concept, and as such it has many different interpretations. It has been conceptualised as an equilibrium or balance (Dodge et al., 2012), an amount of life satisfaction (Kim-Prieto et al., 2005), or in terms of a range of dimensions that contribute to a happy life (Rath et al., 2010). Ryff (1995) was one of the first authors to come up with a definition for wellbeing, suggesting it is the degree to which one has an excess of positive over negative affect. The common thread among these definitions is a broad sense of things that make you feel well, factors which psychologists often describe as hedonic and eudaemonic principles. Hedonic principles encompass wellbeing as happiness and pleasure, whereas eudaemonic principles entail that wellbeing is achieved through self-actualisation: both can make a person feel well (Cooke et al., 2016). To reach hedonia, affections must be satisfied, and when striving for eudaemonia, values must be satisfied (Deci & Ryan, 2008). Conceptions of wellbeing have shifted considerably over time, with most now building on both hedonic and eudaemonic principles; for example, "Wellbeing is more than just happiness. As well as feeling satisfied and happy, wellbeing means developing as a person, feeling fulfilled, and making a contribution to the community" (Marks

& Shah, 2004 p.2).

In response, social scientists have created models that conceptualise wellbeing through a set of dimensions. The premise is that wellbeing is dynamic and subjective, so individuals will each be sensitive to different areas of wellbeing. For example, it has been suggested recently that "...well-being [is] a state of harmony or balance between physical, mental, spiritual, cultural, community and ecological dimensions, extended through time" (Shakespeare et al. 2021, p. 677). Initial models, however, only centred around three dimensions - physical, social and psychological (or mental) (Keyes, 2021) - as these were seen as the pillars of subjective wellbeing. Physical wellbeing is the effective management of one's bodily function and health through exercise and dietary choices (Rath et al., 2010). Social wellbeing involves having strong relationships and networks with other people (Rath et al., 2010). Psychological wellbeing emphasises qualities of human wellness including self-acceptance, positive relationships, autonomy and purpose (Ryff, 1995). Some models also include a fourth dimension, financial wellbeing: for example, in the Satisfaction With Life Scale (Diener et al., 1985) and the Financial Well-being Scale (Prawitz et al., 2006). Financial wellbeing is particularly pertinent to consider in the COVID-19 era in the Pacific when many people have lost their main source of income from international tourism.

Over time, however, it has been asserted that additional dimensions of wellbeing should be considered to fully understand this complex phenomenon. It is evident that many models used to explain wellbeing have been developed in very WEIRD (Western, Educated, Industrialised, Rich, Democratic) spaces. WEIRD wellbeing frameworks are assumed to be universal, yet they tend to neglect the cultural embeddedness of wellbeing (Schulz et al., 2018). An example of this is the focus on the individual in WEIRD models, with less consideration of the person as part of a collective: the latter is especially important to a range of Indigenous cultures worldwide (Schulz et al., 2018).

3. The original Frangipani Framework of wellbeing

As the pandemic began, the researchers, and the wider tourism sector, were concerned about how Pacific peoples were coping with insufficient tourists to drive their economies (South Pacific Tourism Organisation, 2018). Thus in May 2020, Scheyvens and Movono began to research how Pacific peoples were responding to the pandemic following a surge in COVID-19 cases worldwide and the onset of lockdowns and large scale border closures.

A survey targeting tourism-dependent communities – who were now without tourists – was sent out via social media. The survey asked a range of questions about adaptation in the face of the crisis; it also included one Likert-scale question about people's financial, social, physical and mental wellbeing. Findings demonstrated that Pacific people showed resilience in the face of COVID-19 through utilising customary land and traditional practices to meet their basic needs and support one another. Customary land is owned communally by clans or other sub-tribal units and comprises more than 80% of total land area for many Pacific island countries (Boydell & Holzknecht, 2003). Pacific people are said to have an 'intense attachment to land' (Curry et al., 2012, p.116). They use terms such as *vanua* in Fiji, *fonua* in Tonga, and *enua* in Cook Islands, which embrace land and people and their connections, along with people's values, beliefs, traditions and history (Batibasaga et al., 1999). While the land is thus much more than an economic commodity, its ability to provide sustenance is central to why it is valued and respected. Many of those surveyed in 2020 reported returning to customary lands and relearning how to cultivate this land for subsistence, which aided their resilience during COVID-19 (Movono et al., 2022).

As expected, there were also negative consequences of the pandemic for Pacific communities.

Many people suffered a major financial blow, and others had deteriorating mental health that accompanied the stress of reduced incomes and less social interaction due to lockdowns. Despite this, the resounding message that emerged from the 2020 survey was that people were surviving by reconnecting with their culture, their faith community, the land and the sea, and some even reported thriving in the absence of tourists (Scheyvens et al., 2022). The promising results of this survey prompted us to delve into analysis of Pacific wellbeing models in order to more fully understand this term and what it meant to Pacific peoples.

