

Article

Spirituality and Sustainable Development: A Systematic Word Frequency Analysis and an Agenda for Research in Pacific Island Countries

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Abstract: While different in emphasis, spirituality and sustainable development are intertwined concepts that cannot be meaningfully discussed in isolation from each other. This is especially pertinent in Pacific Island countries that are characterised by both high degrees of vulnerability to climate change and high degrees of religious engagement. There is a paucity of research that examines the relationship between spirituality and sustainable development in contemporary human development discourse. To address this gap in the literature, this research employs an inductive and exploratory methodological approach to the study of major development organisations in Australia. It investigates what significance contemporary NGOs ascribe to matters of spirituality in the design and implementation of their community aid and development programming in the Pacific and beyond. To achieve its goal, the study conducts a systematic term frequency analysis in the annual reports of government-funded and independently funded NGOs, both faith-based and secular. It extends previous research by focusing expressly on the intersectionality of sustainable development and spirituality as a fertile space for interdisciplinary inquiry. The findings link development policy and practice more closely to the needs and worldviews of Pacific peoples. A better understanding of the spirituality–sustainability nexus will enable more effective, sustainable, equitable, ethical, and culturally acceptable development programming. Crucially, integrated approaches promise to make ongoing community development programmes and adaptation responses to climate-driven environmental change more effective and sustainable. Finally, it is an important aim of this study to conceptualise various opportunities for future research, thus laying the foundation for an important emergent research agenda.

Keywords: spirituality; sustainable development; Australia; Pacific; indigenous; systematic keyword research; word frequency analysis; future research agenda

1. Introduction

Most development programming in the Pacific region has overwhelmingly privileged “outsider” orientations that uncritically perpetuate scientific and technocratic perspectives

that contrast sharply with the faith-informed worldviews and experiences of local island communities. In consequence, many development and climate change adaptation initiatives have not been sustainable, having been guided by external agendas and funded by foreign donors [1,2]. Set against this background, the time is ripe to investigate the interplay between spirituality and sustainability so that community development programmes and adaptation responses to climate-driven environmental change can become more effective and enduring [3,4]. More specifically, a better alignment between spirituality and sustainability can expand the limits of climate change adaptation in the Pacific Islands and overcome any possibility of maladaptation [5–7].

This research aims to investigate the narrative associated with the delivery of aid from the perspective of its NGO providers and, using their official documentation, to what extent this process acknowledges the nexus between the spirituality and environmental sustainability of the recipients. The framing of this research is around the language used in the formal documents when describing the partnerships and relationships between aid providers and aid recipients, the language associated with the aid projects, their stated explanations and objectives, and their results. With many recipient countries previously being colonies of Western countries, the precise NGO reporting language is critical to ensure that colonial-era injustices and inequities are not perpetuated [8].

The scope of this research is limited to aid delivered to Pacific Island countries, as this region receives 48% of all Australian overseas development aid (ODA) funding (<https://www.dfat.gov.au/sites/default/files/pbs-2020-21-dfat-aid-budget-summary.pdf>, accessed on 22 December 2022), and where spirituality is the foundation to cultural beliefs and practices [9–11]. In 2020–2021, the Pacific Island countries receiving the highest ODA funding were Papua New Guinea (AUD 491 m), the Solomon Islands (AUD 103 m), Vanuatu (AUD 46 m), and Fiji (AUD 40 m), equating to per capita amounts of AUD 54, AUD 141, AUD 153, and AUD 45, respectively (based on SPC population data for the year 2021; <https://sdd.spc.int/indicators-stat>, accessed on 14 October 2022). The contribution of this paper is to identify to what extent the language of aid agencies acknowledges the spirituality of the receivers. In the literature, the linkages between spirituality and sustainability are not comprehensively addressed [12]. In addition, there is a contribution towards facilitating a better understanding of why many aid programmes and climate change adaptation initiatives fail, being predominantly initiated from “a scientific and technocratic worldview perspective, in which climate change is seen as a science-informed issue, rather than a faith-informed issue” [29, p. 293]. It is our hypothesis that some programmes and delivering agencies do not sufficiently apprehend the recipients’ spiritual and sustainability foundations, the theme of much recent research in the Pacific region [10,13,14].

This article is organised as follows. Next, we discuss our study’s conceptual basis and operational framework, including its intended contribution to this nascent field of investigation. We then present the study’s methodology. Thereafter, we present the results and discuss the key findings in light of the study’s stated aims and objectives. Our discussion also covers critical analyses in key areas and acknowledges limitations and opportunities for future quantitative and qualitative research. Finally, we conclude with a succinct synthesis of the study’s main contribution, which is to develop this field of investigation and articulate an emergent agenda for research in Pacific Island countries.

2. Social Context, Study Framework, and Intended Contribution

In 2020–2021, the Australian Government’s Department of Foreign Affairs and Trade (DFAT) (<https://www.dfat.gov.au/>, accessed on 22 December 2022) budgeted AUD 4 billion for overseas development aid (ODA), plus an additional AUD 328 million as a one-off budget item for COVID-19 response, vaccine access, and health security, with humanitarian disaster response and recovery being a separately budgeted item that year (<https://www.dfat.gov.au/about-us/corporate/portfolio-budget-statements/pbs-2020-21-dfat-budget-highlights>, accessed on 22 December 2022). Of the AUD 4 billion Asia-Pacific aid budget, AUD 2.2 billion was allocated to country and regional bilateral

aid, with the balance allocated to global programmes such as the United Nations and other government departments. In addition, there are NGOs involved in providing aid globally. Further to receiving DFAT funding, all NGOs involved in delivering aid programmes obtained significant contributions from non-DFAT sources through volunteered hours, donations, bequests, and other grants and funding opportunities.

The partnerships between DFAT and various NGOs build upon the developmental expertise and knowledge of local contexts held by NGOs in addition to having established rapport with recipient countries and communities [15]. DFAT's policy priorities when engaging with NGOs focus on economic development and governance, gender equality, agriculture and fisheries, education and health, and infrastructure with the overt aim of advancing Australia's national interests (<https://www.dfat.gov.au/aid/topics/investment-priorities>, accessed on 22 December 2022). Yet, an audit of the Australian government documentation conducted for this research revealed there is little acknowledgement of the worldviews of the citizens or communities in the aid-receiving countries or their connections to the natural environment and, most importantly, how this influences stakeholder uptake of foreign-funded interventions [16,17]. For, if the success of climate change projects is tied to an understanding of the interconnectedness between the people, their spirituality, the land, and the environment, then it follows that the effectiveness and sustainability of aid projects hinge on their adoption of holistic perspectives [18,19]. There is thus a tension between secular funders, who generally do not acknowledge the spirituality of the recipients, and the values and practices of the recipient populations that hold spiritually informed worldviews, especially in the Pacific [2,11]. Thus, there is an opportunity to leverage societal impact through research that better aligns worldview orientations and sustainable development processes and outcomes. This applied exploratory research aims to help build this nascent field of investigation.

