

## Article

# From Deficit to Strength-Based Aboriginal Health Research – Learning from those Who Flourish

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**Abstract:** Aboriginal Australians have a fundamental human right to opportunities that lead to healthy and flourishing lives. While the impact of trauma on Aboriginal Australians is well-documented, a pervasive deficit narrative that focuses on problems and pathology persists in research and policy discourse. This narrative risks further exacerbating Aboriginal disadvantage, through a focus on ‘fixing what is wrong’ with Aboriginal Australians, and the internalising of these narratives by Aboriginal Australians. While a growing body of research adopts strength-based models, limited research has sought to explore Aboriginal flourishing. This conceptual paper seeks to contribute to a burgeoning paradigm shift in Aboriginal research, seeking to understand what can be learned from Aboriginal people who flourish, how we best determine this, and in what contexts this can be impactful. Within, we argue the case for a new approach to exploring Aboriginal wellbeing that integrates salutogenic, positive psychology concepts with complex systems theory to understand and promote Aboriginal wellbeing and flourishing. While deeper work may be required to establish the parameters of a strength-based, culturally aligned Aboriginal conceptualisation of positive psychology, we suggest the integration of Aboriginal and Western methodologies offer unique and potent means of shifting the dial on seemingly intractable problems.

**Keywords:** Aboriginal; First Nations; wellbeing; salutogenesis; flourishing; positive psychology; complex systems

## 1. Introduction

*“Aboriginal Law refers to a complex relationship between humanity and land which extends to cover every aspect of life; to that extent it is what theorists call a ‘complex system’, in that it explains both the observer and the observed.”* Mary Graham – Kombu-Merri & Wakka Wakka person

*“the purpose of models is not to fit the data, but to sharpen the questions.”* Samuel Karlin – mathematician

### 1.1. Positionality

We acknowledge and pay respect to the traditional owners and custodians of the Nyoongar boodja on which the first two authors – mother and son Wardandi Nyoongar people – conceived this manuscript. We wish to acknowledge the continuing connection to land, sea and community and we pay our respects to our Elders past and present. We also acknowledge all Aboriginal peoples across this continent now known as Australia.

This paper emerged through considerable discussion between the first two authors, a Wardandi Noongar mother and her eldest son, about Aboriginal health and wellbeing and the possible factors across each of their lives that has led to their own current states of wellbeing. Both have endured despite unique and distinct experiences of the Stolen Generation and its impacts; one taken from her family as a child never to know her biological parents, the other of the first generation in family to be raised by his biological parents. Both belong to an Aboriginal family that, while deeply impacted by the policies and practice of Australia's colonial legacy, has over time reconceptualised what it means to be 'doing well' as Aboriginal people. The collective voice across the manuscript's Aboriginal and *Wadjella* (non-Aboriginal) authorship draw on the diverse cultural and disciplinary perspectives to make a case for expanding how we conceptualise Aboriginal health and wellbeing research, and what this may mean for Aboriginal health and wellbeing more broadly.

### 1.2. Background

As enshrined for all individuals and populations, Aboriginal Australians have a fundamental human right to opportunities that lead to healthy and flourishing lives, despite any adversity they face [1]. However, the prevalence and causes of trauma for Aboriginal people [2], and the collective and pervasive impact of this trauma on the wellbeing of Aboriginal Australians is well-documented [3]. Disturbingly, rates of disadvantage experienced by survivors of Australia's Stolen Generation, and their descendants, have been considered to be even greater than those witnessed among the broader Aboriginal Australian population [3]. Australian governments have responded with a range of strategic policy, program and resourcing initiatives that seek to address disparities in health outcomes. However, these initiatives have met with limited success [4]. While research has examined the deleterious effects of colonisation and past/on-going policies on Aboriginal people broadly, a pervasive deficit narrative that focuses on problems and pathology dominates academic and policy discourse. This narrative risks further exacerbating Aboriginal disadvantage, through the production of evidence that focuses on 'fixing what is wrong' with Aboriginal Australians, and, perhaps more problematically, the subsequent internalising of deficit narratives of self among Aboriginal Australians [5].

While there are notable examples in the broader literature of Aboriginal Australian people who are living, and redefining what it means to be healthy [6], few researchers actively assume a strength based approach to better understand factors that enable some Aboriginal families and individuals – particularly those whom are powerfully affected by historical and on-going trauma - to attain high levels of subjective wellbeing: to 'flourish' [7]. Even fewer are the examples within the literature of those factors that contribute to and underpin Aboriginal wellbeing [8]. This raises an important question about the underlying factors that support the flourishing of some Aboriginal Australians in spite of their experiences of substantial trauma. Put one way, this question might be: "Why do some Aboriginal people thrive while others do not?". However, the causes of Aboriginal health and wellbeing disparity and the lived experience of this disparity are well documented and not the foci of this paper. Rather, when conceptualising this paper, we instead framed our thinking with an alternative question 'For those Aboriginal people who are doing well and who flourish, what needs to be true?'.

In doing so, we seek to contribute to a burgeoning paradigm shift in approaches to Aboriginal research, seeking to understand what can be learned from Aboriginal people, families and communities who are doing well. While an important goal in its own right, we extend this by asking how we best determine these things, and in what contexts might we see these learnings take shape and have relevance, influence and impact.

Within this manuscript, we first discuss Aboriginal wellbeing as a multifaceted construct, and the complexity of causation, noting the broader system of factors that can contribute to disadvantage. We then argue the case for a new approach to exploring Aboriginal wellbeing that integrates salutogenic, positive psychology concepts with complex

systems theory, to understand and promote Aboriginal wellbeing and flourishing: Systems Informed Positive Psychology (SIPP).

We briefly talk to existing conceptualisations of strength-based Aboriginal research, followed by discussion of recent pilot research with an Aboriginal family exploring the factors associated with high levels of wellbeing built on the foundations of SIPP. We then elaborate on potential opportunities and tensions within this research model, before concluding with a consideration of the proposed model's fit to Aboriginal health and wellbeing, and ways forward.

### 1.2.1. Wellbeing as a multifaceted construct

Wellbeing for Aboriginal peoples is a holistic, multifaceted construct [9]. Recent Aboriginal-led research has sought to establish models to understand, interpret and promote what wellbeing means for Aboriginal Australians [8-10]. Fundamentally driven by Aboriginal research methodologies [11], this body of work seeks to ensure and facilitate culturally aligned methods and definitions of wellbeing, as an empowering and emancipatory process to guide examinations of wellbeing and the translation of these to new, improved and appropriate models of wellbeing to overcome entrenched inequality. These models are noted as interconnected and include a broad range of components considered important to Aboriginal people [8]. Importantly, this work suggests the culturally bound nature of the features of life important to Aboriginal populations, compared to non-Aboriginal developed models, and thus conceptual differences in those factors considered meaningful to wellbeing, but also their weighting relative to other more commonly used metrics. In contrast to this still developing evidence, most research into Aboriginal social and emotional wellbeing has focused on the reduction of pathology, falling well short of intended aims [5]. Also prevalent has been its framing in deficit discourse – representations of Aboriginal people and populations entrenched in a narrative of deficiency, negativity and failure [12]. Despite renewed focus on greater involvement of Aboriginal Australians in determining targets of relevance to Aboriginal communities [13], the focus remains almost solely one of reducing deficit and pathology, comparative to Western 'objective' measures of wellbeing [14]. What has received little focus within Aboriginal Australian health and wellbeing contexts are the factors that develop and enhance health and wellbeing, extending into the realm of a 'life well lived' – in short, flourishing [15], and also how this is facilitated within the broader system of factors for Aboriginal populations. In the general population, there is a well-established evidence base of strength-based research exploring the lives and experiences of flourishing individuals and families, despite experiences (historical and/or on-going) of trauma [16]. However, little is known about the factors that influence the life trajectory of flourishing Aboriginal families and individuals. While Aboriginal flourishing is significant in its own right, it is doubly so when considered in light of the fact that *"those with positive post-event trajectories of resilience and growth [...] are not typically seen by clinicians, nor studied by clinical researchers"* [17]. That many Australian Aboriginal families and individuals have found their way to flourishing is a topic of national significance.

