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Impact of Transformational and Relational Leadership Theories and Ethics Towards Climate Change Resilience in Fiji

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ABSTRACT

This analytical essay explores the intricate interplay between leadership theories and the ethical dimensions inherent in addressing climate change, natural disasters, and their impacts on Fiji. Transformational and relational leadership theories are identified as crucial frameworks in shaping ethical attributes within organizations, creating ethical climates that address the implications of climate change and disasters. The challenges posed by natural disasters in Fiji, particularly on the economy, vulnerable sectors, and communities, necessitate effective leadership and ethical approach. This essay delves into multiple leadership theories, examining their relevance and efficacy in the context of Pacific Islands. Authentic leadership, transformational leadership, and culturally sustaining leadership emerge as influential paradigms, contributing to disaster risk reduction, resilience, and coping mechanisms. The Ethical and Effective Leadership (EEL) Model introduces propositions that underscore the impact of leader characteristics, people practices, institutional practices, and contextual factors on organizational outcomes. However, ethical dilemmas surface, as leaders navigate vulnerabilities, resilience, and societal expectations. Crosweller and Tschakert highlight the ethical challenges faced by leaders, particularly in balancing the urgency of climate action with the constraints of neoliberal policies. Complexity of leadership is discussed in disaster risk reduction, including the influence of worldviews and power dynamics within community-led initiatives. In summary, this essay synthesizes various leadership theories, and showcasing their applicability in the Pacific Islands, specifically Fiji, in addressing climate change and disasters. The ethical considerations woven into leadership decisions and actions underscore the need for leaders to navigate complexities, fostering compassion, inclusivity, and preparedness in the face of environmental and societal challenges.

Keywords: Leadership theories; Ethics; Climate change; Disaster risk reduction; Resilience

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1. INTRODUCTION

Both transformational and relational leadership theories play critical roles in shaping ethical attributes within organizations, particularly in the context of addressing climate change and natural disasters in Fiji. Transformational leadership (TL), characterized by its ability to inspire and motivate followers, has been found to positively influence ethical environment within organizations (Engelbrecht *et al*., 2005). This style of leadership is particularly effective in creating an ethical environment that fosters integrity and ethical values among employees. Such an environment is essential in addressing the ethical implications of climate change and natural disasters (Enwereuzor *et al*., 2020). On the other hand, relational leadership (RL)[1], which emphasizes concern for the well-being and empowerment of people, has also been linked to the creation of a friendly and caring ethical environment (Zhang & Yao, 2019). Relational leadership is also framed by care and compassion (Cosweller and Tschakert, 2019). Severe change in climate of the Pacific Islands poses unprecedented challenges for individuals and entities in leadership positions to simultaneously reduce hazards and protect their most vulnerable citizens while denying their own vulnerability (Cosweller and Tschakert, 2019, p.9). The different type of leadership is, therefore, needed to deepen our interconnectedness to others and understanding of loss and suffering. Wisner, Gaillard and Kelman (2012) refer to this as a "temporal dimension of disaster causation" to address leadership challenges.

In the specific context of Fiji, the impact of natural disasters and climate change on the economy and vulnerable sectors, such as small-scale fisheries, has been a subject of concern (Mangubhai et al., 2021). The frequency and intensity of extreme weather conditions in the Pacific Island region due to climate change impacts (e.g. global warming, coastal erosion, sea-level rise, ocean acidification) have necessitated a closer examination of the complex relationships among various stakeholders and the allocation of government aid during and post natural disasters (Mangubhai et al., 2021; Narayan, 2003). Furthermore, the economic impact of natural disasters in Fiji has been a topic of interest, highlighting the country's vulnerability and limited resilience capability in the face of such events (Chand et al., 2022; Lee et al., 2018; Narayan, 2003).

In addition to the organizational implications, the impact of natural disasters on communities and the need for effective adaptation strategies have been emphasized (Hugelius et al., 2020; Janif et al., 2016; Yeo & Blong, 2010). Traditional oral narratives in rural communities in Fiji (for example) have been recognized as valuable sources of knowledge for building climate-change resilience and informing adaptation strategies (Janif et al., 2016). The same authors found that only 11% of informants knew narratives about past extreme events that were not wholly based on personal experience of these. These narratives were generally conflated accounts of different events (extreme waves, winds, drought), all of which had occurred within the lifetime of the informant. Similarly, although 29% of respondents stated that their cultural unit (*mataqali* or *yavusa*) had either songs (*sere)* or dances (*meke)* composed in memory of such events, none of the respondents could remember the words; only a few were able to outline the circumstances in which these songs/dances had been created. A traditional oral narratives study in Fiji in 2016 uncovered:

> *"We have forgotten the meke[s]; that is why you don't find meke for this village. It is because the elders have passed away. This is what I am talking about, that times are changing (Male, 50 years, Viti Levu Island)" (From: Janif et al, 2016).*

Furthermore, the perceived needs of disaster-affected people in Fiji have been studied, emphasizing the importance of understanding and addressing the immediate requirements of communities in the aftermath of natural disasters (Hugelius et al., 2023). Segueing from transformational and relational leadership slightly, there remains an ethical relationship that needs to be clarified. Ethical leadership has been identified as a key factor in shaping ethical conduct or policies within organizations, with its influence extending to employee misconduct, job satisfaction, and organizational commitment (Aryati et al., 2018; Mayer et al., 2010; Mehmood et al., 2018; Onan et al., 2022; Saini & Sengupta, 2019). The mediating role of ethical leadership in the relationship between ethical leadership and various outcomes underscores the significance of fostering an ethical

[1] Relational Leadership is distinct from Relationship Leadership Theory (RLT). RLT conceives that 'leadership is not restricted to a single or even a small set of formal or informal leaders, and, in its strongest form, functions as a dynamic system embedding leadership, environmental and organisational aspects (Hunt and Dodge, 2001: 448). Drath et al. (2008) refer to this as locating knowledge 'not in the individual mind but in the on-going relationship' (p. 641).

environment addressing the ethical implications of climate change and natural disasters (Aryati et al., 2018; Mayer et al., 2010; Mehmood et al., 2018; Onan et al., 2022; Saini & Sengupta, 2019).

Objectives and Purpose (Aim) of the Article:

- To examine the critical role of transformational and relational leadership within organizations, particularly in the context of addressing ethical concerns related to climate change and natural disasters in Fiji.
- To analyze the impact of natural disasters on various aspects of Fijian society, including the economy, vulnerable sectors, and local communities.
- To explore how effective leadership, characterized by transformational and relational leadership styles, can mitigate the ethical implications arising from climate change and natural disasters in Fiji.
- To investigate the relationship between leadership effectiveness and the establishment of an ethical climate within organizations, considering their role in addressing the challenges posed by natural disasters.
- To provide insights and recommendations for organizational leaders, policymakers, and stakeholders in Fiji and other similar contexts on fostering effective leadership and ethical climate to address the ethical dimensions of climate change and natural disasters.

Overall, this article aims to contribute to the understanding of how leadership approaches, particularly transformational and relational leadership, can play a crucial role in shaping ethical responses to the challenges posed by climate change and natural disasters, with a specific focus on the case of Fiji. The impact of natural disasters on the economy, vulnerable sectors, and communities underscores the need for effective leadership and ethical climate to address the ethical implications of these challenges.

2. METHODOLOGY

This analytical essay was conducted through the use of a qualitative scoping review, paralleled with an in-depth online literature search. As part of this process, a preliminary assessment of the available literature on a specific subject was carried out with the intention of determining the breadth of the literature, its most important concepts, and the areas where additional research is needed. In addition, the author used a critical discourse analysis (CDA), explicitly intending to incorporate social-cultural or theoretical insights into discourse analysis while advocating social commitment and interventionism in research. A qualitative analytical approach was simultaneously, integrated to investigate the complex relationship that exists between leadership theories and the ethical considerations that are inherent in the process of addressing climate change, natural disasters, and the effects that they have on Fiji. A comprehensive understanding of the relationship between leadership and ethics, as well as the problems faced by climate change and natural catastrophes in Fiji, was offered through the utilization of theoretical analysis in conjunction with empirical discoveries.

3. MULTIPLE LEADERSHIP THEORIES AND ARGUMENTS (FOR AND AGAINST) THE LEADERSHIP THEORYIES

In the Pacific Islands, (and perhaps elsewhere as well), leadership theories play a crucial role in addressing challenges related to climate change, disaster risk reduction (DRR), and resiliency. Authentic leadership, as proposed by Avolio & Gardner (2005), emphasizes the development of positive forms of leadership, including transformational and servant leadership, which can be instrumental in guiding efforts related to DRR and resilience (Avolio & Gardner, 2005). Additionally, the study by Eisenbeiß et al. (2008) highlights the significance of transformational leadership in fostering team innovation, collaborative action, integrating team climate principles, which is pertinent to building resilience in the face of disasters. Furthermore, Prayag et al. (2023) demonstrate the importance of transformational leadership in strengthening employee resilience, particularly in the context of tourism firms, which is relevant to the Pacific Islands' tourism industry. The study by Burrage et al. (2023) emphasizes the significance of Pacific Islander cultural approaches to coping with disasters, including the use of traditional and religious leadership structures, highlighting the importance of culturally relevant leadership in addressing crises such as the COVID-19 pandemic. Moreover, Hattori (2016)

discusses the concept of culturally sustaining leadership from a Pacific Islander's perspective, shedding light on the importance of leadership that sustains and promotes Pacific Islander culture. This author explored the concept of resilient leadership, emphasizing the link between transformational-transactional leadership and resilient leadership, which is pertinent to building resilience in the face of environmental and social challenges (Dartey-Baah, 2015; Meijerink & Stiller, 2013), provide a framework for analyzing leadership objectives, functions, and tasks in climate change adaptation, offering insights into the kind of leadership needed for addressing climate-related challenges in the Pacific Islands (Meijerink & Stiller, 2013). Additionally, David et al. (2013) highlight the role of leadership and capacity building in eliminating tobacco-related disparities among Pacific Islanders, emphasizing the importance of leadership in promoting health equity and resilience (David et al., 2013). Finally, Blaney et al. (2020) enrich the understanding of resilience by exploring its application in the context of volunteer firefighters, providing insights into the role of leadership in fostering resilience in emergency services. These studies collectively underscore the significance of various leadership theories in addressing climate change, DRR, and resiliency in the Pacific Islands.