3. Methodology

A total of 120 government and non-government organisations that provide humanitarian aid to Pacific nations were identified from the Australian-accredited non-government organisations funded by DFAT plus the Australian Council for International Development (ACID) membership list (non-DFAT funded). In deciding which specific NGOs to include in this research, we identified the countries they were operating in and deliberately selected only those NGOs that stated they were operating in the Pacific region. The list of identified countries included in our study is available in Table S1 (Supplementary Materials). As this paper is concerned with the intersection between spirituality and environmental sustainability, the main criterion for classifying the different organisations delivering aid was based on the foundational principles of the NGO agencies and whether they identify as faith-based or secular (non-faith-based). A further separation occurred between those organisations that are accredited through DFAT and those that receive no funding from the Australian government. It is important to distinguish groups based on the funding sources as DFAT-accredited NGOs must align with DFAT objectives and interests [15], while those without accreditation have more freedom to pursue unaligned objectives and possibly be more open about spiritual aspects that may be linked to the programmes. Using these two criteria, four groupings were created: (1) DFAT-funded/accredited faith-based NGOs, (2) DFAT-funded/accredited non-faith-based NGOs, (3) non-DFAT-funded/accredited faith-based NGOs, and (4) non-DFAT-funded/accredited non-faith-based NGOs. The research then selected ten organisations from each category, forty in total. Selection was based on the 'highest revenue' in each group. Table S2 (Supplementary Materials) provides a summary of the organisations selected, funding sources, percentage of income sourced from DFAT, and the year to which data refer.

As an exploratory study, quantitative content analysis was undertaken on the most recent annual report (2018–2020) available for each organisation performing a three-step coding process (elaborated below). Annual reports are considered to be a reliable source of data [20] because:

1. They address the government requirement that all registered Australian charities fulfil for purposes of government department accountability (Australian Charities and Not-for-profits Commission Act 2012);
2. They are audited by a qualified entity in accordance with Australian Government requirements (Australian Charities and Not-for-profits Commission Act 2012);
3. They address a growing global emphasis on corporate governance and disclosure norms;
4. They may facilitate improvements in the quality of textual narratives in corporate reporting [21];
5. They are publicly available documents and therefore readily accessible.

In addition, annual reports are used as a mechanism to signal what is important when engaging various internal and external stakeholders [22,23] and for impression management purposes [21,24]. Examining annual reports provides an opportunity for collecting detailed data that classify text units into categories [25].

Term frequency analysis (TFA) was initiated using a three-step process. In Step 1, a keyword search was prepared using meaningful terms related to the research aims and question, for example spirit*, sustainab*, and econom*. As is common in keyword research, the asterisk (*) symbol was used as a wildcard command to broaden the search for words that commence with the same letters. Inter-coder reliability (ICR) was established with two coders independently reading eight reports, two from each group, to identify keywords that described any spiritual or sustainable phrasing within the narrative [26]. The kappa index was not checked, which is appropriate for an exploratory study and follows the literary precedents of other similar word frequency research [27–29]. The final keywords to code all the reports were identified as spirit*, relig*, Indig*, Aborig*, faith, church, God, econom*, develop*, sustain*, justice, partner, social, and communit*. As in other similar word frequency research, term frequency analysis (TFA) was undertaken in tandem with keyword-in-context analysis (KWIC) [28]. This process ensured that only appropriate terms were included in the analysis [30]. More specifically, irrelevant words or groups of words were omitted from the final search results, including the terms faithful, social media, and names or titles such as Churchill, Godfrey, and Honourable Justice. Thus, the four themes of religion, economic/development, sustainability, and social/community were foregrounded. Table S3 provides the list of keyword search terms (Supplementary Materials).

Step 2 involved quantitative data collection. Following other similar keyword research (e.g., [29]), the initial process involved counting the occurrences of key terms within the annual reports. To obtain the data, Adobe Acrobat PRO DC [31] was used to carry out an ‘Advanced Search’, querying each term as ‘whole words only’ within each of the 40 Portable Document Format (pdf) annual reports. Following this, all occurrences were collated, checked for accuracy, and then analysed. The software provided the capacity to exclude the unwanted terms identified in Step 1 to reduce the potential for skewed results. Two annual reports (Marist Mission Centre and Door of Hope Australia Inc) required optical character recognition (OCR) conversion to render the text image files suitable for keyword searching.

In Step 3, data analysis was undertaken within and across the four main NGO categories. Each category lists ten NGOs and for each organisation queried the values for ‘Report page count’, ‘Report word count’, and ‘Total income (\$)’ (Table S4; Supplementary Materials). Data analysis involved descriptive statistics and the Kruskal–Wallis test [32] (Table S4 and Figures 1–5). More specifically, data analysis involved the following steps:

First, since we had small sample sizes ($n = 10$, for each group per category), determining the distribution of the four groups of NGOs was important for choosing an appropriate statistical method. Outliers were also present. Therefore, a Shapiro–Wilk test was performed and showed that the distribution of all four NGO groups departed significantly from normality (W for Accredited faith-based = 0.87, p -value < 0.01, W for Accredited non-faith-based = 0.882, p -value < 0.01, W for Non-accredited faith-based = 0.77, p -value < 0.01, and W for Non-accredited non-faith-based = 0.795, p -value < 0.01). Based

on this outcome indicating non-normality, the nonparametric Kruskal–Wallis test was used to examine the differences between the themes per NGO category [32,33].

Second, the Mann–Whitney post hoc nonparametric test was performed to test where the significant differences may be between themes for NGOs. When performing the ad hoc test, the Bonferroni correction was taken into account with 6 tests performed; therefore, a critical value of 0.008 was considered.

Third, an average word count was calculated across each theme for each NGO. For example, an average of 5 for the theme “Religion” would suggest that 5 words related to religion have appeared in the annual report.

Finally, given the widespread prevalence of Christianity in the Pacific, it made sense to classify the six keywords Spirit*, Relig*, Indig*, Aborig*, Faith/s, and Church/es, God under the overarching category of Religion as this terminology is both prevalent in the literature and locally used and understood [2,10]. Although some conceptual research distinguishes between ‘religion’ and ‘spirituality’ (e.g., [34]), this study intentionally accommodated a mutually inclusive conceptual approach. While a clear-cut differentiation may seem more plausible in some Western countries, with sentiments sometimes noted that “traditional religion has failed to meet the spiritual needs of many people” (pp. 15–16), a similar distinction appears tenuous in the Pacific. Additionally, in reference to religion and spirituality, Zawawi and Wahab [35] concluded that “the main difference between the two is that religion has rules and specific beliefs to follow and involves the idea of the sacred, while spirituality relates to the philosophy of life, attitudes and values” (Notwithstanding, in their opinion, spirituality may also be found in religion (pp. 399–400). In view of the available literature, Pacific Island context, and the broad regional prevalence of Christianity (Section 2), where—with the exception of Fiji—most aid recipient nations are overwhelmingly Christian (commonly holding Christianity in tandem with customary beliefs), it made the most sense to consider ‘religiosity’ and ‘spirituality’ as conceptually synonymous and report the corresponding keywords under the overarching category of Religion.