### 1.2.2. Complexity in origin and solution?

The commencement and maintenance of Aboriginal health trajectories are founded on a complex body of determinants [18-20] – for example, socioeconomic status, educational access, housing, transportation, behavioural factors, community capacity and support, and the experience of discrimination. These common distal determinants are linked to, mediate, and are often reinforced by, more proximal determinants such as genetic, health behavioural and socio-environmental interaction factors [21], and are deeply embedded in colonised societies. While the existence and impact of these discrete determinants are well understood, less so are the exponential impacts of their interrelatedness [19,

22-23]. These are complex issues difficult to disentangle; the continuing consequences exemplified by the high burden of disease and ongoing inter-generational disadvantage makes them deeply challenging to understand and change [24-25]. While embedded within our scientific systems, linear approaches to understanding and improving Aboriginal health outcomes often fall short when considered in the context of the 'wicked' nature of multiple interrelated factors; other, more complexity oriented approaches are useful, perhaps necessary, to disentangle the 'tangled' and elucidate emergent properties, states, constructs and points of leverage that may prove useful in working with populations that struggle under the weight of the impact of such complexity [26-27].

### *1.2. A strength-based complex systems approach to understanding Aboriginal flourishing*

We propose a paradigmatic shift framed by Systems Informed Positive Psychology (SIPP) [28]. Essentially, SIPP is based upon two key theoretical propositions. The first, positive psychology (PP) [29], focuses on exploring the 'well-being, contentment and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present)' of individuals and family. Aligned with calls for greater research focus on the many strengths within Aboriginal communities, positive psychology advocates for a fundamental shift in the way the world is viewed; the distinction and focus inclusive of opportunities for growth and flourishing, as opposed to solely 'weathering the storm' [30]. Far from denying adversity, it is via the integration and understanding of the positive *and* negative aspects, experiences, behaviours and practices of individuals and families, and their sociocultural and ecological contexts that the mechanisms that facilitate and promote valued outcomes – states of wellbeing - arise [9].

The second, systems theory [31], posits that a system is 'an interconnected set of elements that is coherently organized in a way that achieves something' [31] (p. 11). Accordingly, systems theory avoids simplistic, granular perspectives of phenomena, instead concerning itself with the ways in which the diverse functions of discreet elements within a bounded system dynamically interact. Certainly, it enables a focus on understanding the state of an element at any given time by examining the interconnectedness between elements within the bounds of the broader system. However, its real strength lies in its capacity to explicate how and why complex phenomena self-organise, coming together in concert to facilitate elemental adaptation, and/or the emergence of complex phenomena previously unknown or unanticipated.

SIPP brings the two theories together through a foundation of epistemological, political and ethical assumptions of the world [28], specifically that an objective reality likely exists, alongside simultaneous and multiple subjective perspectives of that reality; there is constant negotiation, granting and embodiment of rights, responsibilities and power by people within a given system; and the notion of wellbeing must be defined and redefined collectively, and thus move toward what is good, right, and optimal for the collective. At present, it is unknown whether these assumptions hold for Aboriginal populations, and thus, some exploration, interrogation and redefinition is required. However, in short, SIPP, from a human-oriented psychosocial and sociocultural context, acknowledges that development of entities toward wellbeing, whether individual or collective, does not occur in isolation, recognising the broader forces that play a vital role in the shape of these at any given point in time [28, 32].

There is evidence that familial, social, economic, cultural, educational, environmental, and other factors are important to subjective wellbeing within Aboriginal communities [6]. Moreover, it is the balance and interconnectedness of these threads of wellbeing that contribute to holistic wellbeing in Aboriginal society [8, 33], aligning with principles of systems science [28]. However, there is little research examining the complexity and interaction between these, including within and between individuals, social networks and systems and the broader sociocultural ecology distinct to Aboriginal Australian communities over the lifespan. Moreover, the influence of these factors that catalyse trajectories

toward, and emergence of, a positive psychology of wellbeing is unexplored in the Aboriginal context. Our proposed approach considers key principles of complex systems, acknowledging the temporal, nonlinear nature of human development as individuals, families and communities move through their lives. It is fundamentally shaped by the concept of salutogenesis – that is, a focus on, and exploration of, the precursors, causes and maintainers of health and wellbeing, as opposed to exclusive focus on prevention and elimination of disease, from a baseline of disease and individual unwellness [34]. This adoption, integration, and understanding of the potential of, both strength-based and systems frameworks within Aboriginal wellbeing research are particularly important when considered in light of both holistic Aboriginal conceptualisations of wellbeing and what is going ‘right’ with our communities, but, vitally, evidence linking broader conceptualisations of psychosocial wellbeing to important potentialities and possibilities, from both a practical and theoretical vantage point.

### *1.3. Strength based Aboriginal research: gathering momentum*

Approaches to research that focus on, promote, and /or incorporate the strengths and knowledge of Aboriginal communities are growing in their usage, noted for their capacity to disrupt a history of deficit approaches to research, and push back against the potential harms of deficit narratives to Aboriginal people and communities [5, 35]. There is a growing body of research informing policy and practice that might be described as strength-based and incorporated within research teams, the governance models and methodology. Still maturing, this corpus of knowledge founded on Aboriginal methodologies increasingly includes concepts of co-design – in short, the fundamental inclusion and foregrounding of Aboriginal worldviews and voices within, and driving, the research process [36]. The way this is enacted spans the spectrum of quality and authenticity, ranging from on-going tokenistic approaches that remain little more than outdated models of ‘consultation’ [37], to richly comprehensive methodologies guided, informed and owned by Aboriginal people and communities throughout the entire research life cycle [for example, [38]] intended to set the conditions for appropriate engagement for the given context.

Within this, the centrality of culture is also growing in primacy [35] and being recognised as fundamental by governments and funding bodies (we note that Aboriginal people have long understood this), with a body of work spanning cultural practice in recent times, from frameworks of Aboriginal wellbeing, for example Aboriginal self-determined factors of wellbeing [8] and Social and Emotional Wellbeing models [10], to projects focused on language revitalisation [39], giving voice to country through song [40], and birthing on country [41] just a few important projects that fit this remit. Here we briefly expand on a few pieces of research grounded in strengths, and their potential fit to a salutogenic model.

Sivak et al.’s [39] research utilised a Social and Emotional Wellbeing framework [10] to explore findings from their work on language revitalisation, specifically highlighting the positive psychological and social and emotional wellbeing impacts of participation. Profound meaning was noted as being derived from both the immediate process of language revitalisation, in terms of connection and/or re-connection to culture and country, but also in terms of relationship within and between generations, and the passing on of this knowledge to descendants. The experience of strong positive emotions was articulated as a result of each of these things, but also from the sense of belonging to, and leading, a community initiative that could bring together and heal wounds between Aboriginal and non-Aboriginal communities. This last point speaks clearly to the importance and impact derived from meaningful engagement in research, noted elsewhere [42].

McBride et al. [43] explored Aboriginal women’s conceptualisation of cardiovascular health, foregrounding wellbeing from a cultural perspective and highlighting the protective and risk factors recognised by participants, but also the gap between this recognition and the broader health system response. Importantly, their work speaks strongly to the linkages and interactions between culture, the broader system of factors (such as the



environment, health services, and policy) and components of psychological wellbeing (such as meaning, relationships, and autonomy) and physiological wellbeing. These latter two points, and their interrelationship, have been noted strongly in the broader literature (for example, [44]).

Very recent research has more explicitly aligned with tenets of positive psychology and wellbeing, albeit across a broad populace sample. Sofija et al.'s [45] exploration of the predictors of flourishing for emerging adults in Australia highlighted greater rates of flourishing in Aboriginal populations relative to non-Aboriginal populations, noting 1) the possibility of a trauma and disadvantage derived resilience and/or 2) the existence of inherent strengths specific to this subpopulation that facilitate flourishing. While the former has been well-documented in Aboriginal populations (for example, [46-48]), the latter has only very recently received more rigorous attention.