3.1 Mango's EEL model and the Leadership Squeeze

Mango (2018) prescribes an Ethical and Effective Leadership (EEL) Model, which focuses on character, characteristics, people's practices, institutional practices, context and outcomes. Figure 1 shows the EEL model for leadership practitioners. Five propositions can be derived from both leadership theory and the wider leadership literature. Proposition 1: The character of the leader (or loci playing the role of the leader) predicts the organizational outcomes. Proposition 2: The characteristics of the leader (or loci playing the role of the leader) predict the organizational outcomes. Proposition 3: People's practices espoused by the leader (or loci playing the role of the leader) predict the organizational outcomes. Proposition 4: Institutional practices espoused by the leader (or loci playing the role of the leader) predict the organizational outcomes. Proposition 5: The context moderates the effect of EEL on the organizational outcomes.

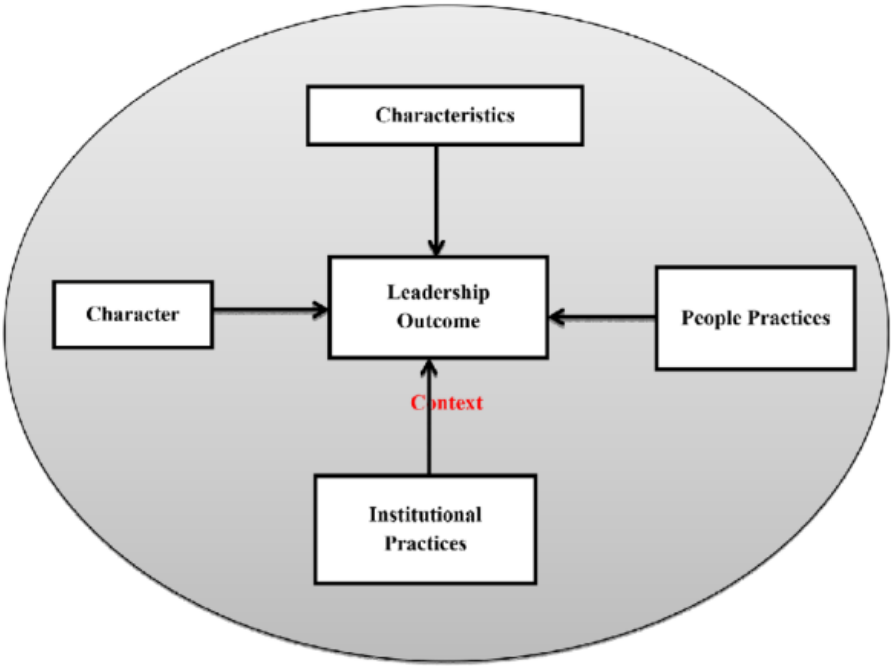

Figure 1: EEL model for Leadership practitioners and the five propositions within Leadership Theory and wider leadership literature. (From: Mango, 2018).

In many respects (and within the context of disasters and climate change in Fiji), the EEL model does focus on some important perspectives. The characters and characteristics of a leader, to some degree, predict disaster risk management (DRM) outcomes. What is accomplished on the ground via "people's practices" (espoused or guided by the leader) predicts the outcome of the relief efforts.

Government (NDMO) or private sector support (Red Cross International), and programme or project leaders, have a profound impact on leadership outcomes.

There is, however, a slight moral or ethical problem. Crosweller and Tschakert (2019) argued that the leadership dilemma emerges because leaders deny vulnerability, while simultaneously promoting resilient subjects wedged within the double goal of addressing the climate crisis through the protection of most vulnerable members of society and the reduction of emissions to meet national and global climate targets (Crosweller and Tschakert, 2019, p.1). The same authors reiterate that effective leadership entails preparing for and responding to increasing intensities and frequencies of extreme natural hazard events while managing and justifying suffering and loss that communities and individuals experience in case of failed protection. Insight is provided into this double challenge, and how it is compounded by the concomitant ways modern societies engage with risk and construct vulnerability and resilience.

Crosweller & Tschakert (2019) further examine how societal factors such as modernity, risk society, neoliberalism, and governmentality in western democracies intersect to influence disaster leadership and management. This framework highlights a shift in the perception of responsibility and potential loss from organizations to individual actors, complicating leadership challenges in managing crises driven by hazards. The evolving dynamics of disaster response during the COVID-19 pandemic, as discussed by (Potutan & Arakida, 2021), further underscore the necessity of adapting disaster management strategies to address the evolving landscape of risks and responsibilities. Additionally, the study by Reimuth (2023) emphasizes the importance of understanding risk as a product of the interaction between hazards, exposure, and vulnerability, providing a foundational concept for effectively assessing and managing disaster risks.

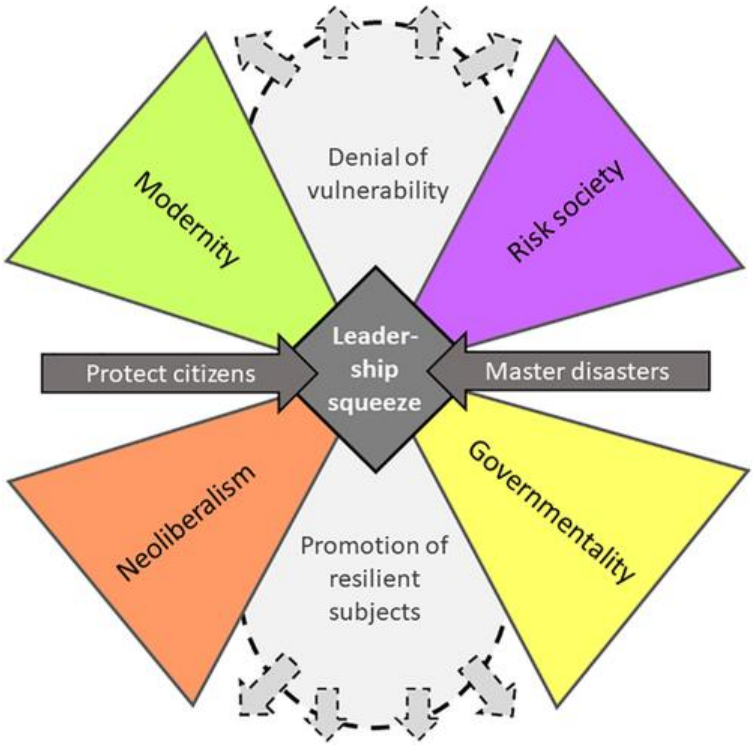

Figure 2: The Leadership squeeze. (From: Crosweller & Tschakert, 2019).

In the realm of crisis management, the research by Miller & Reeves (2021) explore the implications of attributing and deflecting blame during crises, shedding light on how leaders' responses can impact public perceptions of crisis management. Furthermore, the study by van der Plank et al. (2022) introduces a typology of responsibility for coastal flood risk adaptation, offering a structured approach for assigning responsibilities in managing floods and other climate-related hazards. These insights contribute to the broader discussion on crisis leadership and governance, emphasizing the importance of clear responsibilities and effective decision-making processes in mitigating disaster

impacts. Partially synthesizing these perspectives reveals that effective disaster leadership and management necessitate a nuanced understanding of the intricate interplay between societal structures, individual responsibilities, and environmental vulnerabilities. Addressing these multifaceted challenges requires adaptive strategies, clear communication, and collaborative efforts across various sectors to enhance resilience and minimize the adverse impacts of hazard-driven crises.

Crosweller & Tschakert (2019) discuss the ethical challenges faced by leaders in the context of climate change and disasters. They highlight the increasing pressure on leaders due to the impacts of climate change and related disasters, especially on the most vulnerable populations. The authors emphasize the dilemma faced by leaders in balancing the urgent need for action with the constraints imposed by neoliberal policies, reflecting the ethical dimensions of leadership in the face of environmental crises (Crosweller & Tschakert, 2019). Figure 2 illustrates this concept.

In the context of disaster management, Buchtmann et al. (2022) point out that leaders may be constrained by particular worldviews and perspectives, which can influence or "sway" their decision-making processes. This highlights the complexity of leadership in DRR, where leaders must navigate personal and institutional factors that can impact their approach to managing disasters (Buchtmann et al., 2022). Within the context of Fiji or other Pacific Island countries, DRR is highly complex and involves several layers of decision making, leadership and on-the-ground actions.