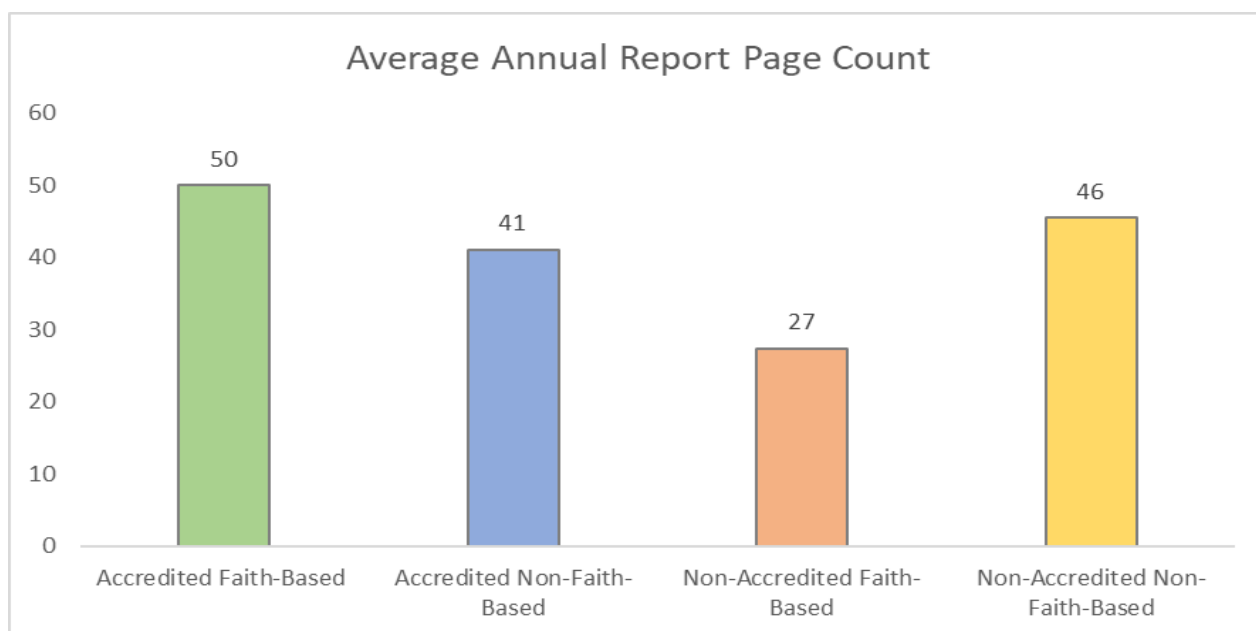


Figure 1. Average annual report page count according to NGO category.

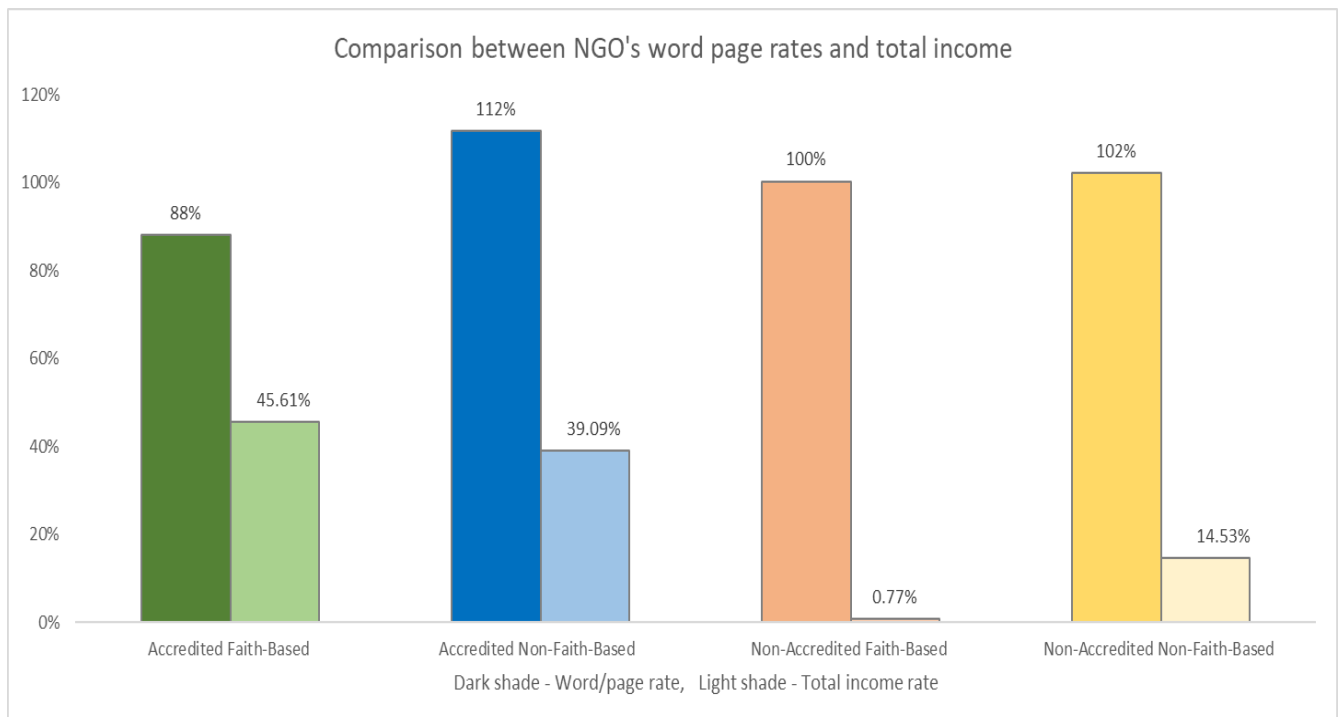


Figure 2. Comparison between NGO word/page rates and total income.