Most of this work has not been conceptualised within a positive psychology theoretical framework. Indeed, to our knowledge no published research in Aboriginal health and wellbeing has adopted the SIPP approach. However, it is relatively simple to understand and interpret the alignment of these projects with positive psychology concepts and, importantly, a salutogenic rather than pathogenic positioning. Thus, we aim to make clear the synergies between SIPP with Aboriginal research and Aboriginal research methodologies, arguing that it is possible to do so without losing those elements vital to Aboriginal wellbeing research, such as the pre-eminence of culture, relationality or of Aboriginal methodology and worldview – these are not mutually exclusive ideas. While beyond the scope of this paper to outline the possible range and quality of strength-based approaches [35], we also note the emphasis in Bryant et al.'s [35] work on foregrounding and embedding cultural practice as a way of 'doing' research (as opposed to being solely a factor of, or intervention in, the research process), and the alignment of this with the concepts inherent to salutogenic, complex systems approaches, particularly interconnectedness and emergence, articulated clearly in the following quote:

*"sociocultural approaches offer insight into the social mechanisms through which strengths and resources are 'made', and thereby offer a way to understand how these can be supported through programmes and other forms of social action". [35] (p. 1414)*

#### 1.4. Pilot testing a SIPP model of wellbeing

This conceptual paper itself stems from as yet unpublished pilot research conducted by the first two authors (Bullen and Hill-Wall) in 2020/2021, who adapted an integrated model of Aboriginal and Western positive psychology methodology [49] to qualitatively explore their own family trajectories of wellbeing and flourishing and the broader systemic context that supported this. Briefly, the research project, framed by SIPP, involved yarning with Stolen Generations survivors and their descendants (11 participants within a single family), aiming to explore, identify and map factors and points of leverage that historically and contemporarily influence trajectories toward wellbeing and flourishing. The research process itself was embedded in relationality, enabling and supporting lengthy yarns structured around the PERMA model [50] (a model consisting of measurable elements suggested to broadly contribute to wellbeing, including Positive Emotion, Engagement, Relationships, Meaning, Achievement) to discuss those things across participants' lifespans that led to family and individual wellbeing. Of significance, experiences of being well as Aboriginal people were not considered homogenous; it was important to ask participants what wellbeing meant to them, reflecting the ethical imperative for culturally appropriate, collective definitions of the construct [27-28, 32]. The emergence of self-definitions of wellbeing appeared throughout, with noted and clear points across the lifespan perceived as contributing to this. External to this, it became clear that wellbeing for individuals and the family more broadly emerged as a by-product of the function and interaction of many historical and contemporary factors at the individual and systemic level, despite the existence of trauma and social and familial disruption as a family directly impacted by the Stolen Generations. While pilot participants consistently highlighted

culture as fundamental, opportunities for agency and autonomy, the experience of flow states and pleasure, search for and clarity of life meaning (interestingly, often found in anger and rage at historical and contemporary issues), and resilience and growth (despite, and in some cases because, of trauma) were consistently noted, in ways explicitly, implicitly and sometimes not at all, linked to culture. Each was associated with individual, social and ecological factors (for example, conceptualisations of cultural identity, intercultural relationships, the creation of, and accessing or seeking out of protective or nurturing proximal and distal environments) of flourishing [44]. Notable to this pilot work, and to the other examples discussed here, was the impact of 'doing' the research (as articulated by Aboriginal researchers and participants), and the inherent meaning, agency and autonomy attributed to guiding and shaping the nature of the research and its outcomes, but also its adherence to ways of doing that align with cultural practice such as relationality in the research process [35].

### 1.5. A SIPP framework for Aboriginal health research: Tensions and Opportunities

Given this context, we propose that it is possible to see Aboriginal people be well, to do well, and to be very well, and that a systems informed positive psychology framework for understanding Aboriginal peoples' health and wellbeing has relevance and utility, in both conceptualising research but also how to frame the research process in a practical sense. We argue that SIPP, as an extensible, flexible and strength-based framework, offers opportunity to understand, implement, interpret and promote what wellbeing means and can be for Aboriginal Australians, the theoretical mechanisms within the broader framework that act to influence wellbeing, and the interactions and intersections with the broader social context to enable enhanced wellbeing. However, it is important to acknowledge that there are areas requiring careful consideration throughout. We aim to outline a few important tensions and opportunities inherent to the SIPP model, or that it is uniquely positioned to generate, address and/or further develop. While likely not a comprehensive list, we address some of the most immediate and salient points.

### 1.6. Tensions

**Metatheoretical assumptions.** The first is the question of relevance of the framework to Aboriginal people, particularly one that has been derived and sustained predominantly by non-Aboriginal practitioners up until this point. Critique has been levelled at the limitations of positive psychology in the context of non-Western cultures, particularly around the very real impacts and consequences of oppression, social marginalisation, but also around the potential for poor fit to values and beliefs that are not Western [51]. This is likely relevant in the Australian Aboriginal context also, though does not necessarily consider that Aboriginal peoples are highly diverse in our beliefs, values and indeed conceptualisations of what it means to be Aboriginal. Indeed, we argue that there are considerable human similarities shared by Aboriginal and non-Aboriginal populations alike, and much can be accomplished through a sharing of ideas, knowledge and models about the world and our worldviews within it, noted by other Aboriginal and non-Aboriginal authors [5, 49, 52].

Importantly, recent research is beginning to explore the potential of positive psychology in global non-Western populations [53-54], each noting the importance of the strength-based focus and its potential relevance and efficacy, while noting the necessity of understanding and deeply considering the cultural fabric of each population throughout the research process. In line with this, and the principles of true strength-based principles, it is vital that Aboriginal populations themselves determine and govern how these frameworks are adapted and implemented (27, 54).

Interestingly, and also speaking to criticism of extant research approaches [35], it is the system focus of SIPP and its inherent 'relationality' – the interconnectedness of and interactions within a complex ecological and sociocultural web – that aligns strongly with strength-based approaches, and facilitates an emergence of Aboriginal-defined wellbeing

and flourishing through identity, practice and relationship. Indeed, it is in the central notion of interconnectedness that lies tremendous and far-reaching potential for such a framework, in terms of moving from an anthropocentric locus and conceptualisation of wellbeing to one where the catalysts of wellbeing are more difficult to pin down yet the ripple of wellbeing stemming from dynamic interactions between systems – including social, natural, artificial – is instinctively understood and experienced by all [27].

Finally, while this paper is about Aboriginal wellbeing, it is acknowledged that many non-Aboriginal people are engaged in this research context. Given the challenges of non-Aboriginal people in working appropriately and effectively with Aboriginal people, the framework may also offer a means of better engaging with and understanding Aboriginal perspectives for those who do not walk in our shoes, so that they too may enact and promote strength-based research that facilitates Aboriginal wellbeing and flourishing. Conversely, there is likely benefit for non-Aboriginal populations in utilising this framework for their own wellbeing – something of a ‘best of both worlds’ construct. The intersection of diverse knowledge systems has the potential to generate solutions and outcomes difficult or impossible to attain in isolation [55]. Inherent to this is a shift in power dynamic at the epistemological level, but equally importantly at the sociocultural. In this scenario, non-Aboriginal people cease to be solely the benefactor (that is, solving Aboriginal ‘problems’) and are able, or required, to assume the position of beneficiary (utilising Aboriginal knowledge to solve their own problems). This last point is becoming more relevant as we begin to understand the interconnectedness of our planet, our societies, and our knowledge systems and the utility of epistemic pluralism in approaches to solving many contemporary complex issues [56].

***False dichotomy: positive/negative: individual/system.*** Another tension we seek to address is the concept of dichotomous thinking and, within this, two meaningful and contested ideas. The first is inherent to positive psychology itself, and the perceived relentless focus on the positive [51], potentially ignoring the lived reality of many Aboriginal peoples. However, the field of positive psychology has matured over the past two decades, recognising negative states as normal, and exploring their role in positive outcomes, and the possibility of negative states as an outcome in itself [32]. The holistic nature of Aboriginal experience is fundamental to ideas of existence and of wellbeing [8, 10] and the development and use of models should reflect both this notion of holism, but also the possibility of variability within. Extending this, it is vital to frame this paper’s proposed approach as one not ignorant to the potential for, and deep importance of, negative emotions and states – ‘normal’ states that often underpin and generate motivation and meaning for individuals and groups – but one that seeks to embody and support an agentic foundation. As an example of this, in our pilot study, participants consistently noted the motivation and meaning derived through and associated with the challenges, anger and rage borne of historical and contemporary issues, noted elsewhere [51]. Beyond this, there is evidence that positive and negative cognitive states can coexist, and that positive states may act as a buffer against mental and physical illness [57].