Furthermore, Rawsthorne et al. (2023) emphasize the importance of understanding power dynamics in community-led disaster preparedness. This is especially relevant within the Fijian (Indo-Fijian or Itaukei cultures, as many groups are led by community-leaders, chiefs or *Turaga-ni Koro* (community spokespersons) and *Roko Tui Va*. This underscores the need for leaders to recognize and navigate their own professional power in shaping experiences and fostering community participation in disaster preparedness efforts (Rawsthorne et al., 2023).

In the realm of compassionate leadership, Sompa et al. (2023) provide insights into the leadership process of a local government official during the COVID-19 pandemic. The study illustrates the success of leadership characterized by compassion, discipline, and accountability, shedding light on the multifaceted nature of effective leadership in times of crisis (Sompa et al., 2023). These references collectively underscore the multifaceted challenges faced by leaders in the context of climate change, disasters, and pandemics. They highlight the ethical, institutional, and community-oriented dimensions of leadership, emphasizing the need for leaders to navigate complex decision-making processes while fostering compassion, inclusivity, and preparedness in the face of environmental and societal challenges.

3.2 Central Issues in Educational Leadership in North America, Oceania and Beyond

"As this essay unfolds, the focus is on broadening the perspective of education leadership (EL) to include not only North America but also Oceania and other countries". The rational for this is that education is a lifelong process, crosscutting to different countries, and EL can be described within diverse social and cultural contexts. The central issues in educational leadership in North America (and to some extent in Oceania) essentially encompass a wide array of topics that are crucial for the development and enhancement of leadership in educational settings. One of the key issues is the need to integrate leadership into technical curricula, particularly in Science, Technology and Engineering (or STEP) programs. This is evident in the growing number of higher education institutions in North America and in Oceania (Australia, Fiji and other Pacific Island countries) that host environmental and engineering leadership programs, supported by initiatives such as (for example): Strengthening Pathways for peace in partnerships and collaborations with GPPAC Pacific: Pacific People Building Peace and the Soqosoqo Vakamarama; the National Initiative for Capacity Building and Knowledge Creation for Engineering Leadership (NICKEL) in Canada and the Engineering Leadership Development Division (LEAD) of the American Society for Engineering Education (Klassen et al., 2020). This highlights the importance of integrating leadership into technical education to prepare future leaders in engineering fields.

Another central issue is the preparation of educational leaders to address diversity and equity. The need for leadership preparation programs and resources that provide educational leaders with the knowledge and skills to support all students in their academic and social development, as well as to understand and address systemic forms of discrimination, is crucial in the current educational landscape in North America and beyond (Tuters & Portelli, 2017). This issue underscores the

importance of equipping educational leaders with the necessary tools to create inclusive and equitable learning environments.

Furthermore, the integration of transformational leadership and instructional leadership is essential for school performance and restructuring. Scholars of education have advocated for a model of transformational leadership to accomplish the reforms central to school restructuring, emphasizing the significance of leadership styles in driving educational improvements (Marks & Printy, 2003). Additionally, the need for leadership development programs in various fields, such as medicine, radiology, and agriculture, reflects the growing recognition of the importance of leadership skills in these domains. The systematic review of leadership development programs for physicians and radiology residents in North America underscores the increasing efforts to deploy leadership development for professionals in these fields (Ahrari et al., 2021; Frich et al., 2014; Kumar et al., 2020).

Moreover, the issue of social justice leadership and the inclusion of diverse perspectives in educational leadership discourse is a central concern. The need to foster a theory of social justice leadership and to include voices and experiences of school, technical or university leaders that are not often represented in the discourse is crucial for advancing educational leadership (Rugano, 2019; Theoharis, 2007). The central issues in educational leadership also extend to international perspectives, such as the need to deepen educational leadership discourse and knowledge by learning from experiences of school principals in Kenya, as well as the importance of creating a common culture of knowledge sharing in early education (Granrusten, 2019; Rugano, 2019).

It seems the central issues in educational leadership in North America and Oceania encompass the integration of leadership into technical curricula, addressing diversity and equity, integrating transformational and instructional leadership, developing leadership programs in various fields, fostering social justice leadership, and incorporating international perspectives into educational leadership discourse.

4. DESCRIPTION OF TRANSFORMATIONAL VS. RELATIONAL LEADERSHIP THEORY AND ETHICS

Transformational and relational leadership theories play a crucial role in addressing climate change, DRR, and community resilience in the South Pacific. Transformational leadership emphasizes the leader's ability to inspire and motivate followers to achieve extraordinary outcomes (Ahmad et al., 2017). This leadership style is closely aligned with ethical leadership, which emphasizes moral values and principles in decision-making and behaviour (Ahmad et al., 2017). Ethical leadership has been found to be positively associated with transformational leadership and is linked to positive organizational outcomes (Bedi et al., 2015). Ethical leadership, therefore, influences employee voice and organizational identification, contributing to a positive work environment and organizational effectiveness (Lam et al., 2016; O'Keefe et al., 2019).

According to Nicholson and Kurucz (2017), the theoretical practice of relational leadership is essential for dealing with the increasingly urgent and complex social, economic and environmental issues that characterize sustainability, or at best, long term resiliency on the face of dangerous climate change. Despite growing attention to both relational leadership and leadership for sustainability, an ethical understanding of both is limited (Nicholson and Kurucz, 2017, p.1). It is a conundrum, as both sustainability and relational leadership are rifled with moral and ethical implications. This analytical essay conceptually explores how the moral theory of 'ethics of care' can help illuminate the ethical dimensions of relational leadership for sustainability. In doing so, the implications of ethics of care more broadly for the practice of relational leadership development are elaborated. From a caring perspective, a 'relational stance' or logic of effectiveness can be fostered through engaging in a reflective process of moral education through conversation. In starting this dialogue, we can begin to build capacity for relational leadership for sustainability and, thus, support the development of individual well-being and organizational and societal flourishing.

In the context of climate change, ethical leadership is essential for promoting sustainable practices and addressing the ethical implications of environmental decisions (Fraga, 2021). Climate change poses significant challenges to the South Pacific, impacting ecosystems, biodiversity, and local communities (Kosanic et al., 2019; Sandel et al., 2011). The concept of climate change velocity, which integrates macroclimatic shifts with local spatial topo-climate gradients, provides insights into the rate

of climate change and its impact on species endemism (Sandel et al., 2011). Understanding these dynamics is crucial for developing effective strategies to mitigate the effects of climate change on vulnerable ecosystems and communities.

As reiterated, DRR is another critical area where leadership theories and ethics intersect. Effective DRR strategies require strong leadership to communicate risk information and promote community resilience (Joob & Wiwanitkit, 2018; Wu et al., 2022). Community-based disaster reduction strategies have shown promise in enhancing resilience, but the effectiveness of these initiatives varies based on local conditions and socioeconomic factors (Wu et al., 2022). Additionally, disaster risk reduction policies can benefit from community participation, as it moderates the implementation of risk reduction policies and fosters a culture of preparedness (Yuwanto et al., 2021).

In the South Pacific, the ethical dimensions of leadership are particularly relevant in DRR efforts. Leaders must uphold integrity and ethical conduct to build trust and promote ethical climate within organizations and communities (Enwereuzor et al., 2020). This is tied to their moral, civic and spiritual/*Vanua* obligation within the Itaukei and Indo-Fijian cultures. Moreover, the ethical implications of climate change and DRR require leaders to consider the broader societal and environmental impacts of their decisions (Fraga, 2021; Tombs & France-Hudson, 2018). As a partial summary to this section, transformational and relational leadership theories, coupled with ethical leadership principles, are instrumental in addressing climate change, disaster risk reduction, and community resilience in the South Pacific. These leadership approaches can inspire positive change, foster ethical decision-making, and promote sustainable practices to mitigate the impact of environmental challenges on local ecosystems and communities.

4.1 Heutagogy and Mapping the Complexities of Effective Leadership within Applied Critical Leadership framework

If we now look at how learning theory influences effective leadership, we are drawn to examine the term Heutagogy and its imbedded relationships with transformational, applied critical leadership (ACL) and relational leadership within the context of climate change and DRR.

4.1.1 Critical Heutagogy Practice

According to Argyris & Schön (1996) and Chan et al. (2022), a key concept in heutagogy[2] is that of double-loop learning and self-reflection (Figure 3) (Argyris & Schön, 1996, as cited in Hase & Kenyon, 2000). In double-loop learning, learners consider the problem and the resulting action and outcomes, in addition to reflecting upon the problem-solving process and how it influences the learner's own beliefs and actions (Figure 3). Double-loop learning occurs when learners "question and test one's personal values and assumptions as being central to enhancing learning how to learn" (Argyris & Schön, 1978, as cited in Hase and Kenyon, 2007, pp. 45-46).