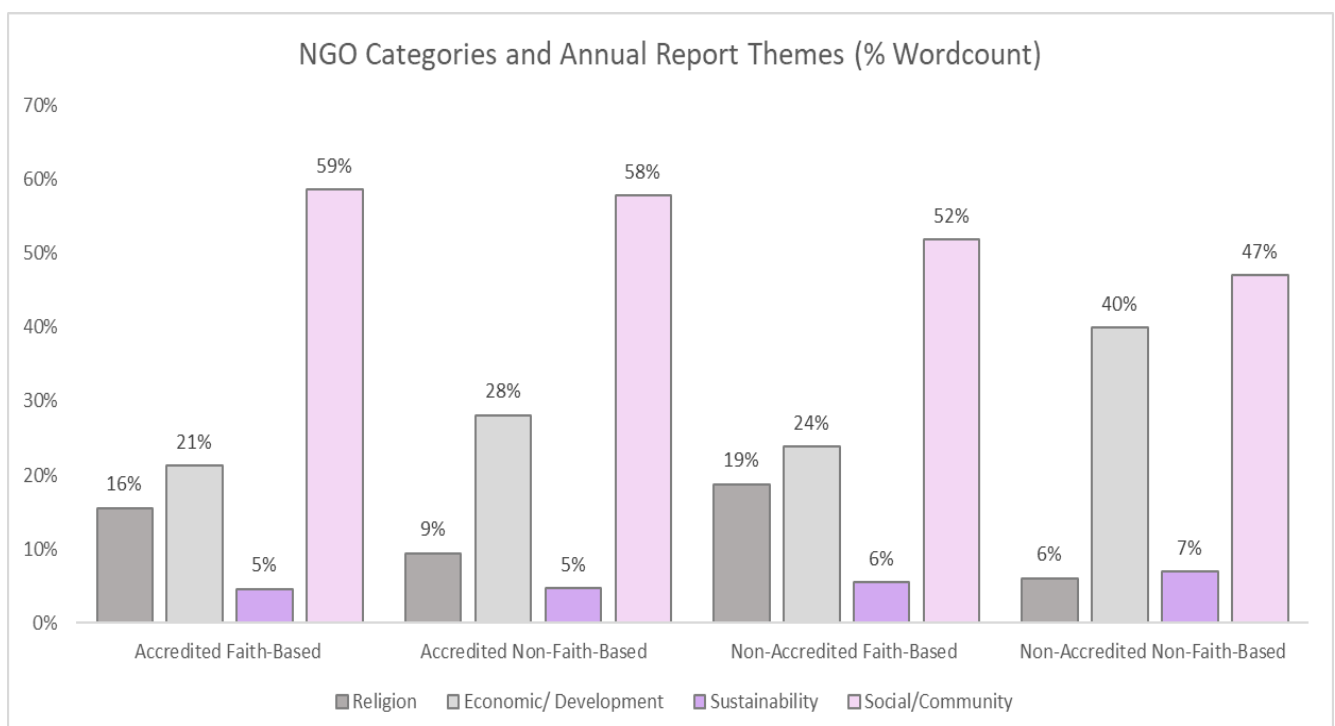


Figure 3. NGO categories and annual report themes (% word count).

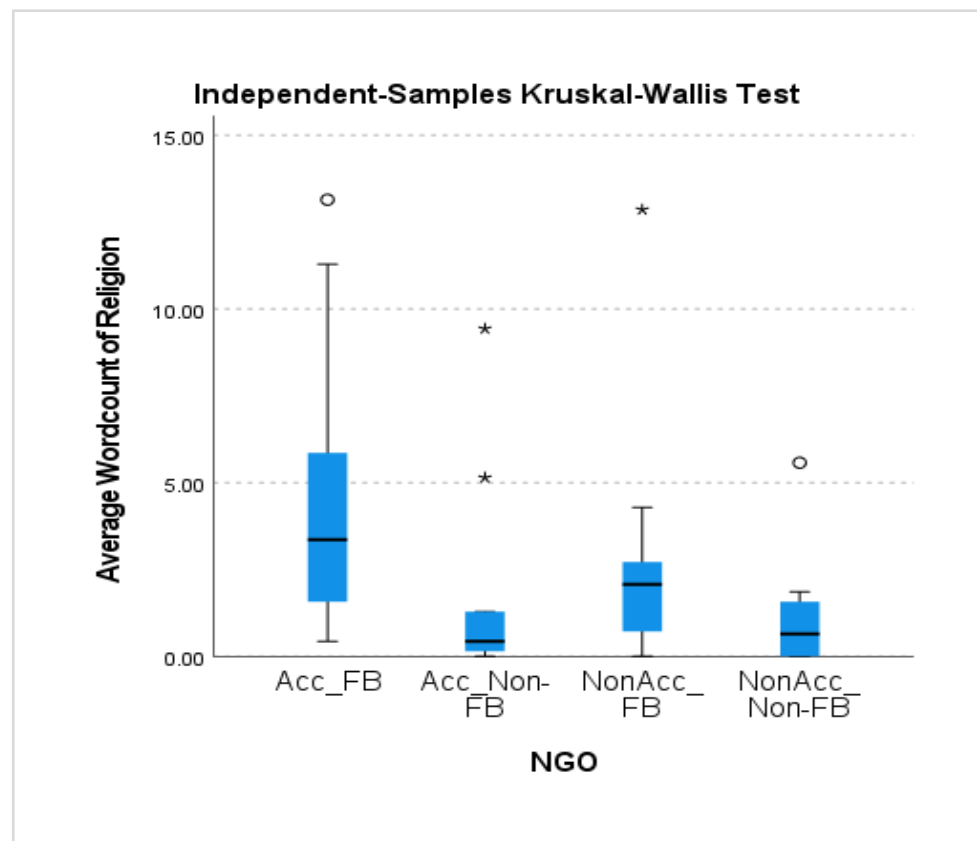


Figure 4. Independent samples Kruskal–Wallis test; figure by SPSS (○ = outlier; * = far outlier).

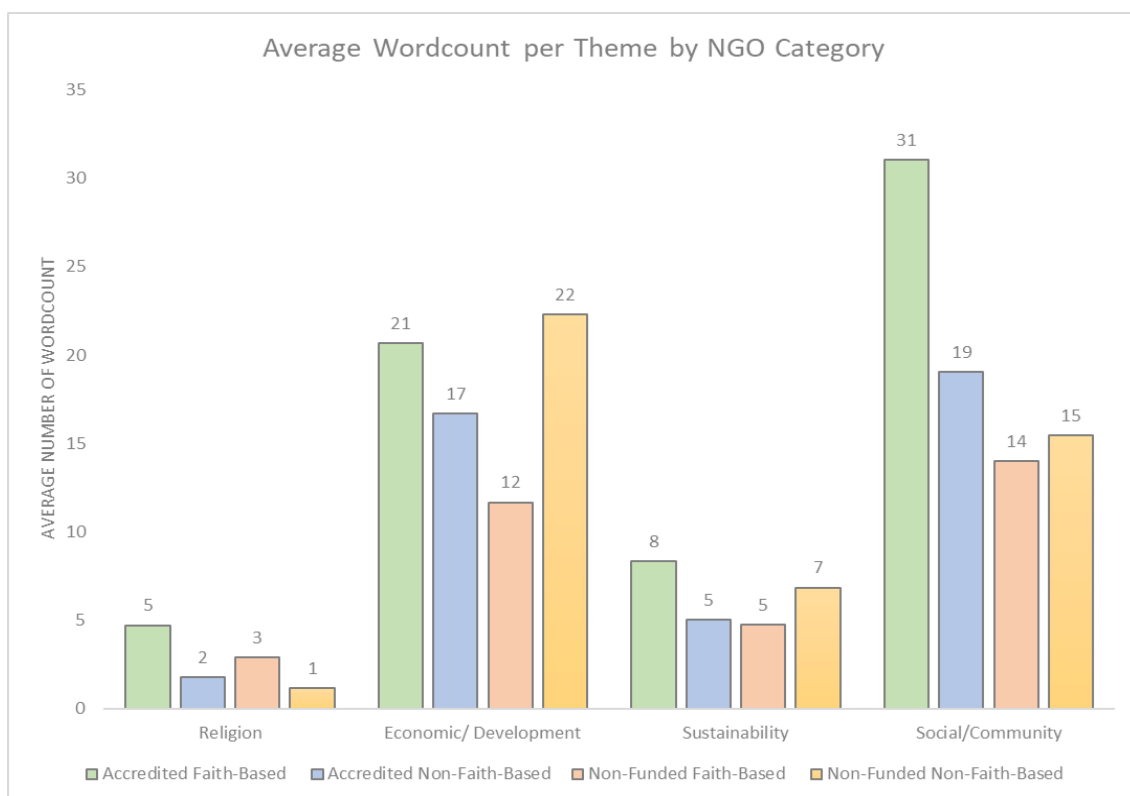


Figure 5. Average word count per theme by NGO category.