The second is that foregrounding system culpability alone ignores the fundamental inclusion of Aboriginal people within the system, and thus may have the potentially unanticipated impact of the erasure or suppression of individual agency. Indeed, while arguments are, and should be, made that the focus on (for example) individual resilience may form a new ‘tyranny’ [35, 51], it is the conceptualisation of the fundamental idea of these that must be expanded, solely from that of individuals who are resilient to the harms of a system, to systems that facilitate and support resilience and growth [58]. While cognisant of the insidious nature of victim-blaming [5], and of the dire need for systems change and/or reformation to accommodate Aboriginal populations, we argue that there is value and importance in deep consideration of the potential hidden implications within this push for systemic change. Simply, agency is imperative, enabling and propelling communities to work from this foundation toward whatever end is considered relevant and meaningful for the individual and group. Perhaps most importantly, Aboriginal people exist within, and are part of, a broader system and the imperative and development of



agency – as more than passive entities buffeted by forces outside of our control – is as vital to desired wellbeing outcomes as our efforts toward systemic change. It is likely only through this model that we then can move to a further expansion of the earlier example of resilience – that of the establishment of systems that facilitate and support the dismantling of highly resilient problems [59].

Given this, we emphasise the utility of pluralism, an openness to multiple ways of seeing, understanding, improving, and solving challenges faced [55]. We suggest that the world is too varied, too changed for simplistic dichotomous thinking to further the wellbeing of populations, and there is value in the exploration of possibilities toward better outcomes and, importantly, how this is achieved, to whom flow the benefits, what these benefits are, and how they are sustained.

***The pre-eminence of culture.*** The importance of culture to the wellbeing of Aboriginal Australians is clear [60]. As primarily Aboriginal authors across this paper, we also acknowledge the pre-eminence of culture to our own lives, and its significance – both in and of itself, and as a genuine demonstrable determinant of wellbeing (see [46] for exceptions to this). However, while a core tenet of Aboriginal wellbeing and Aboriginal wellbeing research, we suggest that it would be potentially inaccurate, reductionist and constraining to state that culture alone determines what is meaningful for an Aboriginal person [61]. Indeed, that it runs the risk of homogenising the phenomenological experiences of ‘being’ an Aboriginal person, and the idea of ‘culture’ itself, for Aboriginal and non-Aboriginal populations alike. Indeed, there may be unintentional harms associated with this for those who have experienced significant disconnection from culture such as those of the Stolen Generations and their descendants. Instead, we make a case for a multifaceted, strength-based complex systems conceptualisation to frame our health and wellbeing research activities – to understand those broad strength-based ecological factors that support social and emotional wellbeing, physical wellbeing, and healthy long lives of a quality deemed relevant to and by Aboriginal peoples themselves.

Much of the available literature centres culture as a powerful protective factor for Aboriginal people’s health globally. What remains unclear are the immediate impacts of culture broadly, the likely inherent factors associated with culture and cultural practice (for example, being and belonging, concepts of agency, place and meaning), or the broader systemic factors that interact and emerge, mediate, moderate and predict wellbeing or trigger restorative biological processes, beyond culture alone. We note the focus on the influence of culture in its own right [8, 10, 60], and as one component of culturally informed, strength-based interventions, but also as a means of understanding the mechanisms that underpin associations between culture and wellbeing, particularly physical wellbeing. Importantly, by framing this within a Systems Informed Positive Psychology model, we enable the strength of culture to be understood more deeply, while enabling an understanding of the broader ‘ecology’ of Aboriginal Australians, the interactions and emergent properties across this ecology and how such things occur and can be leveraged toward Aboriginal wellbeing outcomes.

### 1.7. Opportunities

***Deficit narrative implications.*** The first potential application of this model is simply to add, and offer new possibilities, to the body of work that aims to address pervasive deficit narratives of Aboriginal peoples. For far too long, Aboriginal health and wellbeing research has played a role in propagating ideas about Aboriginal people that are harmful [5]. This manifests in both harmful discourse, perspectives, and understandings of Aboriginal populations, but also the ways in which research is conceptualised, implemented, evaluated and translated into policy and practice, thus further embedding and reinforcing problematised ideals. Both of these have implications for Aboriginal populations themselves, from the internalising of these deficit narratives, to the avoidance of, or walking away from, potentially helpful research or practices. Each potentially leads to the

problematic assumption that Aboriginal people do not want to, or simply cannot, help themselves – that we are in fact the problem [5].

One of the primary purposes of proposing the SIPP framework is thus to more fully realise a strength-based foundation from which to explore, bring together and better understand how to bring to the fore the strengths of Aboriginal community. Clearly this work is already underway [8]. SIPP's focus facilitates a foundational foregrounding of those factors that promote salutogenesis, as opposed to shaping research through the lens of describing and ameliorating disease, risk factors and deficit [62]. The intention is not to ignore the very real health concerns of Aboriginal communities, nor to supplant the approaches, methodologies and philosophies noted earlier, but to add to, support, complement and extend their influence and impact [57]. Its strength lies in both the narrative that it derives from and promotes (that Aboriginal people are capable of wellness and thriving) and its extensibility in terms of incorporating and facilitating greater understanding and relevance to Aboriginal wellbeing via existing theoretical approaches while explicating and generating new models of efficacy and effectiveness.

**Metatheoretical potential.** Following from the last point is the framework's utility, much of this flexibility lying in its potential to act as connective tissue, accommodating a breadth of theoretical frameworks within. Perhaps most importantly, it facilitates orientation of the user toward salutogenic framings and thus explication of existing theories, such as those underpinning agency [63], resilience [64], growth [16], optimism [65], and motivation [66], in relation to research focused on understanding the intersection of Aboriginal and non-Aboriginal frameworks, specifically in the context of those things that lead to wellbeing and flourishing. The earlier example (p. 5 of this manuscript) focused on Aboriginal language revitalisation [39], when interpreted through Seligman's PERMA model of wellbeing [50], makes clear this capability.

Moreover, while the example illustrates the ways in which research might align with suggested building blocks of wellbeing [50], it also implies how we might apply these ideas of salutogenesis to the conceptualisation phase of strength-based research, enabling us to think more clearly and foundationally about how to avoid deficit approaches. For example, a research project may incorporate a co-design model to explore flourishing as a function of restorative practice on country, itself a function of the role of agency, relationality, positive emotion, or meaning making. Each of these then align with fundamental tenets of positive psychology, and of culture more broadly, and allows us to understand and describe those factors underpinning human behaviour that are invoked or correlated with those cultural factors that facilitate wellbeing.

It is within this metatheoretical capacity that the framework's potential value becomes evident, bridging gaps and explicating connectedness between domains such as (for example) people and country. Beyond this, we make the case that it is not 'what you do, but how you do it', if you are to replicate a given course of action. Given the diversity of Aboriginal cultural groups across Australia, a means of understanding how these things link together to effect meaningful shifts in wellbeing is perhaps necessary at a level abstracted from 'culture', to then allow us to develop interventions that are extensible, and versatile, and have the potential to be configured to suit such diversity while retaining the original intention of a move toward wellbeing and flourishing.

**Linking mental and physical wellbeing.** A growing body of evidence points to the contribution of psychological functioning to improvement or maintenance of physiological functioning [44], including cardiovascular disease, diabetes, pain and all-cause mortality [67]. This is important in the Australian Aboriginal health context, given the noted chronic individual and systemic life stressors experienced by a disproportionate number of Aboriginal Australians, and the contribution of these to poor psychological wellbeing, and associated physiological markers of health [68]. It is well documented that wellbeing for Aboriginal people is holistic, beyond simply physical or psychological wellbeing, and emerges from a balance of many factors, including community, culture and country [8, 10]. A few recent interventions in the Australian Aboriginal context have, for example, focused on the role of culture and cultural practice upon the social and emotional

wellbeing of Aboriginal populations (e.g. [39, 43]). However, while falling within a positive psychological framing, in terms of inherent factors and constructs involved (for example, relationality, meaning or engagement), there has been limited examination of the potential physiological impacts of these things for Aboriginal Australians.

Extending this link between mental and physical wellbeing across the lifespan, longevity studies internationally have noted links between psychological wellbeing and physiological health, above and beyond mitigation of physiological disease [69]. To successfully age, a range of internal and external factors are implicated, and are modifiable; for example individual dispositions and social connectedness [69], but also broader factors such as our ecological environments [70], and these are influential in a number of ways, through the promotion of adaptive health behaviours and the direct moderation of stress and disease. Importantly, this approach has implications for Aboriginal populations across the spectrum, from Elders to younger generations and everything in between. The latter is particularly salient given the trend within Aboriginal health research toward conceptualising and optimising early life interventions.