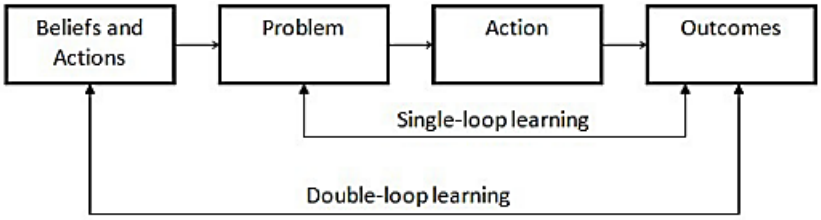

Figure 3: Double-loop learning (Eberle & Childress, 2005, as shown in Eberle, 2009, p. 183)

This approach invites introspection about the nature of heutagogy, placing emphasis on self-determined learning and requires that learners acquire both competencies and capabilities (Hase & Kenyon, 2000; Blaschke and Hase, 2015; Stephenson & Well, 1992 as cited in McAuliffe et al., 2009, p. 3). Competency[3] can be understood as proven ability in acquiring knowledge and skills, while capability is characterized by learner confidence in his or her competency and, as a result, the ability "to take

[2] https://www.powerschool.com/blog/heutagogy-explained-self-determined-learning-in-education/

[3] In other words, "capability" is a combination of behaviors, skills, processes and knowledge that affects an outcome. Competency is the measure of how a person performs a capability (Acorn (2024). Competency vs Capability: What's the Difference? Retrieved from: https://acorn.works/enterprise-learning-management/competency-vs-capability)

appropriate and effective action to formulate and solve problems in both familiar and unfamiliar and changing settings" (Cairns, 2000, p. 1, as cited in Gardner et al., 2008, p. 252). Capable people exhibit the following traits:

- self-efficacy, in knowing how to learn and continuously reflect on the learning process;
- communication and teamwork skills, working well with others and being openly communicative;
- creativity, particularly in applying competencies to new and unfamiliar situations and by being adaptable and flexible in approach; and
- positive values (Hase & Kenyon, 2000; Kenyon & Hase, 2001; Gardner et al., 2008).

The higher education response to heutagogy so far has been one of reluctance, which could be due to the impracticality of implementing a full-blown educational framework of heutagogy. While acknowledging the need for pedagogy and andragogy, McAuliffe et al. (2008) argue that "the removal of the educator makes the concept of heutagogy impractical in a credentialing institution" and that it is not possible or even reasonable to implement heutagogy's trademark of learner-guided assessment (p. 4). Despite this, educators in the Distance Learning, nursing, engineering, and education professions have found heutagogy to be a credible response to the critical issues that their learners are faced with in the workplace, and have designed their learning environments based on the approach (Ashton & Newman, 2006; Bhoryrub et al., 2010; Gardner et al., 2008). For example, within Distance Education, Bhoyrub et al. (2010) report that heutagogy provides a learning framework that addresses needs of education students, who must learn in an ever-changing environment that is both complex and unpredictable; a heutagogical approach to learning helps them to become lifelong learners, as well as "makes sense of the necessary uncertainties that defines OLDE (Online Distance Education).

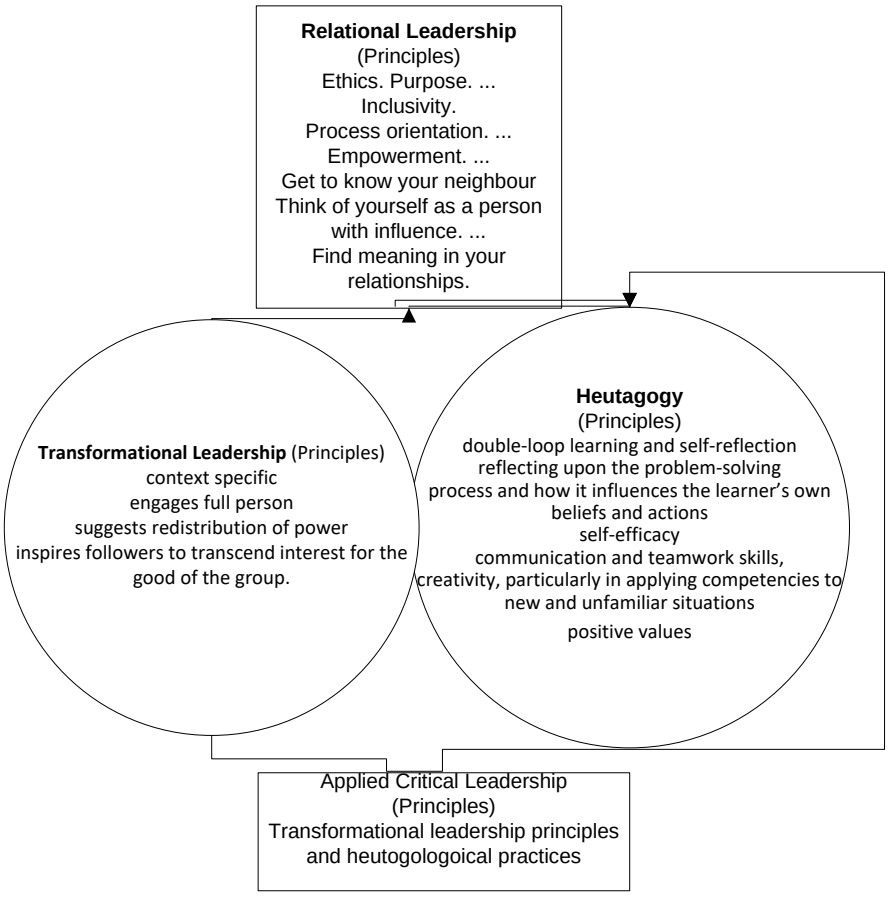

Figure 4: Modified Theoretical framework underlying applied critical leadership (ACL), Transformational Theory, Heutagogy and Relational Leadership (Adapted and modified from: Blaschke, 2012. p. 8).

The evolution of applied critical leadership (ACL) research is derived from principles of critical pedagogy (Giroux, 1983), critical race theory (Ladson-Billings, 1999) and transformational leadership practices (Bass, 1985; Burns, 1978). Even though these are somewhat dated references, their theoretical proponents remain important references in context of more 'progressive theories'. Educational leaders who propose an ACL model in education "consider the social context of their educational communities and empower individual members of these communities based on the educational leaders' identities (i.e., subjectivity, biases, assumptions, race, class, gender, and traditions) as perceived through a CRT lens" (Santamaría & Santamaría, 2012, p. 5). We, however, need to take a slightly different stance in order to understanding applied critical leadership within the concept of transformational, relational, applied critical leadership (ACL) and self-directed learning (heutagogy), all of which play important roles particularly in Indigenous communities in Fiji (Figure 4).

Transformational leadership, characterized by collaboration and active engagement, is essential in empowering Indigenous communities to drive positive change (Daniëls et al., 2019). This leadership style appeals to individuals due to its focus on idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Shvindina, 2017). Furthermore, the relationship between transformational leadership style and leader thinking, significantly impacts organizational performance (Hai et al., 2021). In the context of Indigenous communities however, effective leadership plays a crucial role in addressing their distinct challenges, particularly for vulnerable populations on the front lines of climate change and disaster risk reduction (DRR).

Applied critical leadership (ACL) draws from transformational leadership, personal leadership, heutagogy, and relational leadership theory (Santamaría & Jean-Marie, 2014). It is grounded in social justice and educational equity, making it particularly relevant for addressing the historical injustices and inequalities experienced by Indigenous communities (Santamaría & Santamaría, 2015). ACL emphasizes the importance of leadership resulting from both professional practice and leaders' lived experiences, aligning with the cultural values and traditions of Indigenous communities (Santamaría & Santamaría, 2015).

As discussed previously, heutagogy, is a unique learning approach where learners are highly autonomous and self-determined, which is pertinent in Indigenous communities. It aligns with Indigenous ways of knowing and learning, oral narratives, life stories, which are often rooted in self-directed and experiential learning (Facca & Allen, 2011; Simard, 2020). By embracing heutagogical principles, Indigenous communities can reclaim and revitalize their traditional knowledge and practices, fostering a sense of empowerment, reconciliation and self-determination. Since time immemorial, and tied to the interrelationships with their land and oceans, Fijian communities have always been self-reliant, self-directed and have been surprisingly resilient in the face of climate change and natural disasters. Their progressive understanding of the environment, and the abilities for them to withstand shocks and stresses, allowed them to have an innate resilience, relaying in capable people to lead coupled with self-directed learning.

The adoption of heutagogical learning within management provides a partial explanation that heutagogy may be implemented in a variety of contexts, ranging from undergraduate study to senior leadership positions within organizations and across disciplines (e.g. cross-cutting areas of climate change, DRR, DRM, health and the social sciences).

4.1.2 Can Gender-Focused Climate Change Programming be Gender Transformative? [Brief View from a Feminist-Inclusive Leadership Theory perspective]

Side-stepping briefly to include a GESII (Gender Equity and Social Inclusion and Inclusivity) perspective as it relates to transformational and relational theory, a brief focus is desired on the Feminist-Inclusive Theory of Leadership perspective and how this overlaps or intersects with Transformative and Relational Leadership, considering climate change and disaster risk in Fiji.

The intersection can be visualized from diverse perspectives and validated by many authors. Transformational leadership theory emphasizes the leader's ability to inspire and motivate followers, while relational leadership theory focuses on the social processes of leadership and organizing (Dionne et al., 2004; Uhl-Bien, 2006). These theories intersect with feminist-inclusive leadership by emphasizing the importance of empowering others, collaboration, and creating positive social change (Lewis, 2021; O'Brien, 2017). Feminist-inclusive leadership seeks to challenge traditional power

structures and promote inclusivity, which aligns with the relational aspect of leadership, emphasizing everyday relationally-responsive practices of leaders (Cunliffe & Eriksen, 2011; Guo et al., 2021).

Furthermore, feminist-inclusive leadership aims to address gendered dimensions of leadership and explore why women's participation in leadership has not resulted in significant feminist gains (O'Brien, 2017). This aligns with the critique of transformational leadership theory, which questions its impact on organizational performance and the need to part ways with this dominant theory (Andersen, 2015; Berkovich, 2016). Additionally, feminist-inclusive leadership seeks to promote social justice interpretations of female leaders, particularly in historically disadvantaged communities (Edwards, 2018).