4. Results and Discussion

Table S4 (Supplementary Materials) reflects the raw data according to the four NGO categories and the keyword search categories and subcategories elaborated in Section 3 and denoted in Table S3 (Supplementary Materials).

4.1. Report Lengths

The results (Figure 1) show that DFAT-funded NGOs produced annual reports with the biggest average page count; non-accredited faith-based NGOs produced annual reports with the smallest average page count. This finding raises several questions, including about the use of images in annual reports that may have inflated page count and whether DFAT-funded faith-based NGOs feel accountable towards constituents who they deem impressionable by more extensive reporting and/or more images. Inversely, it raises questions about whether non-DFAT-funded faith-based organisations might feel somewhat more financially frugal in funding the production of annual reports and/or more constrained in their spending.

To better understand the correlations, we then calculated the scores for word count per page for the different annual reports. Next, we compared and rated them according to the total words per page. Therefore, if an annual report scored above the total word/page rating, it received a score above 100, and if not, below 100. We also compared the organisations by income and total income. Expressed as a share of total income, accredited faith-based NGOs received the most funding (45.6%), followed by accredited non-faith-based NGOs (39.1%), non-accredited non-faith-based NGOs (14.5%), and non-accredited faith-based NGOs (0.8%) (Figure 2). Interestingly, the NGOs with the highest income, accredited faith-based NGOs, had the lowest score in words per page (88%); this result suggests that these organisations used more graphic illustrations or images in their annual reporting while, at the same time, publishing reports with the most pages overall (Figure 1). The accredited non-faith-based NGOs had the highest score in terms of words per page (112%) and the second-highest share of income (Figure 2).

Stated simply, data analysis suggests that DFAT-accredited faith-based NGOs had the highest share of income and lowest average word count per page; at the other end, non-accredited NGOs had the lowest share of income and yet significantly exceeded the word/page rate of accredited faith-based NGOs. This inverse relationship between the share of funding and words per page may constitute an area worthy of closer examination in future research. Moreover, accredited faith-based NGOs displayed the biggest total 'Report word count' (500 pp. total; = avg. 50 pp. per annual report), and the NGO category non-accredited faith-based NGOs reflected the smallest total 'Report word count' (274 pp. total; = avg. 27.4 pp. per annual report) (Table S4; Supplementary Materials). Stated simply, NGOs with the biggest share of total income produced annual reports with the most pages (50 pp. avg.), and NGOs with the smallest share of total income produced annual reports with the fewest pages (27.4 pp. avg.). It is acknowledged here that this need not necessarily be seen in a negative or critical light. Organisations receiving large amounts of funding may naturally need to present more data and may therefore choose to summarise findings in the form of illustrations, tables, figures, and/or diagrams. It would be interesting to examine more closely why well-monetised accredited faith-based NGOs seemingly produced annual reports that were nearly double the size (in pages) compared to less well-resourced non-accredited faith-based NGOs (Figure 2).

4.2. Reporting Areas

We also compared the profiles of the different NGOs by categories (Religion, Economic/Development, Sustainability, Social/Community) relative to their annual report word count (Figure 3). Significant differences were found between the themes for each NGO category:

Accredited faith-based NGOs:

$$(H(3) = 22.605, p < 0.001)$$

Accredited non-faith-based NGOs:

$$(H(3) = 22.886, p < 0.001)$$

Non-accredited faith-based NGOs:

$$(H(3) = 12.096, p = 0.007)$$

Non-accredited non-faith-based NGOs:

$$(H(3) = 23.048, p < 0.001)$$

Most tests showed significant differences. The few nonsignificant differences were between Economic/Development and Social/Community for any NGO. Additionally, for both Non-accredited NGOs Economic Development and Sustainability showed no significant difference. Non-Accredited Non-Faith Based was the only significant difference between Religion and Sustainability. Accredited NGOs showed significant differences between Social/Community and Sustainability.

As can be seen (Figure 3), the findings are very different for each topic, therefore the null hypothesis was rejected when performing the Kruskal–Wallis test. The Social/Community topic was reported most often, followed by Economic/Development, Religion, and Sustainability. As anticipated, faith-based NGOs reported more on religion, while non-faith-based NGOs reported more on other topics. Even so, all groups reported on religion to a certain degree. We surmise that this may be linked to the fact that all NGOs are working in Pacific Island countries that are characterised by very high degrees of religious engagement [9–11].

As explained in Section 3, the Kruskal–Wallis test was again conducted to test for differences between NGOs for each theme. A significant difference was found between NGOs for Religion:

$$(H(3) = 9.260, p = 0.026).$$

No significant differences were found between NGO categories and the other themes:

$$\text{Economic/Development } (H(3) = 5.309, p = 0.151);$$

$$\text{Sustainability } (H(3) = 1.894, p = 0.595);$$

$$\text{Social/Community } (H(3) = 7.360, p = 0.061).$$

Figure 4 shows that for the Religion theme, the significant differences in the pairwise comparison test are between non-accredited non-faith-based NGOs and accredited faith-based NGOs ($H(3) = 13.650, p = 0.009$), and accredited non-faith-based NGOs and accredited faith-based NGOs.

It is perhaps relevant to mention that although average word count is significantly different for Religion, between those NGO groups mentioned above, the average word count is much higher for the other themes for all NGO groups, as can be seen in Figure 5.

The results show that across all dimensions and NGO categories, the Social/Community and Economic/Development dimensions were discussed the most, followed by Sustainability and Religion. Interestingly, the theme of Religion received the least attention in the annual reports (Figure 5). Although faith-based NGOs reported on Religion more than non-faith-based NGOs, overall, our interpretation is that reporting on spiritual themes was muted and perhaps, therefore, under-valued. This under-appreciation of the value of spiritual knowledge in tackling challenges such as poverty or climate change may be linked to these issues being perceived as inherently scientific and requiring technocratic solutions [1,36,37]. Notwithstanding, the reasons underlying the under-appreciation and

under-reporting of spirituality are diverse and nuanced and therefore represent fertile grounds for future empirical and longitudinal qualitative research.

While the themes of Social/Community and Economic/Development were conspicuously covered in the annual reports, it was surprising to us to note that issues of Sustainability were not more prominently featured, especially in view of the vulnerabilities of low-lying Pacific Island countries to the impacts of climate change, including in areas of sustainable food security and sea level rise, and the corresponding displacement (actual and anticipated) of coastal communities [38–40].

4.3. Critical Analysis: Limitations and Opportunities for Future Quantitative Research

Our exploratory word frequency assessment points to opportunities for future research. Capitalising on these will lead to a more nuanced understanding of the spirituality–sustainability nexus, thus enhancing both the policy and practice of sustainable development in the Pacific. This section notes pertinent research limitations and conceptualises them as opportunities for future quantitative inquiry, which is the stated aim of this research.