In summary, we propose systems informed positive psychology as an extensible and flexible paradigm offering opportunity to understand, implement, interpret and promote what wellbeing means and can be for Aboriginal Australians, the theoretical mechanisms within the broader framework that act to influence wellbeing, and the interactions and intersections with the broader social context to enable enhanced wellbeing.

## 2. Discussion

This paper has explored the possibilities for Aboriginal wellbeing research through the lens of systems informed positive psychology, highlighting both opportunities and tensions of the framework in terms of its fit to Aboriginal wellbeing research broadly. In doing so, we aim not to supplant existing work/knowledge in this space, but to foreground the possibilities of a framework that appears to have increasing relevance to Aboriginal research more broadly. Within this, we work on the notion that many of the necessary ideas for improving Aboriginal health outcomes and wellbeing already exist, and it is how we understand and piece together the extant web of knowledge – practical and theoretical – that likely matter most at this point. This paper also works on the proposition that Systems Informed Positive Psychology is an intuitive and useful way to bring together a range of disparate constructs/concepts and facilitate their integration, utilisation and interpretation within our research processes. For this to be achieved, we propose SIPP as an overarching model that enables salutogenic and strength-based research aligned with and determined by the needs of individuals and communities, while acknowledging and attending to the broader system or ecology of factors that play a role in wellbeing at any given time, and the interconnected nature of these things. It may be this last point is the key. Evidence is beginning to point toward the interconnectedness of a range of factors that facilitate wellbeing [8]. However, it has not yet explicitly articulated that it is what emerges from these factors in concert – and the how and why of this emergence – that is paramount.

### *The imperative for a strength-based complex systems approach*

One purpose of any given system is to maintain some conceptualisation of homeostasis or balance, whether in the context of social, natural, or artificial systems. For all practical purposes, and like any system, what exists in the Aboriginal wellbeing context at present appears intended to perpetuate the status quo [5]. Unfortunately, this has consistently marginalised those peripheral to the heart of its purpose and ‘makeup’ – Aboriginal ‘unwellness’ appears to be the primary emergent property of the existing complex system. Given this, we need to ask what the ‘system’ is for, and how might it be reconceptualised to a new fundamental purpose [62]. If we think of the broader systemic context we exist within as a biological organism, it becomes clear that we need to conceptualise an environment we ourselves are an integral, agentic part of (not vestigial, anomalous, or

simply subject to), contributing to and benefiting from the systemic imperative to maintain homeostasis – to co-create ‘we-being’ [32].

Aboriginal societies and cultures have an inherent, intuitive understanding of the broader ecology, and have sought and found balance for millennia. It is important that we leverage this to understand the bigger picture of what makes us well as Aboriginal people, and how we strategically position and leverage these things to contribute to the wellbeing of populations, Aboriginal and non-Aboriginal. At present, we are tinkering at the edges in many ways [62]. It is becoming apparent across many populations that a fundamental shift in the paradigm we are enmeshed within (ironically, as both Aboriginal and non-Aboriginal people) is much more likely to effect profound change [31] (p. 162). This work has already begun (for example, [5, 8, 62], and our proposition complements and extends these bodies of work. Following on from these ideas, we suggest this paper’s proposed framework also feeds into and creates opportunity for Aboriginal Australians to shape broader conceptualisations of, and interventions toward, wellbeing across multiple levels and contexts, for example at the individual and community level, but also at the more abstracted level of measuring and monitoring national wellbeing [71].

At the individual and community level, there is good evidence that these salutogenic approaches can be beneficial [72]. Positive psychology has generated meaningful outcomes for many populations, with an increasing focus upon and relevance to non-WEIRD (White, Educated, Industrialised, Rich and Democratic) populations. In the Aboriginal Australian context a focus on the mechanisms that underpin associations between culture and wellbeing appear to be a promising start, and there is tremendous scope to extend research and interventions, with the emphasis on heightened holistic wellbeing and how it is generated through relevant approaches such as those raised in this manuscript. For example, a given approach may enhance the sense of psychological wellbeing through meaningful engagement with, and connectedness to, country, culture and practice, in turn influencing physical outcomes also [44]. However, it is important to note that solely focusing on interventions that seek to explore, articulate and act upon these links in relative isolation may well be of limited efficacy for many health contexts (beyond merely psychological and physiological, neurological and neurotrophic effects of the interventions themselves), both in terms of what has the capacity to generate such wellbeing, but also the sustainability of these outcomes [27, 32].

Without defining and understanding the systemic bounds of the environment a given intervention exists within, it is difficult to know why an intervention is or is not useful, and where the most useful points of intervention and leverage may be to support and sustain individual and community wellbeing and flourishing efficiently and effectively. At present, little is understood about what these things are or might be. Suffice to say, the complex web of interactions and agents are poorly reflected in our measures of wellbeing.

Considered from this perspective, a systems-level, more abstract example of the symbiotic nature of wellbeing with a systems informed positive psychology framework – and the notion of powerful leverage points [31] – is important. Here we suggest an example born from very recent discussion around measures of national wellbeing to illustrate a locus of potential leverage to illustrate how SIPP might usefully influence the broader system, in terms of multidimensional wellbeing derived from the interconnectedness of known wellbeing factors [71]. At present, the means of measuring and understanding how well a society is doing at any given time is determined via Gross Domestic Product (GDP), an economic tool that foregrounds output and levels of production as a proxy for ‘wellbeing’. However, there is growing sentiment that this measure has become increasingly misaligned with the needs of a nation (and indeed planet) and fails to capture what is necessary for sustainable development going forward. Existing models and measures ignore both the vast majority of non-market-based contributors to wellbeing (for example, psychological, physiological, and ecological health), but concerningly also the gross inefficiency and waste of existing economic models and the sustained harms resulting from this



[71]. Certainly, this model does not consider a range of the things that are meaningful and increasingly measurable for many citizens, especially Aboriginal populations [8].

Extending this argument, existing measures of wellbeing further reinforce the idea that somehow Aboriginal people are deficient in the things that non-Aboriginal society deem relevant, while incentivising and rewarding the system that plays a powerful role in ensuring this deficit. A perverse example of this is the misalignment between production as a proxy for wellbeing and Australia's health system, a system that *"assesses as positive any increase in medical spending by the population, even if it is due to poor health, stress and the spread of preventable diseases"* [71]. Given the state of Aboriginal Australian health and the enormous expenditure to ameliorate disparity, this perverse illustration should make clear the problematic cycle many Aboriginal communities are caught within, at levels we are generally not positioned to influence. It should also have clear implications for the reader in terms of the broader Aboriginal wellbeing context; not simply health, but education, employment and so on. This function of current systems, the impact on Aboriginal populations, and the call to recalibrate and reconfigure extant approaches, has been noted elsewhere [62].

A revised systemic model enables a paradigmatic shift from the deficit language, framing and conceptualisation of traditional economic models and measures to models that can go some way to a rehumanising of Aboriginal populations – and, ironically, non-Aboriginal populations – through an understanding and supporting of broader, more meaningful conceptualisations of wellbeing that are fundamentally interconnected in orientation, encapsulating and derived from human, animal, eco- and social systems [27, 73]. It is how we might embed these possibilities into our institutions, communities and broader society – and the means of measuring them – that is vital to consider, however the approach and its potential aligns with our intent to consider Aboriginal wellbeing from a broad strength-based, systems-informed lens. SIPP offers the opportunity for a fundamental reconsideration of Aboriginal health and wellbeing in terms of incentives and indicators, what determines and generates value, how and for whom [32]. At the same time, from a theoretical perspective it is a fundamental reconsideration of the notion of a positive psychology, the creation – perhaps 'return to' is more accurate – of an 'Aboriginal' positive psychology. It enables a conceptual framing that considers the cultural and ethical norms and values associated with the many groups across the nation and their distinct ideas of, and means of attaining, meaning, relationality, happiness, balance and ultimately wellbeing, and what these things might mean from an Aboriginal perspective [27-28, 32]. We are arguing, therefore, that a systems informed positive psychology may be useful as a research lens that enables us to consider how we do, can and should think about and frame the research we do, and its potential impacts. It enables us to think about wellbeing from its very foundations, to question the assumptions we have about wellbeing and the research process and the relationship between the two.