Using the concepts outlined in figure 4, the intersection of feminist-inclusive leadership with transformational and relational theories (Figure 4) involves examining the impact of leadership styles on organizational commitment, team performance, and creativity (Ajia, 2021; Li-hong, 2019; Mansur & Jia, 2018). This intersection highlights the need to explore the dual-level effects of transformational leadership and the mediating role of process approach empowerment in organizational creativity (Mansur & Jia, 2018; Wang & Howell, 2010). Moreover, it emphasizes the complexity and chaos characteristics of the dynamic evolution of the multifactor relational leadership system, strongly suggesting the need for a relational leadership theory under complex environments (Guo et al., 2021).

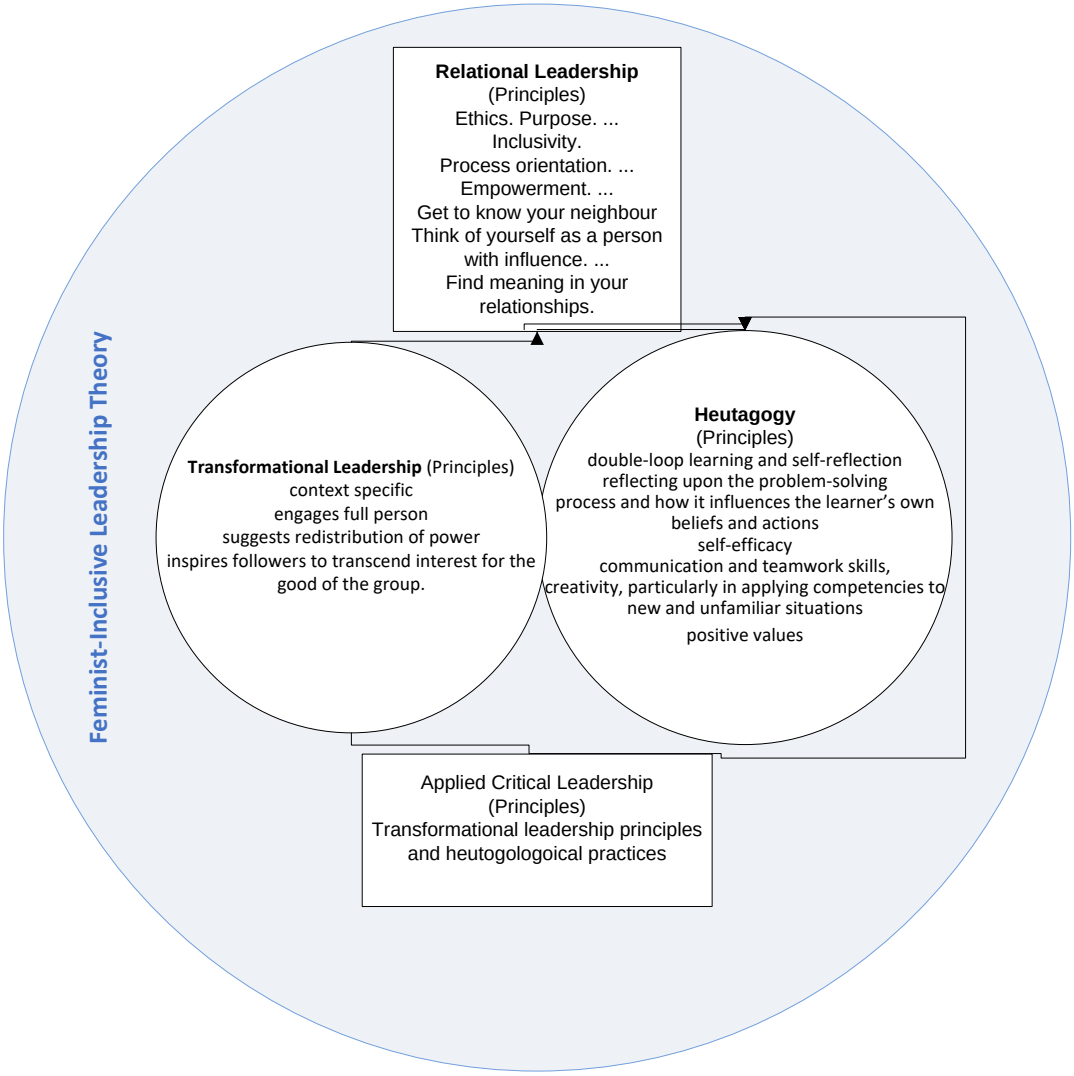

Figure 5: Conceptualized Intersection of Feminist Inclusive Leadership Theory (outside circle), Transformational, Relational Theory Heutagogy and Applied Critical Theory (Modified and adapted from: Blaschke, 2012, p. 8).

As a partial conclusion, therefore, the intersection of feminist-inclusive theory of leadership with transformational and relational theories underscores the importance of empowering others, challenging traditional power structures, promoting gender inclusivity, and addressing gendered dimensions of leadership. It also highlights the need to explore the impact of leadership styles on organizational commitment, team performance, and creativity, particularly in complex environments.

Based on the enablers conceptualized above, there is potential for gender-focused climate change programming to be gender transformative change (GTC), which is illustrated by following points:

- GTC multidimensional because interventions engage with dynamic, not static societies, which are affected by many institutions and factors.
- GTC operates at multiple levels and multiple scales, for example household, community, organisation, groups, market, sub-district government, national government.
- GTC is long-term. In most cases, the impacts of implementing a gender transformative approach will be felt after the project term finishes.
- GTC is self-directed (Heutagogical), inclusive and non-linear. Progressive shifts toward greater gender equality in one dimension may be accompanied by setbacks in another.

The relevance of these elements is that multiple factors and actors are involved, which suggests the need for a systems approach in design and measurement of GTC (Narayan, 2005). In order to monitor risks and setbacks and make positive interventions, development practitioners should take a broad view of change (Martinez et al., 2016). Rao and Kelleher (2005) offer a framework that illustrates different areas and actors, which can be targeted in a gender transformative approach in regards to changes relating to women. This would fit well within the cultural prerogatives/priorities of Fijian society, and help empower women and girls as marginalized (vulnerable) groups.

As a partial summary then, transformational, relational, and applied critical leadership, along with heutagogy, are vital in the context of Indigenous communities. These leadership approaches provide frameworks for empowerment, collaboration, and the promotion of social justice and educational equity, aligning with the values and needs of Indigenous communities.

4.1.3 How does the Cynefin Framework fit within Transformational, Relational and Critical Leadership frameworks?

The Cynefin framework, developed by Snowden (1999), provides a valuable “lens” for understanding and navigating complex decision-making contexts. The framework categorizes situations into five domains: simple, complicated, complex, chaotic, and disorder, each requiring different approaches to decision-making. In the context of leadership frameworks, the Cynefin framework aligns with transformational, relational, and critical leadership approaches by offering a structured sense-making tool that aids leaders in understanding and responding to diverse situations.

Cynefin framework offers decision-makers a "sense of place" from which to view their perceptions. Cynefin is a Welsh word meaning 'habitat', 'haunt', 'acquainted', 'familiar'. Snowden uses the term to refer to the idea that we all have connections, such as tribal, religious and geographical, of which we may not be aware (Harvey and Keith, 2015). It has been compared to the Māori word *turangawaewae*, meaning a place to stand, or the "ground and place which is your heritage and that you come from” (Harvey and Keith, 2015). Within the context of Fijian culture and the leadership proponents related to disaster risk reduction and climate change, some of these frameworks could be applied to some degree in leadership/decision-making or place based traditional approaches to leadership.

As previously reiterated, transformational leadership emphasizes the importance of inspiring and motivating followers to achieve extraordinary outcomes. The Cynefin framework complements this approach by providing leaders with a structured model to understand complex and chaotic situations, enabling them to adapt their leadership style to the specific context. By offering a cognitive approach to urgent decision-making, the framework equips leaders with the ability to apply appropriate actions in crisis situations, aligning with the proactive and adaptive nature of transformational leadership.

Relational leadership theory focuses on the social processes of leadership and organizing, emphasizing the significance of relationships and interactions within organizations. The Cynefin framework supports relational leadership by providing a tool for leaders to make sense of complex landscapes and understand the dynamics of different domains, thereby, informing their relational

strategies and decision-making processes. This aligns with the framework's role in enabling leaders to engage with diverse contexts and contribute to the advancement of relational leadership theory.