4. Pacific notions of 'wellbeing'

Indigenous cultures conceptualise wellbeing in a way that diverges from normalised Western discourses (Durie, 1985). Given the context for our research, we examined South Pacific models of wellbeing; they tend to be holistic and focus on the broader context within which individuals are located (Tu'itupou et al., 2020). A key theme in Pacific models that is overlooked in many Western models is the dimension of spiritual wellbeing, which is entrenched in the Pacific way of life (Pulotu-Endemann, 2001). Spirituality is not necessarily confined to religion; Indigenous people can also see spirituality as connection to their ancestors or a sense of mana and identity. To this end, spirituality is commonly reflected in wellbeing models developed by Indigenous scholars across the Pacific region including the New Zealand Māori model, *Te Whare Tapa Whā* (Durie, 1985), Tonga's *Fonua* model (Tu'itupou et al., 2020), and the Tokelauan model of *Te Vaka Atafagā* (Kupa, 2009). Significantly, the *Fonua* model places spirituality in the centre of their models thereby suggesting that spirituality is the basis for all other wellbeings. In addition, environmental wellbeing does not typically appear in Western wellbeing models (Summers et al., 2012), but environmental factors play a key role in some Pacific models of wellbeing. For example, the *Fonofale* model of health is based around a traditional Samoan *fale* (house), with prominent aspects of wellbeing designated through the support poles and base of the house (Pulotu-Endemann, 2001). The *fale* is not seen alone, however; it sits with its own environment, time and context that encircle the framework. Equally, the Tokelauan model of *Te Vaka Atafagā* positions its wellbeing *vaka* (boat) within the ocean, which is its environmental context (Kupa, 2009). If the sea is rough, or the wind is too strong, these things will affect the wellbeing of those on the boat.

Pacific cultures have often found their own ways of describing what wellbeing means to them. Vanuatu presents an interesting case. Dissatisfied with conventional measures of development, Vanuatu chose to devise 'alternative indicators of wellbeing' (Tanguay, 2015). For example, to measure community vitality – which can be seen as a proxy for social wellbeing – they use indicators such as the proportion of individuals regularly attending community meetings, the proportion of individuals with favourable evaluation of traditional leaders, the proportion of individuals who perceive there is equality in their community, and the proportion of individuals that have someone to support them in times of need. Similarly, Tanguay (2015) explains how they devised alternative indicators of traditional knowledge and production skills, and access to land and natural resources, as the latter are an important basis for resilient livelihoods in much of the Pacific. Aligned with the Pacific models of health and wellbeing described above, Vanuatu's measures of wellbeing are far more holistic, communal, and place/environment-based, than most western conceptions of wellbeing. They also provide important insights into how wellbeing and resilience might be understood specifically in island contexts.

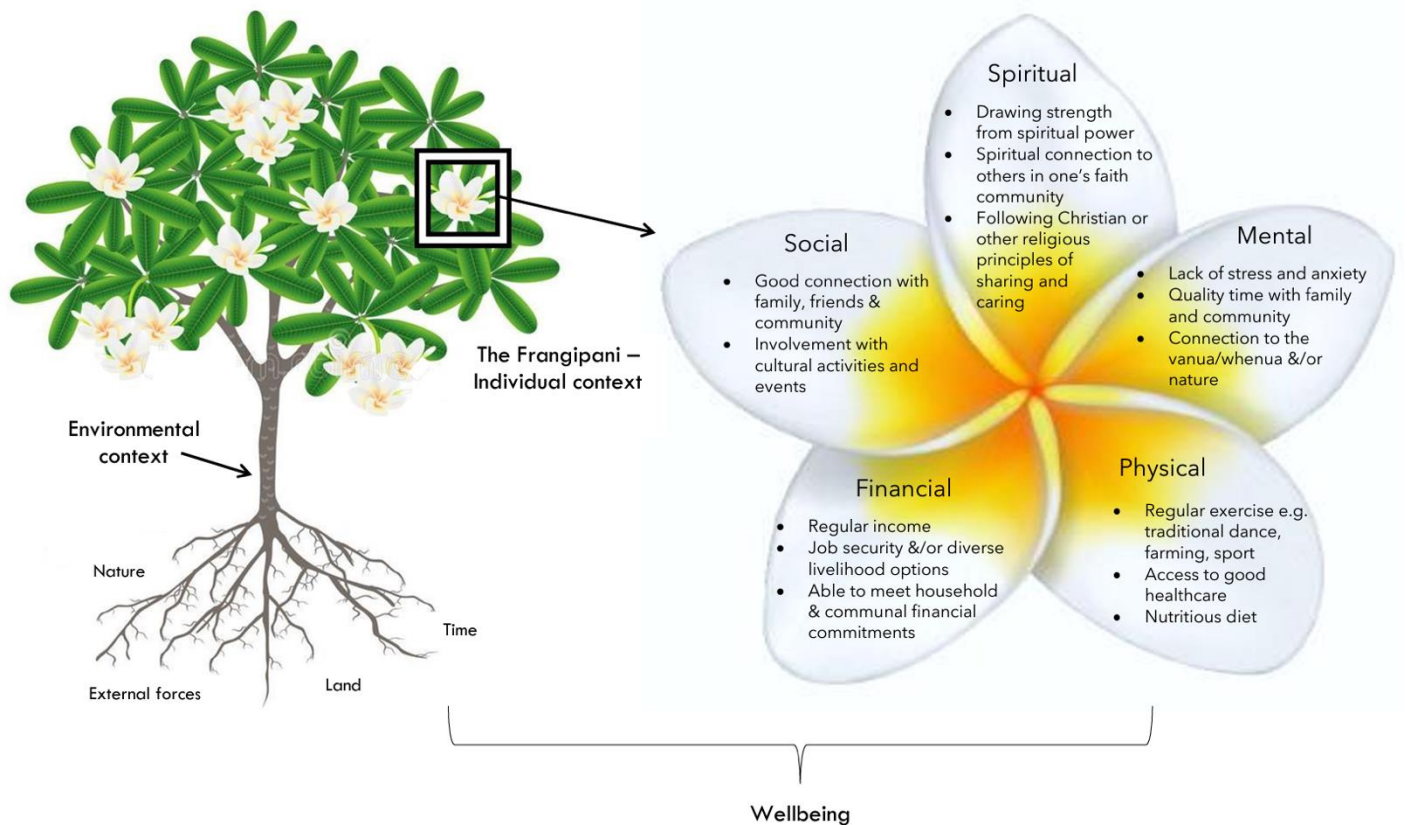
5. Evolution of the Frangipani Framework