The broader body of Aboriginal health research and literature is difficult to quantify, and reflects huge investment of time and resources, but also an inability to facilitate outcomes leading to sustained wellbeing [4, 74] and a certain myopia regarding the big picture of Aboriginal health and wellbeing. For example, on the one hand, the volume of literature on Aboriginal resilience is encouraging and suggests – arguably valorises – the strength of Aboriginal people [46-48]. On the other hand, this reflects a systemic environment within which we are unendingly required to be resilient, with an enormous human and economic cost that will inevitably require payment [75]. We reiterate Karlin's sentiment that the model should sharpen our perspective of the terrain before us, and consequently the questions we ask of it – it is not there to fit the data. The purpose of our proposed SIPP approach is to enable understanding of the possible parameters and bounds from a strength-based context, while taking into account the broader context of Aboriginal peoples' lived experience, to move toward wellbeing as defined by us. Through the SIPP approach, we anticipate greater understanding of the complex system of interactors and agents that each of us as Aboriginal people live within, and the emergent phenomena of this broader environment. We suggest the potential to uncover novel evidence of the

multisystemic factors that influence movement toward and maintenance of flourishing, despite adversity – not simply those that contribute to states of poor wellbeing and health. From this vantage point, we will be more equipped to develop models of, and promote systems that support, Aboriginal flourishing and wellbeing – inclusive of vital points of adaptation and emergence, resilience and, more importantly, growth - to be utilised for future research and interventions when working with Aboriginal families, and beyond.

### 3. Conclusion

The COVID pandemic and climate crisis has, perhaps irreversibly, brought to the forefront of entire populations questions of life meaning, connectedness with and to each other and country, and the necessity of hope and joy. Aboriginal populations have arguably been at the forefront of this questioning since colonisation and the harms done to the very source of life meaning for so many, and there is a good deal we can learn and apply through the development of such frameworks from those who have attained a life of wellbeing. However, to do so effectively and appropriately, we require frameworks that inherently move researchers toward the conscious design, implementation, translation and evaluation research initiatives in ways that promote wellbeing, through all stages of the lifecycle. We suggest that a vital first step is to undertake significant research to better understand factors that support, drive and maintain those Aboriginal populations that are flourishing, extending very recent work in the wellbeing space. Through this we may both highlight potential approaches to address the challenges faced by Aboriginal populations that remain vulnerable and struggle, but also explicate ways to sustain shifts in outcome through meaningful impact at policy and funding levels.

We reiterate and acknowledge the tensions associated with promoting this more nuanced approach, that it may be seen as a means of ignoring the real disparities in health outcomes between Aboriginal and non-Aboriginal populations, but also the tensions around homogeneity of Aboriginal identity and/or the centrality of culture, and/or ongoing challenges in Aboriginal health. However, the relevance and salience of these concepts and frameworks has never been greater, and models associated with the impact of broader elements of flourishing in Aboriginal Australian populations are yet to be developed. We reiterate the urgent need to push back against/expand upon the predominant focus on individual and community deficit and dysfunction within many disciplines. We further suggest that calls to investigate the potential benefits and utility of integrating Aboriginal ways of knowing and Western positive psychology methodologies (i.e. strength-based social science), offer unique and potent means of reflecting on the current status quo and enabling new perspectives to shift the dial on seemingly intractable problems in our society. However, we caution that a simple mapping of positive psychology frameworks is likely insufficient, and that deeper work may be required to establish the parameters of an authentic, strength-based, culturally aligned Aboriginal conceptualisation of positive psychology.

The response to the call for truly strength-based research paradigms is growing in the Aboriginal space. While this paper contributes to this, we do not consider our proposed approach to be the only way, or even the most useful or usable. More, we aim to contribute an approach to Aboriginal health and wellbeing research stemming from a strength-based paradigm that enables flexibility and scope to walk within the world as it is while respecting and foregrounding Aboriginal concerns and interests. While this is an important goal in and of itself, we think the impacts extend beyond this and hope that our paper has stimulated further thought around the 'how' of doing Aboriginal research, certain tensions inherent to this proposition, and what this means to practitioners who aim to undertake strength-based Aboriginal research. We also hope our paper shines a light on the potential impacts and directions that this framework may enable and facilitate, while stimulating thought about culturally appropriate ways to do so. In true strength-based fashion, we hope that our paper stimulates thought around a functional inversion of the idea of Closing the Gap – that is, bringing non-Aboriginal Australians closer to an

understanding of what enables wellbeing and flourishing for Aboriginal Australians, and thus all Australians.

## References

1. UN General Assembly, United Nations Declaration on the Rights of Indigenous Peoples : resolution / adopted by the General Assembly, 2 October 2007, A/RES/61/295, available at: <https://www.refworld.org/docid/471355a82.html> [accessed 29 January 2023]
2. Menzies, K. Understanding the Australian Aboriginal experience of collective, historical and intergenerational trauma. *Int Soc Work*. 2019, 62, 1522-1534. doi: <https://doi.org/10.1177/0020872819870585>
3. Australian Institute of Health and Welfare. Aboriginal and Torres Strait Islander Stolen Generations and descendants: numbers, demographic characteristics and selected outcomes. Cat. No. IHW 195. Canberra: AIHW. Retrieved from <https://www.aihw.gov.au/reports/indigenous-australians/stolen-generations-descendants/overview> (accessed on 3rd November 2022)
4. Bond, Chelsea J., and David Singh. More than a refresh required for closing the gap of Indigenous health inequality. *Med J Australia*. 2020, 212, 198-199. doi: 10.5694/mja2.50498
5. Fogarty, W., Lovell, M., Langenberg, J. & Heron, M-J. Deficit Discourse and Strengths-based Approaches: Changing the Narrative of Aboriginal and Torres Strait Islander Health and Wellbeing, The Lowitja Institute, Melbourne, 2018.
6. Walter, M. Doing Indigenous family. In *Indigenous Children Growing Up Strong*. Walter, M., Martin, K., Bodkin-Andrews, G., Eds. Palgrave Macmillan, London, UK. 2017, pp. 123-152.
7. Hone, L. C., Jarden, A., Schofield, G. M., & Duncan, S. Measuring flourishing: The impact of operational definitions on the prevalence of high levels of wellbeing. *Int J Wellbeing*. 2014, 4. doi: 10.5502/IJW.V4I1.1
8. Garvey, G., Anderson, K., Gall, A., Butler, T. L., Whop, L. J., Arley, B., ... & Howard, K. The fabric of Aboriginal and Torres Strait Islander wellbeing: a conceptual model. *Int J Env Res Pub He*. 2021, 18, 7745. doi: 10.3390/ijerph18157745
9. Butler, T. L., Anderson, K., Garvey, G., Cunningham, J., Ratcliffe, J., Tong, A., ... & Howard, K. Aboriginal and Torres Strait Islander people's domains of wellbeing: A comprehensive literature review. *Soc Sci Med*. 2019, 233, 138-157. doi: 10.1016/j.socscimed.2019.06.004
10. Gee, G.; Dudgeon, P.; Schultz, C.; Hart, A.; Kelly, K. Social and Emotional Wellbeing and Mental Health: An Aboriginal Perspective. In *Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice—Revised Edition*; Dudgeon, P., Milroy, H., Walker, R., Eds.; Commonwealth of Australia: Canberra, Australia, 2014; p. 55-68.
11. Rigney, L. I. Internationalization of an Indigenous anticolonial cultural critique of research methodologies: A guide to Indigenist research methodology and its principles. *Wicazo Sa Rev*. 1999, 14, 109-121. doi: <https://doi.org/10.2307/1409555>
12. Fforde, C., Bamblett, L., Lovett, R., Gorringer, S. & Fogarty, B. 'Discourse, deficit and identity: Aboriginality, the race paradigm, and the language of representation in contemporary Australia', *Media Int Aust*. 2013, 149, 162-73. doi: <https://doi.org/10.1177/1329878X1314900117>
13. Closing the Gap (2020). National Agreement – Closing the Gap <https://www.closingthegap.gov.au/sites/default/files/files/national-agreement-ctg.pdf> (accessed 12th December 2022)
14. Parker, P. D., Bodkin-Andrews, G., Parker, G. B., & Biddle, N. Trends in indigenous and non-indigenous multidomain wellbeing: Decomposing persistent, maturation, and period effects in emerging adulthood. *Emerg Adulthood*. 2019, 7, 391-410. doi: <https://doi.org/10.1177/2167696818782018>
15. VanderWeele, T. J., McNeely, E., & Koh, H. K. Reimagining health—flourishing. *J Am Med Assoc*. 2019, 321, 1667- 1668. doi:10.1001/jama.2019.3035
16. Tedeschi, R. G., & Calhoun, L. G. Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychol Inq*. 2004, 15, 1-18. doi: [https://doi.org/10.1207/s15327965pli1501\\_01](https://doi.org/10.1207/s15327965pli1501_01)
17. Joseph, S., & Linley, P. A. Positive psychological perspectives on posttraumatic stress: An integrative psychosocial framework. In *Trauma, recovery, and growth: Positive psychological perspectives on posttraumatic stress*, S. Joseph & P. A. Linley (Eds.), John Wiley & Sons, Inc., Hoboken, NJ, USA, 2008, pp. 3-20. doi:10.1002/9781118269718
18. Gracey, M., & King, M. Indigenous health part 1: determinants and disease patterns. *Lancet*. 2009, 374, 65-75. doi: 10.1016/S0140-6736(09)60914-4.
19. Marmot, M., & Wilkinson, R. Social determinants of health, 2nd Edition. Oxford University Press, UK, 2005.
20. Paradies, Y. Racism and indigenous health. In *Oxford Research Encyclopedia of Global Public Health*, 2018
21. Loppie Reading, C., & Wien, F. Health Inequalities and the Social Determinants of Aboriginal Peoples' Health. National Collaborating Centre for Aboriginal Health: Prince George. British Columbia, Canada, 2013
22. King, M., Smith, A., & Gracey, M. Indigenous health part 2: the underlying causes of the health gap. *Lancet*. 2009, 374, 76-85. doi: 10.1016/S0140-6736(09)60827-8
23. Marrone, S. Understanding barriers to health care: a review of disparities in health care services among indigenous populations. *Int J Circumpolar Health*. 2007, 66, 188-198. doi: <https://doi.org/10.3402/ijch.v66i3.18254>
24. Baum, F. E., Laris, P., Fisher, M., Newman, L., & MacDougall, C. "Never mind the logic, give me the numbers": former Australian health ministers' perspectives on the social determinants of health. *Soc Sci Med*. 2013, 87, 138-146. doi: <https://doi.org/10.1016/j.socscimed.2013.03.033>