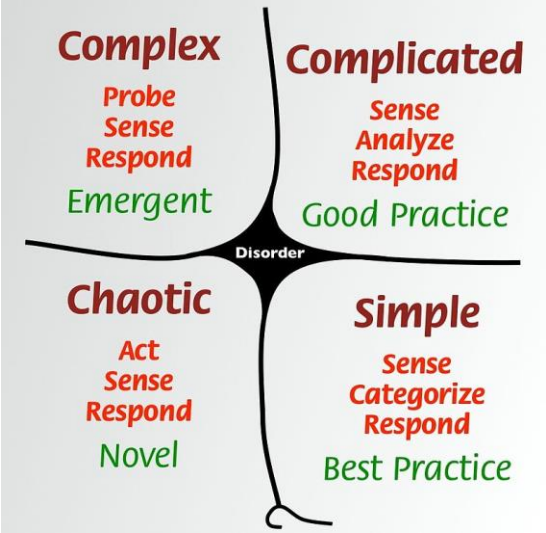

Figure 6: The conceptualized Cynefin framework. (Source: Cynefin framework. (2024, January 2). In *Wikipedia*. https://en.wikipedia.org/wiki/Cynefin_framework

Critical leadership frameworks emphasize the examination of power dynamics, social justice, and ethical considerations in leadership. The Cynefin framework (Figure 6) contributes to critical leadership by enabling leaders to identify decision-making typologies and power dynamics within complex contexts, thereby, maximizing the effectiveness of leadership responses to emerging challenges. Additionally, the framework's emphasis on understanding complex systems and the interplay of various factors aligns with the critical leadership perspective, which seeks to address systemic issues and power differentials. Briefly then, the Cynefin framework serves as a valuable tool that aligns with transformational, relational, and critical leadership frameworks by providing leaders with a structured approach to sense-making and decision-making in diverse and complex contexts. It enables leaders to adapt their strategies, understand relational dynamics, and address systemic challenges, thereby contributing to effective leadership in dynamic environments.

4.2 Implications for Disaster and Emergency Management and Ethical Leadership

As we have uncovered in this essay so far, ethical leadership is foundational to various leadership theories, including transformational and relational leadership, and is relevant to instructional and critical theory. Research has shown that ethical leadership is positively associated with transformational leadership, emphasizing moral and ethical components in the leadership process (Ahmad et al., 2017; Bedi et al., 2015). This connection is further supported by the claim that ethical leadership is a critical element for truly transformational leadership (Zhu et al., 2015). Additionally, ethical leadership is linked to the mediating role of ethical climate change aligning with social learning theory and explaining the effects of ethical leadership on the morals of ethical climate change (Jensen et al., 2022; Mayer et al., 2010). Furthermore, ethical leadership has been found to be positively related to other leadership styles, such as transformational leadership, indicating its relevance in instructional theory (Wang et al., 2015). Ethical leadership, therefore, is more than just traits and values-based inspirational leadership; it also encompasses the moral and ethical components introduced in transformational leadership theory (Armstrong & Muenjohn, 2008; Treviño et al., 2003). This suggests that ethical leadership underpins transformational and relational leadership theories by emphasizing moral and ethical aspects in leadership. Furthermore, ethical leadership is connected to social learning theory, which is relevant to critical theory as it posits that individuals learn ethical behaviour by observing and emulating credible role models (Jensen et al., 2022).

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4.3 Spaces for Effective (or Ineffective) Decision-Making

Figure 7 suggests clarifies that as intensities of climate-influenced natural hazards increase, with heightened pressure for disaster resilience and leadership (CIFRC, 2021), both potential and actual consequences increase. Concurrently, leadership's effectiveness at reducing or preventing these consequences through risk treatments reaches a limit. Beyond this point, risk treatments remain constrained and begin to decline, while the consequences, along with resultant loss and suffering, rise substantially. Behind this heuristic, is evidence of Australian senior decision makers normalizing risks and crises. They do so by pursuing both aggressive preparedness strategies and vested interests such as big coal and gas, selectively filtering scientific knowledge, and hiding behind pervasive masculinity ideals that deny both vulnerability and complicity (Rickards et al., 2014).

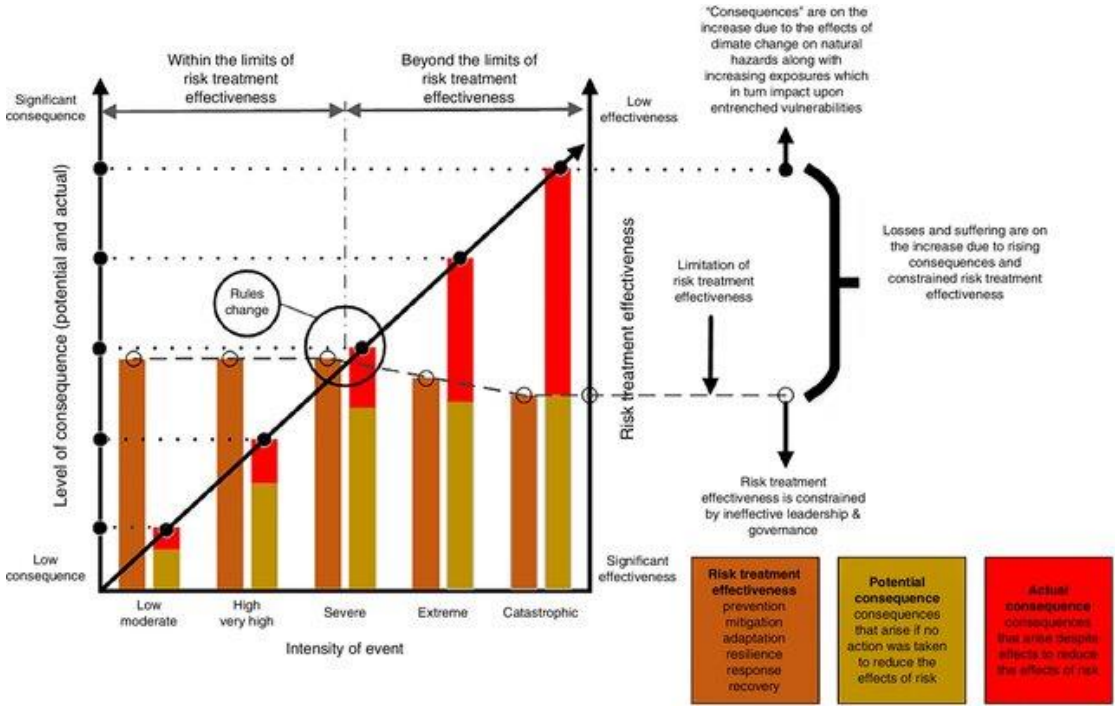

Figure 7: The relationship between consequence, intensity, and the limitation of risk treatment effectiveness that close down spaces for effective leadership and decision-making (Reprinted with permission from Crosweller and Tschakert (2019).

According to Crosweller & Tschakert (2019), the confluence of modernity, the modern risk society, and neoliberal forms of governmentality as well as their effects on vulnerability and resilience have significant ramifications for disaster risk management. Together they reshape the ways citizens look up to their leaders in the hope of effective and just decision making as well as the ways leaders reposition themselves (or do not) to address the mounting challenges in managing disasters and resilience. Here, we use the case of Australia to exemplify the inadequacy of the current leadership space to effectively treat risk with increasing intensity and consequences of events to minimize harmful outcomes, including suffering and loss (loss of damage).

4.4 Caveats to Transformational Leadership and Relational Theory

Trust is developed by discouraging egocentricity, encouraging proactivity and resilience, focusing on issues rather than positions and accepting responsibility while working independently (Jones et al, 2014). Respect is achieved by adopting to new ideas, ambiguity and change, acknowledging the contribution appears and support mechanisms and also facilitating dialogue and being willing to work outside comfort zones (Jones et al, 2014, p,2). In the Fijian Itaukei and Indio-Fijian culture, this element of trust is intrinsically reciprocal, and falls in line with the iTaukei *mata* system of *Vanua* representation, as a system of knowing 'put' in place (or place-based trust-building) to facilitate knowledge sharing and the pursuit of what the *Vanua* conceptualizes as *bula sautu* (lit. 'life [lived in]

peace and plenty', and meaning 'well-being') (Tabilai, 2014).

This is a critical component to leadership and the knowledge building exercise. Tabilai (2014) also reiterates that scientific research, therefore, becomes the vehicle, whereby 'silenced' narratives and traditions embodying important indigenous knowledge may be 'voiced'. Herein, time-proven notions and 'theories' are 'forced' to go through the rigorous process of scientifically validating 'knowledge', and which will prove useful to its traditional 'owners' and the institution of research itself. This constructionist research, as a *re-kune* (searching and conceiving, again) for the answers to the research questions framed to meet the 'needs' of this research project, have used a mix of qualitative methods contextualized with the view of decolonizing the methodology. Using phenomenology, ethnography and philosophical reflection, the participant-observation method was adopted for this research as *veitalanoa*, and employing the *vakaLakeba*, to bring the literature, data collected from the 'field' and metaphorical thought into a rara place of dialogue (Tabilai , 2014).

One of the more interesting caveats to transformational theory and differentiations with relational theory is the slight variation to relational theory that fits within the context of climate change and disaster risk in Fiji. This is what I would like to call a "Relational Co-Theory", called as Socio-material relationalism (SMR). This theoretical framework that emphasizes the interconnectedness and interdependence of social and material elements in various contexts. It posits that social and material entities do not exist in isolation but are co-constituted through their interactions and relationships (Kang & Kim, 2020). This perspective is particularly relevant in geographical and sociological studies, where it has been used to understand phenomena such as vulnerability, poverty (Elwood et al., 2016), entrepreneurship (Bogren et al., 2013), and sustainability (Lejano, 2019). The concept of relationality is central to SMR, highlighting the dynamic and emergent nature of social-material interactions (Preiser, 2019). It underscores the need to consider the entangled socio-materialities in various practices and processes, such as in educational settings (Impedovo, 2021). Furthermore, SMR has been applied in diverse fields, including ecology (Preiser et al., 2018), anthropology (Beynon-Jones, 2013), and urban technology (Rutherford, 2011), demonstrating its interdisciplinary relevance. The relational ontology of SMR challenges traditional views that treat social and material entities as separate and distinct, instead emphasizing their entwined and co-produced nature (Kang & Kim, 2020). This perspective has implications for understanding complex adaptive systems, where phenomena are seen as emerging from dynamic interactions and relationships (Preiser et al., 2018). Additionally, SMR has been employed to analyze the relational aspects of landscape stewardship (Cockburn et al., 2020), extractive terrains (Ey & Sherval, 2015), and human engagements with water (Strang, 2014) highlighting its applicability in diverse environmental and social contexts.