In 2021, the original Frangipani Framework was developed (Scheyvens et al., 2021). The petals of the frangipani flower overlap, indicating the connections between and among five different wellbeing dimensions we included - financial, social, physical, mental, spiritual - and the interrelated nature of wellbeing. Spirituality had not been considered explicitly in the 2020 survey. There had been a great deal of time pressure to get a survey out in the early stages of the pandemic, thus it was designed without fully consulting the South Pacific models of wellbeing discussed above which clearly all concur on the centrality of spiritual wellbeing to Pacific peoples. Furthermore, spirituality arose frequently in the comments of those responding to open-ended questions in the 2020 survey, thus we added it as the fifth dimension in the original *Frangipani framework*.

The current article presents the *Advanced Frangipani Framework of Wellbeing*, which includes a revision of the original model. This advanced framework adds an environmental wellbeing dimension via the trunk and roots of the frangipani tree (Figure 1; see below). Environmental wellbeing was added in response to further analysis of interviews conducted in 2020 and 2021 which revealed how many people returned to the *vanua* (their ancestral lands) during periods when the tourism industry could no longer sustain them due to the pandemic, and how they connected or reconnected with the natural environment during this time (Movono et al., 2022). Thus when thinking of the overarching metaphor of the frangipani tree, environmental context is the trunk that connects the multiple wellbeings of individuals (the flowers) and communities to nature, time, land, and external forces (such as relatives based overseas, or global recession) – factors reflected in some of the other Pacific wellbeing models discussed earlier. The upper part of the frangipani tree represents a complex socio-ecological system that connects individuals to each other through the branches. It is the trunk and roots (or environmental context) which influence the flourishing, or wilting, of each flower (or individual wellbeing context).

In summary, *The Advanced Frangipani Framework of Wellbeing* builds upon both Western and Indigenous Pacific models of wellbeing. An analysis of Western models of wellbeing demonstrated how social, physical and mental wellbeing are key dimensions that need to be considered, along with financial wellbeing. Reflecting on participants' sentiments expressed in our 2020 and 2021 research, along with South Pacific models of wellbeing, spiritual and environmental dimensions of wellbeing were also seen as essential. See Table 1 for the evolution of the Frangipani Framework to date. This revised framework has guided later data collection, discussed below.

Figure 1. Advanced Frangipani Framework of Wellbeing



Note. Explanation of wellbeing components. The overlapping petals of the frangipani flower represent the dimensions of wellbeing on a personal level, and how they are inter-related. These are located on branches of a frangipani tree, which has a trunk and roots that represent the overarching environmental context affecting the wellbeing of each frangipani flower.

Social wellbeing. How connections to one's culture and to other people, whether that be friends, family, or wider community networks, can contribute to a person's overall wellbeing.

Spiritual wellbeing. How spiritual connection, including but not limited to religious faith and the values that go along with this, and Indigenous spiritual connection to the land, contributes to a person's overall wellbeing.