25. Carey, G., Crammond, B., & Keast, R. Creating change in government to address the social determinants of health: how can efforts be improved? *BMC Public Health*. 2014, 14, 1-11. doi: 10.1186/1471-2458-14-1087
26. Gwynne, K., & Cairnduff, A. Applying collective impact to wicked problems in Aboriginal health. *Metrop Univ*. 2017, 28, 115-130. doi: <https://doi.org/10.17061/phrp3222215>
27. Wissing, M. P. Beyond the "Third wave of positive psychology": Challenges and opportunities for future research. *Front Psychol*. 2022, 12, 6381. doi: <https://doi.org/10.3389/fpsyg.2021.795067>
28. Kern, M. L., Williams, P., Spong, C., Colla, R., Sharma, K., Downie, A., ... & Oades, L. G. Systems informed positive psychology. *J Posit Psychol*. 2020, 15, 705-715. doi: <https://doi.org/10.1080/17439760.2019.1639799>
29. Kim, H., Doiron, K., Warren, M., & Donaldson, S. The international landscape of positive psychology research: A systematic review. *Int J Wellbeing*. 2018, 8, 50-70. doi:10.5502/ijw.v8i1.651
30. Waters, L., Algoe, S. B., Dutton, J., Emmons, R., Fredrickson, B. L., Heaphy, E., ... & Steger, M. Positive psychology in a pandemic: Buffering, bolstering, and building mental health. *J Posit Psychol*. 2022, 17, 303-323. doi: <https://doi.org/10.1080/17439760.2021.1871945>
31. Meadows, D. H. Thinking in systems: A primer. Chelsea Green Publishing, 2008
32. Lomas, T., Waters, L., Williams, P., Oades, L & Peggy, K. Third wave positive psychology: broadening towards complexity, *J Posit Psychol*. 2021, 16, 660-674. doi:10.1080/17439760.2020.1805501
33. Dudgeon, P., Bray, A., D'costa, B., & Walker, R. Decolonising psychology: Validating social and emotional wellbeing. *Aust Psychol*. 2017, 52, 316-325. doi: <https://doi.org/10.1111/ap.12294>
34. Mittelmarm, M. B., Bauer, G. F., Vaandrager, L., Pelikan, J. M., Sagy, S., Eriksson, M., ... & Meier Magistretti, C. The handbook of salutogenesis. Springer Cham, 2022. doi: <https://doi.org/10.1007/978-3-319-04600-6>
35. Bryant, J., Bolt, R., Botfield, J. R., Martin, K., Doyle, M., Murphy, D., ... & Aggleton, P. Beyond deficit: 'strengths-based approaches' in Indigenous health research. *Sociol Health Illn*. 2021, 43, 1405-1421. doi: <https://doi.org/10.1111/1467-9566.13311>
36. Butler, T., Gall, A., Garvey, G., Ngampromwongse, K., Hector, D., Turnbull, S., ... & Anderson, K. A Comprehensive Review of Optimal Approaches to Co-Design in Health with First Nations Australians. *Int J Environ Res Public Health*. 2022, 19, 16166. doi: 10.3390/ijerph192316166
37. Moll, S., Wyndham-West, M., Mulvale, G., Park, S., Buettgen, A., Phoenix, M., ... & Bruce, E. Are you really doing 'codesign'? Critical reflections when working with vulnerable populations. *BMJ open*. 2020, 10, e038339. doi: 10.1136/bmjopen-2020-038339
38. Wright, M., Lin, A., O'Connell, M., Bullen, J., & Flavell, H. Understanding and working with different worldviews to co-design cultural security in clinical mental health settings to engage with Aboriginal and Torres Strait Islander clients. *Prim Health Care Res Dev*, 2021, 22. doi: <https://doi.org/10.1017/S1463423621000499>
39. Sivak, L., Westhead, S., Richards, E., Atkinson, S., Richards, J., Dare, H., ... & Brown, A. "Language breathes life" —Barngarla community perspectives on the wellbeing impacts of reclaiming a dormant Australian Aboriginal language. *Int J Environ Res Public Health*. 2019, 16, 3918. doi: 10.3390/ijerph16203918
40. Bracknell, C., Horwitz, P., Ryan, T., & Marshall, J. W. Performing kayepa dordok living waters in Noongar boodjar, South-Western Australia. *River Res Appl*. 2022, 38, 404-411. doi: <https://doi.org/10.1002/rra.3868>
41. Marriott, R., Reibel, T., Coffin, J., Gliddon, J., Griffin, D., Robinson, M., ... & Maddox, J. "Our culture, how it is to be us" — Listening to Aboriginal women about on Country urban birthing. *Women Birth*. 2019, 32, 391-403. doi: 10.1016/j.wombi.2019.06.017
42. Kelly, J., Saggars, S., Taylor, K., Pearce, G., Massey, P., Bull, J., ... & Ahboo, S. "Makes you proud to be black eh?": Reflections on meaningful Indigenous research participation. *Int J Equity Health*. 2012, 11, 1-8. doi: 10.1186/1475-9276-11-40
43. McBride, K. F., Franks, C., Wade, V., King, V., Rigney, J., Burton, N., ... & Brown, A. Good Heart: telling stories of cardiovascular protective and risk factors for aboriginal women. *Heart Lung Circ*. 2021, 30, 69-77. doi: 10.1016/j.hlc.2020.09.931
44. Kubzansky, L. D., Huffman, J. C., Boehm, J. K., Hernandez, R., Kim, E. S., Koga, H. K., ... & Labarthe, D. R. Positive psychological well-being and cardiovascular disease: JACC health promotion series. *J Am Coll Cardiol*. 2018, 72, 1382-1396. doi: 10.1016/j.jacc.2018.07.042
45. Sofija, E., Harris, N., Sebar, B., & Phung, D. Who are the flourishing emerging adults on the urban east coast of Australia?. *Int J Environ Res Public Health*. 2021, 18, 1125. doi: 10.3390/ijerph18031125
46. Hunter, S. A., Skouteris, H., & Morris, H. A conceptual model of protective factors within Aboriginal and Torres Strait Islander culture that build strength. *J Cross Cult Psychol*. 2021, 52, 726-751. doi: <https://doi.org/10.1177/00220221211046310>
47. Usher, K., Jackson, D., Walker, R., Durkin, J., Smallwood, R., Robinson, M., ... & Marriott, R. Indigenous resilience in Australia: a scoping review using a reflective decolonizing collective dialogue. *Front Public Health*. 2021, 9, 630601. doi: <https://doi.org/10.3389/fpubh.2021.630601>
48. Jongen, C. S., McCalman, J., & Bainbridge, R. G. A systematic scoping review of the resilience intervention literature for indigenous adolescents in CANZUS nations. *Front Public Health*. 2020, 7, 351. doi: <https://doi.org/10.3389/fpubh.2019.00351>
49. Craven, R. G., Ryan, R. M., Mooney, J., Vallerand, R. J., Dillon, A., Blacklock, F., & Magson, N. Toward a positive psychology of indigenous thriving and reciprocal research partnership model. *Contemp Educ Psychol*. 2016, 47, 32-43. doi: <https://doi.org/10.1016/j.cedpsych.2016.04.003>
50. Seligman, M. PERMA and the building blocks of well-being. *J Posit Psychol*. 2018, 13, 333-335. doi: <https://doi.org/10.1080/17439760.2018.1437466>
51. Yakushko, O., & Blodgett, E. Negative reflections about positive psychology: On constraining the field to a focus on happiness and personal achievement. *J Humanist Psychol*. 2021, 61, 104-131. doi: <https://doi.org/10.1177/0022167818794551>