Briefly then, SMR offers a lens through which to examine the intertwined nature of social and material elements, emphasizing their relational and co-constitutive dynamics across various domains. Its interdisciplinary and cross-disciplinary application underscores its significance in understanding complex socio-material interactions and their implications for diverse fields of study.

The essential differences between socio-material relationalism (SMR) and transformational leadership lie in their focus and application. SMR emphasizes the interconnectedness of social and material elements in shaping human actions and meaning creation (Impedovo, 2021). It views tools, artefacts, and language as integral parts of human actions, inseparable from social interactions (Impedovo, 2021). Material culture of the Itaukei people in Fiji resonates with this perspective. On the other hand, transformational leadership is a leadership style that inspires and influences workers, community-members or employees, to improve their performance, motivation, and morale (Vanesa, 2021). It involves creating a vision, fostering a sense of collective identity, and providing inspiration to achieve higher levels of performance (Kovjanic et al., 2013).

SMR highlights the significance of socio-technical processes and the diverse set of actors in constructing and experiencing urban information flows (Rutherford, 2011). It underscores the contested relations and the variety of tools and instruments used in these processes (Rutherford, 2011). In contrast, transformational leadership is described as an effective leadership style that positively influences organizational components and outputs (Mansur & Jia, 2018). It is known for its ability to transform followers' attitudes and behaviours towards work (Curtis et al., 2017). Furthermore, socio-material relationalism is concerned with the socio-ecological dimensions of oil and the construction of urban information flows through day-to-day activities and practices of diverse actors (Bettini & Karaliotas, 2013; Rutherford, 2011). It emphasizes the relational enactment of the real in socio-material

practices (Beynon-Jones, 2013). On the other hand, transformational leadership is associated with the improvement of employee well-being and the creation of a conducive atmosphere through innovative, committed, and communicative leadership (Liyanage, 2020; Rahmawati, 2022).

4.5 Validity, Practicality and Usefulness, particularly in education

As a mild form of this essay's 'conclusions or recommendations', it is argued "for and against" the important of transformational vs. relational leadership theory, as it corresponds/coincides with or overlaps with climate change and disaster risk in Fiji. There are many caveats and nuances that can be associated with these leadership theories as we have seen. It is important that this comes together in a cohesive, clear, transparent or explanatory matter that helps facilitate an understanding of these two forms of leadership.

1. Transformational Leadership:
Validity:

- Supported by extensive research and empirical evidence.
- Effective in various organizational settings.
- Demonstrates positive outcomes in terms of employee motivation, satisfaction, and organizational performance.

Practicality and Usefulness:

- Provides a framework for leaders to inspire and motivate followers.
- Fosters innovation and positive organizational culture.
- Effective in times of change and uncertainty.

2. Relational Leadership:
Validity:

- Supported by research indicating positive relationships between leader-member exchanges and organizational outcomes.
- Emphasizes the importance of human connections in leadership.

There is a slight caveat to this, named socio-material relationism — in the form of relationist leadership.
Practicality and Usefulness:

- Encourages a focus on employee well-being and empowerment.
- Contributes to the creation of a positive ethical climate in organizations.
- Effective for building strong interpersonal relationships.

3. Mango's EEL Model and the Leadership Squeeze:
Validity:

- Need specific information on Mango's EEL model for a detailed assessment.

Practicality and Usefulness:

- Practicality and usefulness depend on the specifics of the EEL model.
- If it addresses key leadership challenges, it can provide valuable insights.

4. Climate Change and Ethical Leadership:
Validity:

- Ethical leadership is crucial in addressing environmental and sustainability challenges.
- Supported by the ethical implications of environmental decisions.

Practicality and Usefulness:

- Practical in promoting sustainable practices.
- Useful in guiding ethical decision-making in environmental contexts.

5. Critical Heutagogy Practice:
Validity:

- Valid in fostering critical thinking and self-directed learning.
- Grounded in educational theories emphasizing learner autonomy.

Practicality and Usefulness:

- Useful in promoting lifelong learning and adaptability.
- Practical for developing critical thinkers and problem solvers.

6. Applied Critical Leadership (ACL):
Validity:

- Need specific information on ACL for a detailed assessment.

Practicality and Usefulness:

- Practicality and usefulness depend on the specifics of ACL.
- If it applies critical thinking to leadership, it can enhance decision-making.

7. Adoption of Heutagogical Learning within Management:

Validity:

- Heutagogy aligns with adult learning theories and promotes self-directed learning.

Practicality and Usefulness:

- Practical for fostering a culture of continuous learning.
- Useful for managers seeking to develop a learning organization.

8. Feminist-Inclusive Theory of Leadership:

Validity:

- Valid in addressing gender biases and promoting inclusivity.

Practicality and Usefulness:

- Practical for creating diverse and inclusive leadership.
- Useful for addressing gender disparities in leadership roles.

9. Cynefin Framework within Leadership Frameworks:

Validity:

- Valid as a sense-making framework in complex environments.

Practicality and Usefulness:

- Practical for guiding decision-making in various contexts.
- Useful in determining appropriate leadership approaches based on system complexity.

10. Implications for Disaster and Emergency Management and Ethical Leadership:

Validity:

- Valid in emphasizing the importance of ethical leadership in crisis situations.

Practicality and Usefulness:

- Practical for guiding leaders in making ethical decisions during emergencies.
- Useful in maintaining trust and integrity in disaster management.

11. Spaces for Effective (or Ineffective) Decision-Making:

Validity:

- Valid in highlighting the impact of decision-making spaces on leadership outcomes.

Practicality and Usefulness:

- Practical for leaders to assess decision-making spaces.
- Useful for understanding factors that facilitate or hinder effective leadership.

12. Relationship between Consequence, Intensity, and Limitation of Risk Treatment Effectiveness:

Validity:

- Valid in exploring the interplay between risk factors and leadership effectiveness.

Practicality and Usefulness:

- Practical for leaders to evaluate the effectiveness of risk treatments.
- Useful for decision-making in risk management.

In summary then, the validity, practicality, and usefulness of these theories vary, and their effectiveness depends on the context and specific applications within leadership and management domains. Whilst we focused on climate change, disaster risk and resiliency, many of these forms of leadership, frameworks, or learning approaches can be “retrofitted” to accommodate the on-the-ground leadership challenges and complexities that are present in Fijian society today.

5. RATIONALE FOR CHOSEN THEORY TO COMPARISON THEORY

A brief exploration will now be undertaken on how the chosen theories are deemed reasonable/rational within the context of climate change, disaster risk, and community resilience in Fiji theories, and why the chosen theory is considered "better" and/or a good match for education today.

Table 1: Main Leadership Theory comparisons and theoretical matches to Education today

Theory	*Rational*	*Match for Education Today*
Transformational Leadership (TL):	Transformational leadership focuses on inspiring and motivating individuals to achieve more than they initially thought possible. In the context of climate change and disaster risk, leaders need to inspire communities to embrace sustainable practices, adapt to changing conditions, and build resilience.	This theory is relevant in education as it encourages leaders and educators to foster creativity, innovation, and a sense of collective responsibility in addressing climate-related challenges.`
Relational Leadership (RL):	Relational leadership emphasizes building strong relationships and collaboration. In the face of climate change and disasters, fostering community relationships and cooperation is essential for effective response and recovery.	Emphasizing relational leadership in education can help students develop interpersonal skills, collaboration, and empathy, preparing them for effective community engagement in disaster situations.

Table 1 outlines the main theories for purposes of this essay; however, there have been a number of anecdotal frameworks or functional additions to these theories that have importance in climate change, disaster risk, resiliency and education, within the socio-cultural context of Fiji Islands. Table 2 highlights these important frameworks and how this relates to education today, in each case.