Mental wellbeing. How one's mental state, including but not limited to stress, anxiety, happiness, hope, and a sense of connection or belonging, can contribute to a person's overall wellbeing.

Physical wellbeing. How the treatment of one's physical body through movement, nutrition and healthcare can contribute to a person's overall wellbeing.

Financial wellbeing. How financial security through regular income, employment, access to assets or capital, running a business or self-provisioning can help to satisfy the basic needs of a household and allow people to meet communal obligations, thus contributing to a person's overall wellbeing.

Environmental wellbeing. How the health of the environment and access to land and other natural resources has an impact on people's wellbeing, and how this is in turn influenced by contextual issues such as time and external forces.

Table 1. *The evolution of the Frangipani Framework*

Stage	Time period	Description
Initial survey and follow up interviews	2020, beginning of COVID-19 pandemic	Administered survey to Fiji, Samoa, Cook Isl, Vanuatu, Solomon Isl. Included Likert scale question about 4 wellbeings (physical, mental, financial, social). Interviewed key individuals about their experiences
Analysed survey results and wellbeing literature	2020/2021	Pacific peoples were doing better than expected, and spiritual wellbeing needed to be considered in a Pacific context
Created original Frangipani Framework	2021	Devised a way to measure wellbeing in the Pacific, with the original 4 dimensions + spiritual wellbeing
Went back to Pacific wellbeing literature	2021	From Pacific wellbeing literature and the qualitative responses from the 2020 survey, realised that environmental wellbeing needed to be considered in this context
Advanced Frangipani Framework	2021/22	Revised original framework to have 6 wellbeings, including environmental wellbeing, situated as the trunk of the tree on which are flowers with petals representing the other 5 wellbeings
Phase 1 of wellbeing survey <i>**Focus of current article</i>	2021/22	Used the Advanced Frangipani Framework to measure wellbeing in 4 Pacific countries while borders were closed
Phase 2 of wellbeing survey	2022/23	Used the Advanced Frangipani Framework to measure wellbeing in 4 Pacific countries, 6 months after international tourists returned

6. Methodology

6.1 Survey design

The Advanced Frangipani framework of Wellbeing, described above, was used as the basis for a survey conducted between October 2021 and February 2022. The purpose of the survey was to: a) assess wellbeing prior to the return of tourists in Fiji, Samoa, the Cook Islands and Vanuatu (Phase 1), and it will also be used to, b) re-assess wellbeing again in each country six months after tourists have returned (Phase 2). 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 targeted countries and communities that had, prior to COVID-19, relied heavily on tourism for local jobs and revenue (see Table 2), enabling us to compare their response to a lack of tourists in terms of wellbeing. This article focuses on Phase 1 of the survey, and the qualitative results, with some limited quantitative analysis.

Table 2. Comparison of case study countries in the Pacific

	Population	Visitor arrivals	Direct tourism employment	Tourism receipts USD	Tourism revenue (% of GDP)
Fiji	883,000	870,309	41,338	\$931M	38.90%
Samoa	196,000	167,651	5,158	\$248M	30.42%
Vanuatu	293,000	115,634	15,000	\$281M	45.90%
Cook Islands	18,000	168,760	2,386	\$253M	86.99%

Note. All data is sourced from South Pacific Tourism Organisation (2018).

In designing the survey we sought advice from specialists in Pacific wellbeing and/or measurement of wellbeing, namely: Dr Sam Manuela from Pacific Studies and Psychology at University of Auckland, Associate Professor Natasha Tassell-Matamua from Indigenous Psychology at Massey University, and Dr Dean Stronge and Geoff Kaine from Manaaki Whenua.

6.2 Measures

Blocks of questions were asked about each of the six dimensions of wellbeing as represented by *The Advanced Frangipani Framework*. Responses to these blocks of Likert scale questions are detailed in a separate article on quantitative aspects of this survey. The brief quantitative analysis in this paper details responses to one question asked in relation to each of the 6 wellbeings, e.g., “During the period of COVID-19, my mental wellbeing has improved”, which could be scored from ‘strongly disagree’ through to ‘strongly agree’. The qualitative aspect, which is the key analyses in this paper, included a general open-ended question for each wellbeing dimension. For example, “Overall, has the 2020-2021 period of the pandemic had positive and/or negative impacts on your **physical** wellbeing? Please explain.”.

6.3 Working with RAs (research associates)

The unyielding nature of COVID-19 sparked the introduction of travel bans that prevented the primary researchers from partaking in field work, forcing them to find alternative ways of conducting research. This study worked around restrictions by employing Research Associates (RAs) in four Pacific island countries. In Cook Islands, a *palagi* (non-local) volunteer also assisted the RA with data collection. The RAs were approached based on their previous research experience in this field, or 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 the study communities broke down cross cultural barriers; it also helped 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.