52. Brockman, R., Dudgeon, P. Indigenous Clinical Psychology in Australia: A Decolonising Social–Emotional Well-Being Approach. In: Rhodes, P. (eds) *Beyond the Psychology Industry*. Springer, Cham. 2020; [https://doi.org/10.1007/978-3-030-33762-9\\_8](https://doi.org/10.1007/978-3-030-33762-9_8)
53. Basurrah, A. A., Di Blasi, Z., Lambert, L., Murphy, M., Warren, M. A., Setti, A., ... & Shrestha, T. The effects of positive psychology interventions in Arab countries: A systematic review. *Appl Psychol Health Well-Being*. 2022, 1–19. doi: 10.1111/aphw.12391
54. Schick, M. R., Kirk-Provencher, K. T., Goldstein, S. C., Nalven, T., & Spillane, N. S. A framework for the adaptation of positive psychological interventions to North American Indigenous populations. *Prev Sci*. 2021, 22, 913–922. doi: 10.1007/s11121-021-01282-z
55. Bartlett, C., Marshall, M., & Marshall, A. Two-eyed seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing. *J Environ Stud Sci*. 2012, 2, 331–340. doi: <https://doi.org/10.1007/s13412-012-0086-8>
56. Redvers, N., Celidwen, Y., Schultz, C., Horn, O., Githaiga, C., Vera, M., ... & Rojas, J. N. The determinants of planetary health: an Indigenous consensus perspective. *Lancet Planet Health*. 2022, 6, e156–e163. doi: [https://doi.org/10.1016/S2542-5196\(21\)00354-5](https://doi.org/10.1016/S2542-5196(21)00354-5)
57. Trompetter, H. R., De Kleine, E., & Bohlmeijer, E. T. Why does positive mental health buffer against psychopathology? An exploratory study on self-compassion as a resilience mechanism and adaptive emotion regulation strategy. *Cognit Ther Res*. 2017, 41, 459–468. doi: <https://doi.org/10.1007/s10608-016-9774-0>
58. Ungar, M., & Theron, L. Resilience and mental health: How multisystemic processes contribute to positive outcomes. *Lancet Psychiat*. 2020, 7, 441–448. doi: 10.1016/S2215-0366(19)30434-1
59. Hulme, A., Thompson, J., Brown, A., & Argus, G. The need for a complex systems approach in rural health research. *BMJ open*. 2022, 12, e064646. doi: <http://dx.doi.org/10.1136/bmjopen-2022-064646>
60. Jones, R., Thurber, K. A., Chapman, J., D'Este, C., Dunbar, T., Wenitong, M., ... & Lovett, R. Study protocol: our cultures count, the Mayi Kuwayu study, a national longitudinal study of Aboriginal and Torres Strait islander wellbeing. *BMJ open*. 2018, 8, e023861 doi: 10.1136/bmjopen-2018-023861
61. Paradies, Y. Beyond black and white: Essentialism, hybridity and indigeneity. In Short, D., & Lennox, C. *Handbook of Indigenous peoples' rights*. Routledge, 2016, pp. 24–34 doi: <https://doi.org/10.1177/1440783306069993>
62. Watego, C., Whop, L. J., Singh, D., Mukandi, B., Macoun, A., Newhouse, G., ... & Brough, M. Black to the Future: Making the Case for Indigenist Health Humanities. *Int J Environ Res Public Health*. 2021, 18, 8704. doi: 10.3390/ijerph18168704
63. Bandura, A. Toward an agentic theory of the self. In H. Marsh, R. G. Craven, & D. M. McInerney (Eds.), *Advances in self research: Self-processes, learning, and enabling human potential*. Information Age Publishing: Charlotte, NC, USA, 2008, volume 3, pp. 15–49. doi: 10.4236/ce.2015.67067
64. Connor, K. M., & Davidson, J. R. Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depress Anxiety*. 2003, 18, 76–82. doi: 10.1002/da.10113
65. Carver, C. S., Scheier, M. F., & Segerstrom, S. C. Optimism. *Clin Psychol Rev*. 2012, 30, 879–889. doi: 10.1016/j.cpr.2010.01.006
66. Deci, E. L., & Ryan, R. M. Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* Oxford University Press, New York, USA. 2012, pp. 85–107. doi: <https://doi.org/10.1093/oxfordhb/9780195399820.013.0006>
67. Canuto, K. J., Aromataris, E., Burgess, T., Davy, C., McKivett, A., Schwartzkopff, K., ... & Brown, A. A scoping review of Aboriginal and Torres Strait Islander health promotion programs focused on modifying chronic disease risk factors. *Health Promot J Austr*. 2021, 32, 46–74. doi: <https://doi.org/10.1002/hpja.307>
68. Ketheesan, S., Rinaudo, M., Berger, M., Wenitong, M., Juster, R. P., McEwen, B. S., & Sarnyai, Z. Stress, allostatic load and mental health in Indigenous Australians. *Stress*. 2020, 23, 509–518. doi: 10.1080/10253890.2020.1732346
69. Diener, E., & Chan, M. Y. Happy people live longer: Subjective well-being contributes to health and longevity. *Appl Psychol Health Well-Being*. 2011, 3, 1–43. doi: <https://doi.org/10.1111/j.1758-0854.2010.01045.x>
70. Robinson, J. M., Aronson, J., Daniels, C. B., Goodwin, N., Liddicoat, C., Orlando, L., ... & Breed, M. F. Ecosystem restoration is integral to humanity's recovery from COVID-19. *Lancet Planet Health*. 2022, 6, e769–e773. doi: [https://doi.org/10.1016/S2542-5196\(22\)00171-1](https://doi.org/10.1016/S2542-5196(22)00171-1)
71. Fioramonti, L., Coscieme, L., Costanza, R., Kubiszewski, I., Trebeck, K., Wallis, S., ... & De Vogli, R. Wellbeing economy: An effective paradigm to mainstream post-growth policies?. *Ecol Econ*. 2022, 192, 107261. doi: <https://doi.org/10.1016/j.ecolecon.2021.107261>
72. Carr, A., Cullen, K., Keeney, C., Canning, C., Mooney, O., Chinseallaigh, E., & O'Dowd, A. Effectiveness of positive psychology interventions: a systematic review and meta-analysis. *J Posit Psychol*. 2021, 16, 749–769. doi: <https://doi.org/10.1080/17439760.2020.1818807>
73. Graham, M. <http://australianhumanitiesreview.org/2008/11/01/some-thoughts-about-the-philosophical-underpinnings-of-aboriginal-worldviews/> (accessed on 8th November 2022)
74. Kennedy, M., Bennett, J., Maidment, S., Chamberlain, C., Booth, K., McGuffog, R., ... & Bryant, J. Interrogating the intentions for Aboriginal and Torres Strait Islander health: a narrative review of research outputs since the introduction of Closing the Gap. *Med J Aust*. 2022, 217, 50–57. doi: 10.5694/mja2.51601
75. Trudel-Fitzgerald, C., & Ouellet-Morin, I. The cost of resilience: How allostatic load may jeopardize health through repeated demands for (successful) adaptation. *Psychoneuroendocrinology*. 2022, 144, 105874. doi: 10.1016/j.psyneuen.2022.105874