Table 2: Important anecdotal frameworks or functional additions to TL and RL

Theory	*Rational*	*Match for Education Today*
Mango's EEL Model and the Leadership Squeeze:	Mango's EEL model and the Leadership Squeeze provide frameworks for understanding leadership challenges and adapting to complex situations, which is crucial in the unpredictable scenarios presented by climate change and disasters	Teaching leaders to navigate the Leadership Squeeze enhances their ability to make informed decisions and manage crises, skills highly relevant to disaster management education.
Climate Change and Ethical Leadership:	Ethical leadership is crucial in addressing climate change, ensuring that decisions consider the long-term impact on the environment and vulnerable communities.	Incorporating ethical leadership education ensures that future leaders are conscious of the moral implications of their decisions, promoting sustainability and responsible resource management.
Critical Heutagogy Practice:	Critical heutagogy focuses on self-directed learning and critical thinking. In the context of climate change, individuals need to continuously learn, adapt, and critically assess information to make informed decisions.	Promoting critical heutagogy in education prepares individuals to be lifelong learners, essential in addressing the evolving challenges of climate change.
Applied Critical Leadership (ACL):	ACL combines critical thinking with practical application. It is	ACL fosters a problem-solving mindset, equipping individuals

Theory	*Rational*	*Match for Education Today*
	valuable in preparing leaders to analyze and solve real-world problems associated with climate change and disasters.	with the skills needed to address complex challenges and make informed decisions in disaster situations.
Adoption of Heutagogical Learning within Management:	Heutagogical learning places emphasis on self-directed learning. In the context of climate change and disaster management, individuals need to take initiative in acquiring and applying knowledge.	Integrating heutagogical learning in education promotes self-motivation and autonomy, critical for individuals navigating the complexities of climate change adaptation and disaster resilience.
Cynefin Framework within Leadership Frameworks:	The Cynefin Framework helps leaders understand the nature of problems they face and guides decision-making based on the complexity of the situation.	Teaching leaders to apply the Cynefin Framework enhances their ability to analyze and respond to different challenges, making it a valuable tool in disaster management education and climate related environmental awareness.
Implications for Disaster and Emergency Management and Ethical Leadership:	Understanding the implications of disaster and emergency management on ethical leadership is vital for ensuring that responses are just, equitable, and considerate of human rights.	Integrating ethical considerations into disaster management education ensures that leaders prioritize the well-being and dignity of affected communities.
Spaces for Effective (or Ineffective) Decision-Making:	Examining decision-making spaces is crucial in disaster management. Leaders need to understand the contexts that influence their decision-making processes.	Educating leaders about decision-making spaces enhances their ability to make effective decisions in the face of complex and rapidly changing situations, as often seen in climate-related disasters.
Relationship between Consequence, Intensity, and Limitation of Risk Treatment Effectiveness:	Understanding the relationship between consequences, intensity, and the limitation of risk treatment effectiveness is essential for informed decision-making in risk management.	Educating leaders about this relationship ensures that they can prioritize risk mitigation strategies effectively, especially in the context of climate change and its associated risks.

These theories, therefore, provide valuable frameworks for understanding, teaching, and practicing leadership in the context of climate change, disaster risk, and community resilience. They address the cross-cutting and multifaceted, interconnected and interdisciplinary challenges posed by these issues, offering insights into effective leadership, decision-making, and ethical considerations in the face of complex and dynamic situations. Integrating these theories into education today prepares future leaders to navigate the uncertainties associated with climate change and disasters and resiliency.

6. SHORTCOMINGS OF THE CHOSEN AND COMPARISONS OF MAIN THEORIES

As a way of making a physical comparison between the chosen leadership series, the author opted to summarize and highlight main aspects of pros and cons of each and weigh them accordingly. Table 3 takes a pragmatic view at evaluating the main leadership theories, both Transformational Leadership (TL) and Relational Leadership (RL). Both offer distinct advantages and drawbacks. TL excels in inspiring and motivating followers to surpass their own expectations and achieve a common vision, relying on charismatic communication. However, it may foster dependency on the leader's vision and struggle with adaptability to changing circumstances, potentially leading to burnout among followers. Conversely, RL prioritizes building strong interpersonal relationships and collaborative decision-making, promoting a decentralized approach to leadership and adaptability to change. While it emphasizes well-being and work-life balance, the relational demands may still contribute to burnout if not managed effectively. Flexibility in leadership style and measuring success also differ between the two approaches, with TL focusing more on ambitious goals and RL considering outcomes alongside relationship strength and team satisfaction.

7. CONCLUSIONS AND REFLECTIONS

This essay has broadened significantly from its original intent to compare transformational and relational leadership theories and, by default, segued into a number of other frameworks that fit in a broader sense the notion of how leaders address climate change, natural disasters and resiliency in Fiji (as a case study). Ten (10) other leadership theories/frameworks were annexed as partial explanations perhaps for these two highlighted relationships as the bridge/overlap with other frameworks that provide a more comprehensive understanding of the complex relationships that exist on the ground. The validity and practicalities/usefulness of each framework within this essay describes the complexities and highlights the importance of these interrelationships. Many cultural and social relationships intrinsically overlap with leadership in a broad sense, transformational and relational leadership by overworking roles in shaping other ethical attributes and frameworks that intertwine, interconnect or overlap with TL and RT.

In conclusion, therefore, the chosen theories (Transformational Leadership and Relational Leadership) offer valuable perspectives for leadership in the context of climate change, disaster risk, and community resilience. Transformational Leadership is rational in the face of climate change and disasters as it focuses on inspiring communities to embrace sustainable practices and build resilience. It is discovered that the validity, practicality, and usefulness of these theories vary, and their effectiveness depends on the context and specific applications within leadership and management domains. While focusing on climate change, disaster risk and resiliency in Fiji, many of forms of leadership, frameworks, or learning approaches can be “retrofitted” to accommodate the on-the-ground leadership challenges and complexities that are present in Fijian society today.

This seems a good match for education today as it encourages creativity, innovation, promoting self-directed learning (heutagogy) and collective/cooperative responsibility. Relational Leadership, with its emphasis on strong relationships and collaboration, is crucial for effective response and recovery in the face of climate-related challenges. It aligns with education by promoting interpersonal skills and empathy, preparing students for community engagement in disaster situations. In a Fijian context, the importance of aligning education with principles like creativity, innovation, self-directed learning (heutagogy), and collective responsibility cannot be overstated. Fijian culture places significant emphasis on communal ties and cooperation, making the promotion of these values essential for community resilience and development, particularly in the face of climate-related challenges. Relational Leadership (RL) which underscores the importance of building strong relationships and fostering collaboration, resonates deeply within Fijian society. In the wake of climate change impacts and natural disasters, effective response and recovery efforts rely heavily on cohesive community action and support networks. By prioritizing relational leadership in education, Fijian students are better prepared to engage with their communities, demonstrate empathy, and work collectively during times of crisis.

Table 3: Pros and Cons of main Leadership theories

Aspect	*Pros and Cons of Transformational Leadership (TL)*	*Pros and Cons of Relational Leadership (RL)*
Focus	Primarily focused on inspiring and motivating followers to achieve a common vision and challenging them to exceed their own expectations.	Emphasizes building strong interpersonal relationships and connections with team members, focusing on collaboration and trust.
Communication Style	Tends to rely on charismatic communication, often using inspirational speeches and visionary messaging to influence and motivate followers.	Prioritizes open and transparent communication, fostering a supportive environment where team members feel comfortable sharing ideas and concerns.
Dependency on Leader	May create a dependency on the leader's vision, potentially leading to a lack of initiative among followers if the leader is not present or available.	Encourages shared leadership and distributed decision-making, reducing dependence on a single leader and promoting a more decentralized approach.
Adaptability to Change	While effective in driving change aligned with the leader's vision, may struggle with adaptability if the vision becomes outdated or circumstances change rapidly	Often more adaptable to change due to the emphasis on strong relationships, as the leader can leverage the collective strengths of the team to navigate unforeseen challenges.
Risk of Burnout	The high expectations and emphasis on surpassing one's own limits may lead to burnout among followers, especially if the inspirational vision is not balanced with adequate support.	Places a strong emphasis on well-being and work-life balance, but the relational demands and constant collaboration may still contribute to burnout if not managed effectively.
Decision-Making Process	Decision-making is often centralized, with the leader taking a significant role in shaping the vision and strategies.	Promotes a more participative and collaborative decision-making process, involving team members in shaping goals and strategies, fostering a sense of ownership
Flexibility in Leadership Style	Transformational leaders may struggle to adapt their style to different situations, relying heavily on inspiration and vision regardless of the context.	Relational leaders often display a more flexible approach, adjusting their leadership style based on the needs of the team and the nature of the tasks or challenges at hand.
Measuring Success	Success is often measured by the achievement of ambitious goals and the realization of the visionary leader's aspirations.	Success is measured not only by outcomes but also by the strength of relationships, team cohesion, and the overall well-being and satisfaction of team members.

Frameworks like Mango's EEL Model, Ethical Leadership, and Critical Heutagogy Practice offer additional layers of insight into addressing the complexities of climate change and disasters. In a Fijian context, where environmental vulnerability is high, integrating these theories into education is crucial. They not only enhance students' understanding of environmental challenges but also equip them with practical skills for decision-making and risk management within their communities. Furthermore, concepts such as the Cynefin Framework provide valuable guidance for navigating uncertain and dynamic environments, which is particularly relevant in the context of climate change adaptation and disaster preparedness. By incorporating these diverse perspectives into education, future Fijian leaders are empowered to confront the multifaceted challenges posed by climate change with adaptability, resilience, and a deep sense of responsibility towards their communities.

In essence, integrating these theories and frameworks into Fijian education ensures that the next generation of leaders is well-equipped to address the pressing issues of climate change and disasters while upholding the values of collaboration, empathy, and collective action that are intrinsic to Fijian culture. It is essential therefore to acknowledge the shortcomings of each theory, as highlighted in the tables, and consider a balanced approach that leverages the strengths of both Transformational and Relational Leadership in preparing leaders for the complex challenges ahead.

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AUTHOR'S DECLARATIONS AND ESSENTIAL ETHICAL COMPLIANCES

Author's Contributions (in accordance with ICMJE criteria for authorship)
This article is 100% contributed by the sole author. He conceived and designed the research or analysis, collected the data, contributed to data analysis & interpretation, wrote the article, performed critical revision of the article/paper, edited the article, and supervised and administered the field work.

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The author(s) has/have NOT complied with PRISMA standards. It is not relevant in case of this study or written work.

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