6.4 Working in the Pacific

To cater to its target audience, this research abides by the Pacific Research Principles as laid out by the Pacific Research and Policy Centre at Massey University (Massey University Pacific

Research and Policy Centre, 2017). Respect for relationships influenced the choice of RAs, who were at the frontline talking to research participants in our target countries and who needed to follow appropriate cultural protocols. The researchers saw participants as capable ‘actors’ who can respond to the economic downturn rather than framing them as ‘victims’ of the pandemic, demonstrating celebration of cultural knowledge. A summary of the findings of the research was made available to those who wanted this. Additionally, RAs were funded to contribute appropriately to the participants and their communities, whether this was by giving individuals vouchers or providing refreshments for them. To both use the research to do good, and disseminate the research widely, the key researchers established a website onto which the summary report, short articles, videos and media items relating to the research project are regularly being uploaded: thus the community members, business people and governments of the countries concerned can access the findings quickly, rather than having to wait for journal articles to be published (Movono & Scheyvens, 2023).

6.5 Administration of the survey

The survey was piloted in Fiji, Samoa and the Cook Islands, but not in Vanuatu as our RA was not available at that time. During the piloting stage, RAs provided the team with feedback on the survey from both their perspective as researchers and from the subjects of the survey. The feedback concerned whether questions were understandable across language barriers, if people believed anything was missing, and any other comments they had on the survey. Based on this the researchers changed the wording where appropriate to better suit the target audience. This process strengthened the validity of the survey in its subject population.

Next, the RAs selected participants using their own judgment, based on their current connections to the tourism sector and Pacific communities. They were asked to survey 50 people, 25 from each of two tourism-dependent communities in their respective countries, and 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 people from the demographic groups across tourism-dependent communities. 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. In cases where the participant was not comfortable using English, our local RAs would translate whole questions, or specific words, for the participants to aid their understanding. 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, and 5 had to be excluded, so 209 valid responses were recorded (Table 3). 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.

Table 3. *Survey respondents' gender and country*

	Females	Males	Other/Prefer not to say	Total
Fiji	26	22	2	50
Samoa	32	25	0	57
Vanuatu	22	28	0	50
Cook Islands	30	22	0	52
Total	110	97	2	209

6.6 Data analysis

Data was collected using Qualtrics survey software. Qualitative data, drawn upon in this article, was analysed on Qualtrics and Word. Quantitative analysis was conducted in SPSS and Excel; this is largely reported on elsewhere (Scheyvens et al., 2022). A 6 step thematic content analysis of the open-ended questions followed the structure laid out by Braun and Clarke (2006). Inductive reasoning was used to guide this analysis. This started with familiarisation with the survey data through semi-manual transcription between Qualtrics and Word. Next, the researchers went through the responses to amend any errors, and created a list of ideas about patterns in the data. This process was aided by considering what dimension of wellbeing the data was responding to, alongside the broader literature around wellbeing and Pacific and Western models. From here, groups of patterns became themes which were identified in relation to each wellbeing dimension. These were reviewed to ensure their validity and uniqueness. In finish, the themes were grouped under one of the 6 overarching wellbeing dimensions.

6.7 Researcher positionality and ethical issues

Of the primary scholars partaking in this research, one is Fijian, with 10 years' experience teaching and researching tourism in the Pacific, and the other is *palagi* (of European origins) with 25 years' experience in the field of tourism research. Their work centres around sustainable development and tourism, particularly in small island states in the Pacific. Both researchers consider themselves concerned about social and environmental justice, so were concerned about wellbeing of people in the Pacific when COVID disrupted their lives and took away their main source of income.