By organising NGOs into four categories and limiting the sampling to the top-ten NGOs by revenue in each category, this research was not comprehensive. Notwithstanding this, representing a combined total revenue of more than AUD 1.67 billion, the share of these forty organisations' aid budget (Table S2; Supplementary Materials) exceeds three-quarters of all annual Australian development funding dispensed (approximately 76%) in 2020, suggesting the findings are representative and reliable in broadly characterising contemporary trends. Furthermore, being limited to four search categories and a total of seventeen search terms (Table S3; Supplementary Materials), there are opportunities for future research to widen the keyword search scope.

By searching annual reports for the term 'sustainability', this study applied a generic lens to its word frequency analysis rather than a broader range of ideas and practices that people may link to ideas of 'sustainability'. Consequently, future studies could aim to verify and/or build on this research by querying the frequency of alternative words that may be associated with notions of sustainability, such as 'nature', 'oceans', 'climate', 'change', 'food', 'security', etc., and/or with notions of spirituality, such as 'sacred', 'worship', 'sanctity', 'home', etc.

The seventeen search terms arose from a systematic sampling process that followed intercoder reliability (ICR) practice [26] and addressed the research aims. Although the kappa index was not checked, which is acknowledged as a further limitation of this study, it is worth remembering that this study is exploratory in nature and follows the literary precedents of other similar word frequency research that also did not control for the kappa index [27–29].

Building on this research, future quantitative studies may undertake keyword research in other data sources (e.g., NGO websites or social media feeds), an approach that may offer alternative perspectives. Even so, it is worth noting that websites, Twitter, and other social media are more transient and succinct and therefore do not typically offer a similarly enduring 'development snapshot' as annual reports [28]. Furthermore, the reliability of annual reports as data sources is confirmed by both research precedent and by third-party accounting firms, which are typically contracted to oversee their production and release [20]. For these reasons, annual reports are useful data sources upon which the findings of this research can rest. On the other hand, the acknowledgement that annual reports are carefully scripted and audited to ensure that they meet the expectations of diverse stakeholders may mean that the language used in these reports is carefully scrutinised and may, therefore, not reflect all the nuances of NGO positionality in relation to spirituality in development. This may also apply to funders, who (depending on their ethos or values) may be intimidated by too overtly 'spiritual' or 'unspiritual' reporting language.

This keyword research was limited in scope to annual reports published in Australia and in the English language. Hence, there are opportunities to extend this type of research to other regions and languages. Rothstein et al. [41] argue that systematic keyword research

should not be restricted to reports published in the English language, given that publications “in languages other than English may have different results than those published in English” (p. 51). Indeed, the peer-reviewed literature reflects that voice and vernacular play a crucial role in respect of justice and Pacific development discourse. Future studies may build on the foundation laid by this keyword research, both in Oceania and in other aid-recipient countries of the majority world [1,42–44].

4.4. Critical Analysis: Limitations and Opportunities for Future Qualitative Research

Leaving behind the inherent limitations of quantitative research, going forward, there are fertile opportunities to monitor the continuing evolution of the spirituality–sustainability nexus in contemporary development discourse through both longitudinal studies and fine-grained qualitative research [30,45]. In this study, we conceptualise selected aspects of what we consider the emergent research agenda for studying sustainable development in Pacific Island countries.

Our quantitative content analysis has well-known limitations, including the “lack of a capacity to handle nuances, difficulty of providing a comprehensive list of words or phrases to be searched for, and a risk of focusing too much on frequencies to the exclusion of interpretation and meaning” [6, p. 290]. Accordingly, quantitative word frequency research is limited to first-level coding—in this case, frequency coding. In addition, “first level coding mainly uses . . . descriptive, low inference codes” [39, p. 174]. By extension, second and higher levels of coding “take the analysis of the data from a descriptive level to a conceptual or theoretical level [revealing] patterns, abstracting–conceptualising, interpreting” (p. 176). Therefore, although our quantitative frequency analysis yields some eye-opening insights about the presence or absence of specific discussion topics, it cannot offer insights into the significances and meanings attached to situations and understandings. This is a typical limitation of term frequency research (e.g., [28]) and may be illustrated in the following exemplary hypothetical text samples involving the term ‘churches’. Although the two phrases ‘our most significant partner institutions were churches’ and ‘churches were not included as distribution hubs to avoid community division’ are both identified in word frequency queries, they reveal contrasting perspectives about the relationship between spirituality and development practice. Therefore, although in-depth qualitative content analysis lies well beyond the scope of this exploratory term frequency study, it is acknowledged here as a fertile opportunity for fine-grained textual research using multi-level coding approaches [30,45,46].

Furthermore, given the apparent prevalence of images in faith-based DFAT-funded reports, future qualitative research could also focus on visual analyses. In the same vein, future studies might engage directly with development practices—particularly where it may diverge from what is presented to funders—through interviews with development workers.

As might be expected, the key terms used by faith and non-faith actors in the Pacific Islands region vary considerably, which we conclude both shows their particular worldviews (secular or non-secular) but also acknowledges the realities of their particular situations. Hence, future analyses of key terms (especially around religion) could be linked to faith versus non-faith actors to see whether there are explicit differences in emphasis (which one might expect) or not (which could be argued may mean that all NGO actors acknowledge the dominance of spiritual worldviews in the Pacific region). Qualitative approaches would be very well suited to these kinds of analyses [47].

Although less systematic than quantitative analysis and requiring the interpretation of latent meanings (and using smaller databases or groups of texts), Hesse-Biber [48] found that a qualitative content analysis “is better able to account for subtleties of meaning [than quantitative analysis]” (p. 253). For these reasons, qualitative research might investigate the alignment of key terms with the government policies of recipient countries. Arising insights could reflect on the subtleties of either a need for funds versus confidence that the priorities and/or approaches are sound.

Similarly, future research could explore the alignment of key terms with Pacific leaders' statements. More specifically, future studies could analyse the positionality of Pacific Island leaders as articulated through statements made in regional meetings (see, e.g., <https://www.forumsec.org/2021/03/22/pacific-islands-forum-leaders-ocean-statement-2020-21/>, accessed on 14 October 2022). Analysing the congruency between statements and policies would be insightful as this would illuminate how different actors walk the difficult path between DFAT (funder), Pacific Island leaders (clients), and the real situation on the ground (sustainable development practice).

4.5. *Synthesis: An Agenda for Future Research*

In view of sustained calls for integrated development approaches that better link spirituality and sustainability concerns while at the same time cultivating a sensitivity to their interrelationships, there is a sense that more work is needed to make contemporary development practice more inclusive, wholesome, holistic, and sustainable [1,2,12]. While Indigeneity, customary practice, and spirituality have been belittled for being inconsequential or even meaningless according to the technocratic norms and standards of today's global economic system [36,37,49], it is timely to re-examine and rediscover the sustainability–spirituality nexus from the perspective of Pacific Island communities that have sustainably inhabited these environments for thousands of years [38,49–51]. There is empirical evidence that the benefits of soliciting Indigenous local knowledge also apply in geographical regions beyond Oceania [52]. Hence there is a good evidence base to more openly engage spirituality in support of environmentally sympathetic development [53]. Accordingly, contemporary development policy and programming practice will benefit from engaging them in tandem, both to harness their synergistic capacity as well as to enable more effective sustainable development and climate-change adaptation in Pacific Island countries [9–11].