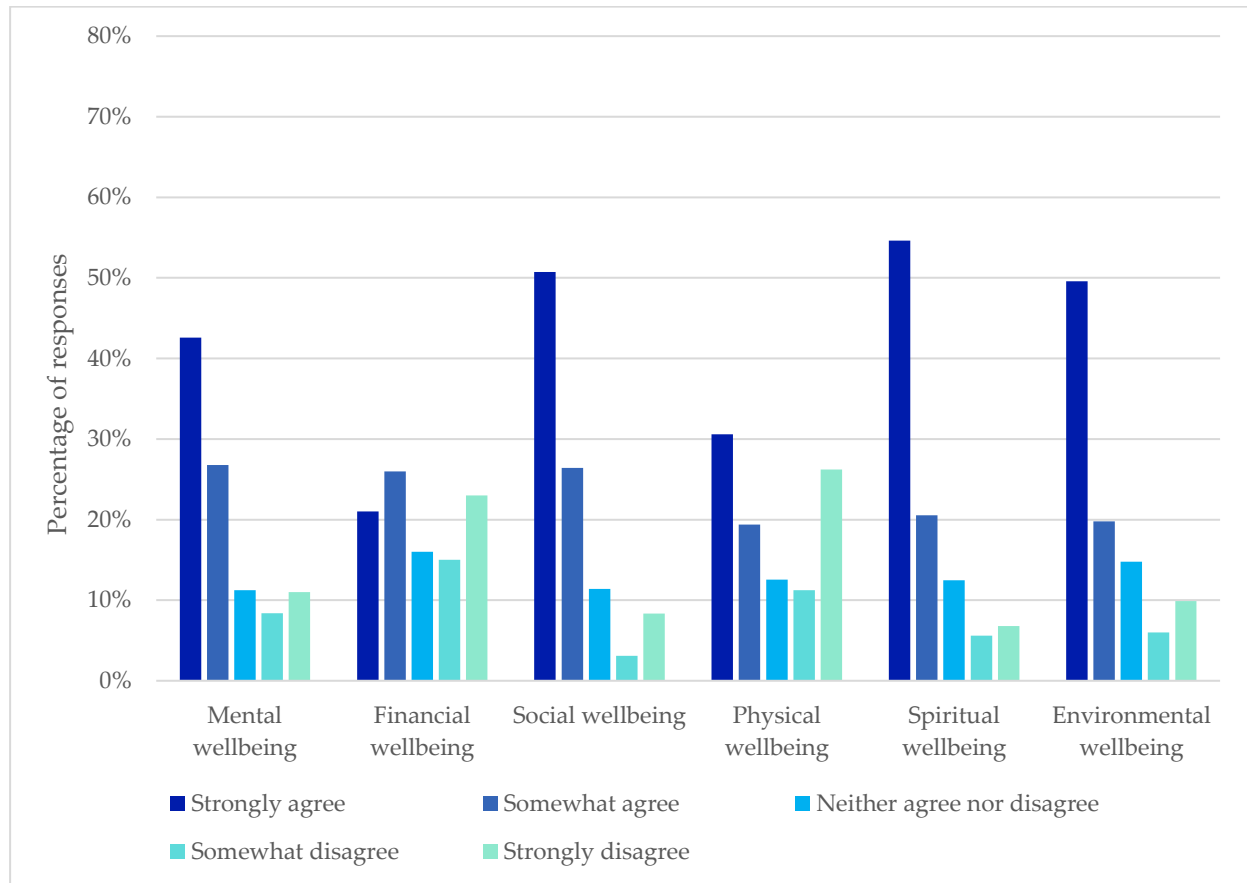
This research is committed to following the Human Ethics Code of Massey University; the key components being subject autonomy, non-maleficence, beneficence, and justice. Following a peer review exercise aligned to these principles, a low risk ethics notification was lodged with the university.

7. Findings: Impacts on wellbeing

This section draws on the survey data conducted in Phase 1 (October 2021-February 2022). Figure 2 summarises results of the 2021/2 survey, based on one Likert question asked in relation to improvements each of the 6 wellbeings. Figure 2 shows that over 50 percent of respondents 'strongly agreed' that their social and spiritual wellbeing had improved, and over 75 percent of respondents 'agreed' or 'strongly agreed' these wellbeings had improved. Meanwhile, around 70 percent of people 'agreed' or 'strongly agreed' that their mental and their environmental wellbeing had improved. Around half of participants felt their physical wellbeing had

‘improved’ or ‘strongly improved’, but another 38 percent perceived declines in physical wellbeing. Finally, the most mixed results came through for financial wellbeing, which was to be expected given the harsh economic impacts of the border closures and cessation of international tourism.

Figure 2. Wellbeing improvements in four Pacific Island countries during the COVID-19 pandemic



Note. 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.

Please note that for the purposes of this article we are focusing on general trends in wellbeing, rather than comparing country-level data. Country-level comparisons, and examples of cluster analyses, can be found elsewhere; see Scheyvens et al. (2022).

7.1 Financial wellbeing

As anticipated, people experienced declines in their financial wellbeing during border closures. People expressed that they struggled day to day with finances due to COVID-19 and associated travel bans, loss of jobs in the resort sector, and related businesses (e.g. taxis, handicraft stalls) closing down or operating on skeleton staff:

“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]

Of the four countries, only the Cook Islands government provided wage subsidies, but people in other places were sometimes supported by remittances from family based overseas.

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. Young people also found it hard to live without a cash income, and a Fijian respondent noted instances whereby this led to an increase in theft and related crimes. A practical example of a coping strategy was that some households 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. 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]

Despite this, the responses about financial wellbeing were less negative overall compared to the results of our 2020 survey (Scheyvens et al., 2022). On the whole, it seems that many people have found ways of successfully adapting their livelihoods over the past two years, so they feel that financially they are coping. For example, people started growing and harvesting more food from the land and sea, thus reducing their household expenditure and sometimes providing a source of income. This was achievable for many people because they could return to customary land at their home village/town/area. This form of urban-rural migration observed during COVID allowed many people without income to survive:

“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]

Bartering goods and services became common practice, and people also found supplementary ways of earning an income e.g. selling plants, vegetables, or cooked foods at roadside stalls. Across the Pacific, bartering movements were organised online, such as ‘Barter for a better Fiji’, a Facebook group with 100,000 members who traded goods during border closures. 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:

“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” [Male, ex tourism employee, Fiji, 2021- Survey]

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

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

7.2 Mental wellbeing

Mental wellbeing was commonly reported in a positive light among those surveyed, which was somewhat surprising considering the multiple challenges and that COVID-19 has introduced. Even though the financial pressures were a real burden at times, many people expressed that they flourished during the pandemic period due to having more time to relax, care for themselves, and more time for family and friends:

“[My mental wellbeing was] positive due to more balance and reflection” [Female, small 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] .

Others benefitted from the chance to reflect on their lives, reassess their priorities, and try new ventures. The financial security that came with running a small business seemed to empower people, and made them feel as if they could withstand the challenges of the pandemic:

“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]

Some reflected on the financial toll, and how social isolation (due to border closures or fewer community events, from church services to sports competitions), and health concerns (including the risk of contracting COVID-19), 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. People were willing to sacrifice aspects of their own wellbeing to support those around them:

“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]

Although border closures took a toll on some of our participants’ mental wellbeing, we were surprised at how many people showed resilience and said they felt hopeful despite the challenges.

7.3 Social wellbeing

Respondents reported high social wellbeing across our dataset. Social distancing restrictions meant that people were forced to socialise mostly within their families and communities, which resulted in more intergenerational interactions, family bonding and friendships rekindled. Lots of people reported really treasuring this time and seeing it as a positive aspect of the pandemic:

“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, including how to cultivate crops, fish beyond the reef, weave traditional mats or print designs onto tapa/masi cloth. Equally, those teaching traditional skills valued 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 feeling closer, communities bonded thanks to so much time shared together, and also due to church and cultural group leaders encouraging people to care for those who were more vulnerable. People expressed a new sense of cooperation, love, charity and connectedness that grew within their communities:

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

Some people adapted well to new ways of communication, such as making the most of connecting with others online, but conversely, for others this took them away from face-to-face interactions:

“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]

On the other hand, people struggled with restrictions on social interaction, particularly strict rules around the size of groups that could gather which in turn disrupted church services and cultural gatherings, including funerals and weddings. Elderly cohorts, for example, expressed that they were more negatively impacted by reduced social contact than middle-aged participants, particularly through the limits on church gatherings. Social distancing is contrary to cultural norms in the Pacific. The lack of physical contact with people outside of their inner circles caused some distress:

“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]

Overall, however, the positive impacts on social wellbeing outweighed the negatives for many of the respondents. COVID gave them the chance to reconnect with their extended families, their neighbours and their culture, in a way that is not normally possible when life centres around earning an income from visiting tourists.

7.4 Physical wellbeing

Responses about physical wellbeing showed mixed results across this dataset. On the positive side, lockdowns 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 in home gardens or on plantations was an abundance of healthy food accessible to all. People reported having healthier diets, especially in relation to the large amount of processed foods that they ended up eating when working long shifts at a hotel or resort:

“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].

Despite the happy majority, some people felt more worried about their health due to the threat of COVID-19 and inability to access health services offshore. Some also felt 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].

Overall, many of the 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.

7.5 Spiritual wellbeing

As noted earlier, spiritual wellbeing was an addition to our 2021/2 survey, which was not specifically considered in 2020. Overall, respondents noted that their spiritual wellbeing was very good during COVID-19. 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:

“[There is] No greater help than having a close relationship with God right now” [Government employee, Samoa, 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:

“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]

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 did not stop people from participating, or organising regular family-based devotions:

“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, however, that they had not attended church because there was no money to contribute to the church. This appears to be the case particularly for denominations where tithing is expected, which sometimes lead congregation members to make judgements about those who could not afford their usual contributions.

Overall, however, 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.

7.6 Environmental wellbeing

Environmental wellbeing was the other new wellbeing considered in the 2021/22 survey. Responses indicated good environmental wellbeing on the whole during the period of COVID-19. 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, ex tourism employee, Fiji, 2021 - Survey]

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]

Some people 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, ex tourism employee, Vanuatu, 2022 - Survey]

There were, however, some downsides to some of the environmental practices taking effect in response to COVID-19. Reportedly there negative environmental impacts due to heavier carrying capacity from the unexpected increase in population of some villages which people returned to when they lost their jobs in town:

“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 shown by all. However, there were clear indications of pressures on the environment due to increases in people living in specific locations where there was then heavy use of natural resources.