5. Conclusions

This exploratory research focused on the nexus between sustainable development and spirituality, showing it to be a fertile space for interdisciplinary inquiry and thus adding to our understanding of development discourse in relation to contemporary practice in the Pacific Islands region. The annual report keyword frequency analysis presented in this research suggests that spirituality, as a development focus, remains muted or even undervalued in contemporary development programming discourse. Our analysis suggests that a closer integration of spirituality and sustainability will create conditions that make development more effective and sustainable. Building this nascent field of investigation, this study conceptualises opportunities for future research, thus laying the foundation for a timely emergent research agenda.

Supplementary Materials: The following are available online at <https://www.mdpi.com/article/10.3390/su15032201/s1>: Table S1: List of Pacific Countries NGOs are providing Aid. Table S2: Organisations selected based on highest total annual income, including DFAT funding and non-DFAT funding (data and analyses self-consistently colour-coded). Table S3: Intercoder reliability guidelines-informed identification of the final list of selected keywords; the four main topics in each report were identified from subcategories. Table S4: Four categories of Australian NGO annual reports with code frequencies of key terms (data and analyses are self-consistently colour-coded).

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References

1. Luetz, J.M.; Nunn, P.D. *Climate Change Adaptation in the Pacific Islands: A Review of Faith-Engaged Approaches and Opportunities*; Springer: Berlin/Heidelberg, Germany, 2020; pp. 293–311. [\[CrossRef\]](#)
2. Luetz, J.M.; Nunn, P.D. *Beyond Belief*; Springer: Berlin/Heidelberg, Germany, 2021. [\[CrossRef\]](#)
3. McNamara, K.E.; Clissold, R.; Westoby, R.; Piggott-McKellar, A.E.; Kumar, R.; Clarke, T.; Namoumou, F.; Areki, F.; Joseph, E.; Warrick, O.; et al. An assessment of community-based adaptation initiatives in the Pacific Islands. *Nat. Clim. Chang.* **2020**, *10*, 628–639. [\[CrossRef\]](#)
4. Leal Filho, W.; Salvia, A.L.; Ulluwishewa, R.; Abubakar, I.R.; Mifsud, M.; LeVasseur, T.J.; Correia, V.; Consorte-McCrea, A.; Paço, A.; Fritzen, B.; et al. Linking sustainability and spirituality: A preliminary assessment in pursuit of a sustainable and ethically correct world. *J. Clean. Prod.* **2022**, *380*. [\[CrossRef\]](#)
5. Barnett, J.; O'Neill, S. Maladaptation. *Glob. Environ. Chang.* **2010**, *20*, 211–213. [\[CrossRef\]](#)
6. Barnett, J.; O'Neill, S.J. Minimising the risk of maladaptation. In *Climate Adaptation Futures*; Wiley: Hoboken, NJ, USA, 2013; pp. 87–93. [\[CrossRef\]](#)
7. Leal Filho, W.; Nalau, J. (Eds.) *Limits to Climate Change Adaptation*; Springer: Berlin/Heidelberg, Germany, 2018. [\[CrossRef\]](#)
8. Saura, B. Remembrance of the Colonial Past in the French Islands of the Pacific: Speeches, Representations, and Commemorations. *Contemp. Pac.* **2015**, *27*, 337–368. [\[CrossRef\]](#)
9. Nunn, P.D.; Mulgrew, K.; Scott-Parker, B.; Hine, D.W.; Marks, A.D.G.; Mahar, D.; Maebuta, J. Spirituality and attitudes towards Nature in the Pacific Islands: Insights for enabling climate-change adaptation. *Clim. Chang.* **2016**, *136*, 477–493. [\[CrossRef\]](#)
10. Fair, H. Three stories of Noah: Navigating religious climate change narratives in the Pacific Island region. *Geo. Geogr. Environ.* **2018**, *5*, e00068. [\[CrossRef\]](#)
11. Bertana, A. The Impact of Faith-Based Narratives on Climate Change Adaptation in Narikoso, Fiji. *Anthr. Forum* **2020**, *30*, 254–273. [\[CrossRef\]](#)
12. Gupta, K.; Agrawal, R. Sustainable development and spirituality: A critical analysis of GNH index. *Int. J. Soc. Econ.* **2017**, *44*, 1919–1939. [\[CrossRef\]](#)
13. Atkinson-Nolte, J.; Nunn, P.D.; Millea, P. Influence of spiritual beliefs on autonomous climate-change adaptation: A case study from Ono Island, southern Fiji. In *Beyond Belief—Opportunities for Faith-Engaged Approaches to Climate-Change Adaptation in the Pacific Islands*; Luetz, J.M., Nunn, P.D., Eds.; Springer Nature: Berlin, Germany, 2021; pp. 345–375.
14. Kempf, W. Introduction: Climate Change and Pacific Christianities. *Anthr. Forum* **2020**, *30*, 215–232. [\[CrossRef\]](#)
15. Department of Foreign Affairs and Trade. *DFAT and NGOs: Effective development partners, Commonwealth of Australia*; Office of Development Effectiveness, Evaluation of the Australian NGO Cooperation Program Annexes: Canberra, Australia, 2015.
16. Nunn, P. Responding to the challenges of climate change in the Pacific Islands: Management and technological imperatives. *Clim. Res.* **2009**, *40*, 211–231. [\[CrossRef\]](#)
17. Nunn, P.D. The end of the Pacific? Effects of sea level rise on Pacific Island livelihoods. *Singap. J. Trop. Geogr.* **2013**, *34*, 143–171. [\[CrossRef\]](#)
18. McNaught, R.; McGregor, K.; Kensen, M.; Hales, R.; Nalau, J. Visualising the invisible: Collaborative approaches to local-level resilient development in the Pacific Islands region. *Commonw. J. Local Gov.* **2022**, *28*–52. [\[CrossRef\]](#)
19. Nalau, J.; Handmer, J.; Dalesa, M.; Foster, H.; Edwards, J.; Kauhiona, H.; Yates, L.; Welegtabit, S. The practice of integrating adaptation and disaster risk reduction in the south-west Pacific. *Clim. Dev.* **2015**, *8*, 365–375. [\[CrossRef\]](#)
20. El-Haj, M.; Alves, P.; Rayson, P.; Walker, M.; Young, S. Retrieving, classifying and analysing narrative commentary in unstructured (glossy) annual reports published as PDF files. *Account. Bus. Res.* **2019**, *50*, 6–34. [\[CrossRef\]](#)
21. Chatterjee, B.; Tooley, S.; Fatseas, V.; Brown, A. An Analysis of the Qualitative Characteristics of Management Commentary Reporting by New Zealand Companies. *Australas. Account. Bus. Finance J.* **2011**, *5*, 43–64.
22. Guthrie, J.; Petty, R.; Yongvanich, K.; Ricceri, F. Using content analysis as a research method to inquire into intellectual capital reporting. *J. Intellect. Cap.* **2004**, *5*, 282–293. [\[CrossRef\]](#)
23. Everaert, P.; Bouten, L.; Van Liedekerke, L.; De Moor, L.; Christiaens, J. *Voluntary Disclosure of Corporate Social Responsibility by Belgian Listed Firms: A Content Analysis of Annual Reports*; HUB Research Paper 2007/29; Production Planning and Control; Hogeschool—Universiteit Brussel, Faculteit Economie en Management: Brussels, Belgium, 2007; pp. 1–45.
24. Stanton, P.; Stanton, J. Corporate annual reports: Research perspectives used. *Accounting, Audit. Account. J.* **2002**, *15*, 478–500. [\[CrossRef\]](#)
25. Beattie, V.; McInnes, B.; Fearnley, S. A methodology for analysing and evaluating narratives in annual reports: A comprehensive descriptive profile and metrics for disclosure quality attributes. *Account. Forum* **2004**, *28*, 205–236. [\[CrossRef\]](#)

26. O'Connor, C.; Joffe, H. Intercoder Reliability in Qualitative Research: Debates and Practical Guidelines. *Int. J. Qual. Methods* **2020**, *19*. [CrossRef]
27. Westergren, A.; Edin, K.; Christianson, M. Reproducing normative femininity: Women's evaluations of their birth experiences analysed by means of word frequency and thematic analysis. *BMC Pregnancy Childbirth* **2021**, *21*, 1–13. [CrossRef]
28. SAMOGGIA, A.; Riedel, B.; Ruggeri, A. Social media exploration for understanding food product attributes perception: The case of coffee and health with Twitter data. *Br. Food J.* **2020**, *122*, 3815–3835. [CrossRef]
29. Luetz, J.M.; Walid, M. *Social Responsibility Versus Sustainable Development in United Nations Policy Documents: A Meta-Analytical Review of Key Terms in Human Development Reports*; Springer: Berlin/Heidelberg, Germany, 2019; pp. 301–334. [CrossRef]
30. Bryman, A. *Social Research Methods*, 5th ed.; Oxford University Press: Oxford, MA, USA, 2016.
31. Creative Cloud. *Adobe Acrobat PRO DC*; Continuous Release, Version 2022.002.20191; Adobe Systems Incorporated: San Jose, CA, USA, 2022.
32. Van den Berg, R.G. How to Run a Kruskal-Wallis Test in SPSS? SPSS Tutorials: Nonparametric Tests. 2023. Available online: <https://www.spss-tutorials.com/kruskal-wallis-test-in-spss/> (accessed on 21 December 2022).
33. Field, A.P. *Discovering Statistics Using SPSS*, 3rd ed.; Sage: Thousand Oaks, CA, USA, 2009.
34. Elkins, D.N.; Hedstrom, L.J.; Hughes, L.L.; Leaf, J.A.; Saunders, C. Toward a Humanistic-Phenomenological Spirituality. *J. Humanist. Psychol.* **1988**, *28*, 5–18. [CrossRef]
35. Zawawi, N.F.M.; Wahab, S.A. Organisational sustainability: A redefinition? *J. Strategy Manag.* **2019**, *12*, 397–408. [CrossRef]
36. Stein, S. The Ethical and Ecological Limits of Sustainability: A Decolonial Approach to Climate Change in Higher Education. *Aust. J. Environ. Educ.* **2019**, *35*, 198–212. [CrossRef]
37. Telleria, J. Power relations? What power relations? The de-politicising conceptualisation of development of the UNDP. *Third World Q.* **2017**, *38*, 2143–2158. [CrossRef]
38. Leal Filho, W.; Ha'Apio, M.O.; Lütz, J.M.; Li, C. Climate change adaptation as a development challenge to small Island states: A case study from the Solomon Islands. *Environ. Sci. Policy* **2020**, *107*, 179–187. [CrossRef]
39. Luetz, J.; Havea, P.H. "We're Not Refugees, We'll Stay Here Until We Die!"—Climate Change Adaptation and Migration Experiences Gathered from the Tulun and Nissan Atolls of Bougainville, Papua New Guinea; Springer: Berlin/Heidelberg, Germany, 2017; pp. 3–29. [CrossRef]
40. Piggott-McKellar, A.E.; McNamara, K.E.; Nunn, P.D.; Sekinini, S.T. Moving People in a Changing Climate: Lessons from Two Case Studies in Fiji. *Soc. Sci.* **2019**, *8*, 133. [CrossRef]
41. Rothstein, H.R.; Sutton, A.J.; Borenstein, M. (Eds.) *Publication Bias in Meta-Analysis: Prevention, Assessment and Adjustments*; Wiley: Hoboken, NJ, USA, 2006.
42. Choudry, A. Against the Flow: Maori Knowledge and Self-Determination Struggles Confront Neoliberal Globalization in Aotearoa/New Zealand. In *Indigenous Knowledge and Learning in Asia/Pacific and Africa*; Kapoor, D., Shizha, E., Eds.; Palgrave Macmillan: New York, NY, USA, 2010. [CrossRef]
43. Rickford, J.R.; King, S. Language and linguistics on trial: Hearing Rachel Jeantel (and other vernacular speakers) in the courtroom and beyond. *Language* **2016**, *92*, 948–988. [CrossRef]
44. Saft, S. *Language and Social Justice in Context: Hawai'i as a Case Study*, 1st ed.; Springer International/Palgrave Macmillan: London, UK, 2021.
45. Punch, K.F. *Social Research: Quantitative & Qualitative Approaches*; Sage: Thousand Oaks, CA, USA, 2014.
46. Saldaña, J. *The Coding Manual for Qualitative Researchers*, 3rd ed.; Sage: Thousand Oaks, CA, USA, 2016.
47. Jackson, K.; Bazeley, P. *Qualitative Data Analysis with NVIVO*, 3rd ed.; Sage: Thousand Oaks, CA, USA, 2018.
48. Hesse-Biber, S.N. *The Practice of Qualitative Research*, 3rd ed.; Sage: Thousand Oaks, CA, USA, 2017.
49. Fischer, M.; Maxwell, K.; Nuunoq; Pedersen, H.; Greeno, D.; Jingwas, N.; Blair, J.G.; Hugu, S.; Mustonen, T.; Murtomäki, E.; et al. Empowering her guardians to nurture our Ocean's future. *Rev. Fish Biol. Fish.* **2021**, *32*, 271–296. [CrossRef]
50. Ellis, E.C.; Gauthier, N.; Goldewijk, K.K.; Bird, R.B.; Boivin, N.; Díaz, S.; Fuller, D.Q.; Gill, J.L.; Kaplan, J.O.; Kingston, N.; et al. People have shaped most of terrestrial nature for at least 12,000 years. *Proc. Natl. Acad. Sci. USA* **2021**, *118*. [CrossRef]
51. Walshe, R.A.; Nunn, P.D. Integration of indigenous knowledge and disaster risk reduction: A case study from Baie Martelli, Pentecost Island, Vanuatu. *Int. J. Disaster Risk Sci.* **2012**, *3*, 185–194. [CrossRef]
52. Leal Filho, W.; Matandirotya, N.R.; Lütz, J.M.; Alemu, E.A.; Brearley, F.Q.; Baidoo, A.A.; Kateka, A.; Ogendi, G.M.; Adane, G.B.; Emiru, N.; et al. Impacts of climate change to African indigenous communities and examples of adaptation responses. *Nat. Commun.* **2021**, *12*, 1–4. [CrossRef]
53. Yunkaporta, T. *Sand Talk: How Indigenous Thinking Can Save the World*; Text Publishing: Melbourne, Australia, 2019.

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