8. Discussion and conclusions

As noted in the introduction, the aims of this article were twofold. The first was to explain how and why we developed a six-dimensional framework of wellbeing. In building our wellbeing framework, we discussed how analysis of other Indigenous and Pacific wellbeing models, as well as our earlier data collected in 2020, led us to include a ‘spirituality’ dimension (Grieves, 2008; Tu’itupou et al., 2020). We then also chose to add an ‘environmental’ dimension because of the need to communicate how the health of the environment and access to land and other natural resources has an impact on people’s wellbeing, and how the wider environmental context impacts on Pacific peoples (Pulotu-Endemann, 2001; Shakespeare et al., 2021). The survey data demonstrate the value of these two more novel dimensions of the Advanced Frangipani Framework of Wellbeing. These add to our understanding by acknowledging the entrenched and interrelated nature of relationships prevalent within Pacific societies, and they show that spiritual beliefs and connections with the environment have been a cornerstone of wellbeing for many people in the region. Overall, we have shown that how wellbeing is measured in different cultural contexts matters, and that in our context, the islands of the South Pacific, it was vital to include dimensions like spiritual and environmental wellbeing.

The framework we have utilised also supports other Indigenous models which show it is

valuable to connect individual wellbeing to communal social contexts and ecological systems (Durie, 1985; Kupa, 2009; Summers et al., 2012). Essentially, individuals are intrinsically embedded in an environment rooted in their unique context, place, and time whilst also influenced by external systems, all of which can impact on people's wellbeing (Tanguay, 2015; Tu'itupou et al., 2020).

The second aim was to discuss findings of a survey based around those six dimensions of wellbeing, targeting people living in tourism-dependent communities across selected Pacific countries. The *Advanced Frangipani Framework of Wellbeing* has underpinned this research, showing the relevance of every one of the six dimensions to people's self-assessment of their lives during a particularly disruptive period of history: the global coronavirus pandemic of 2020-22. What may surprise many is that instead of wallowing in their misfortune, Pacific people pivoted and were able to cope without their main economic lifeline (Movono et al., 2022). Past chronicles of the lives of Pacific people, including their voyaging across the ocean for thousands of years, indicates that they are naturally adaptive. It is compelling to see how these traits and other resources for resilience were drawn upon during the pandemic to reorganise themselves – not just to survive, but to elevate various levels of wellbeing.

The qualitative methods we used elucidated how social and cultural elements influenced wellbeing, helping people to cope, but also helping some to thrive. These were reinforced by the quantitative findings presented, showing that high percentages of the respondents felt improvements across a range of wellbeings during the pandemic. Essentially, the negative effects of the pandemic were buffered by some core resources which stayed intact during border closures – namely, their families, and the *vanua*. Thus, while border closures led to a drop in financial well-being for most people associated with the tourism sector, through our survey many asserted there had been improvements in their social, mental, environmental and spiritual wellbeing. People expressed that they were content with their physical wellbeing as well. This novel and rather unexpected finding provides insights into how culture and customary systems provide crucial structural support for communal wellbeing during challenging times. Enhanced wellbeing was associated with spending more time with family and other kin, reconnecting with cultural activities and the natural environment, and eating homegrown foods. Essentially, in the face of no international tourists for most of the 2020-2021 period, Pacific peoples sought out a range of social, cultural and natural capitals (Berkes & Folke, 1992), diversified their activities, and improved food and social systems (Leweniqila & Vunibola, 2020). These adaptive patterns and coping strategies are the building blocks of resilience (Nalau et al., 2018). In essence, this study of Pacific wellbeing during the pandemic has shown that when people have access to a range of cultural and natural resources, they can successfully adapt even in the face of significant shocks and financial challenges.

The findings are reflective of a fluid conceptualisation of wellbeing, wherein it is multidimensional, holistic and relational. This was shown in a recent study of New Zealanders which found that, in relation to COVID-19 lockdowns, individuals talked about their personal wellbeing in the context of the broader experiences of wellbeing in their households and communities, as dictated by general societal conditions (Officer et al., 2022). Thus, it is hard to distinguish one wellbeing from another as all are inter-related across different levels of society. This is, similarly, represented by the overlapping petals of the frangipani flower in our framework, and by the fact that the wellbeing of individuals (the frangipani flowers) is influenced by the broader environment within which the frangipani tree is situated, representing nature, land, time and external forces. For example, when many Pacific peoples reflected on the benefits of going back to their ancestral land for their wellbeing (Movono et al., 2022), this was mentioned

across many of the dimensions of wellbeing, including how it supported social, physical, mental, spiritual and environmental domains. Another implication of this is that, rather than governments taking the Westernised approach of focusing on improving the wellbeing of individuals, it might be more important to create conditions in which society as a whole can thrive (Shakespeare et al., 2021).

Overall, our results infer that tourism-driven income, although important, is not everything for Pacific peoples. Beyond financial wellbeing there are other wellbeings which are significant to them, and this will undoubtedly be the case for people servicing the tourism sector in many other parts of the world.

Conflict of interest statement

The authors report no conflicts of interest.

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