

10

DESIGNING FOR STRUCTURAL, SOCIAL AND POLITICAL VIABILITY IN NATIONAL-SCALE SYSTEMIC INTERVENTIONS

Jeff Foote, Graeme Nicholas and Gerald Midgley

1 Introduction

This chapter contains methodological reflections on a participatory design approach undertaken in New Zealand to develop a national response to family violence prevention. Family violence significantly affects the wellbeing of individuals, families and communities, especially children, women and Māori (the indigenous people of New Zealand) (Gear et al., 2021). The New Zealand government spends approximately NZ\$1.5 billion annually on various programmes and initiatives designed to reduce or prevent family violence, including intimate partner violence, child abuse and neglect, elder abuse, inter-sibling abuse and parental abuse (Carne et al., 2019).

One criticism of New Zealand's approach to family violence has been that it is like a patchwork quilt. While skilful quilting involves careful planning and design, the metaphor suggests that disparate local responses have been developed and implemented without sufficient regard for how the *whole system* will work in the interests of family violence prevention. Having said this, the patchwork of policies and services *does* include some 'good practices' and innovations. Also, the range of responses to family violence extends beyond formal or official responses, including informal community support. Nevertheless, the New Zealand Productivity Commission (2015) and Family Violence Death Review Committee (2017) have noted systemic failings in policy development and service delivery (Carne et al., 2019).

Family violence is increasingly recognised by scholars, policymakers and practitioners as a 'wicked problem' (Rittel & Webber, 1973; Sydelko et al., 2021, 2024), given high levels of complexity, uncertainty and contestation (Stephens & Liley, 2021; Stephens, 2023). The complexity of family violence is reflected in the dynamic relationships between various actors, risk and protective factors, policies,

programmes, initiatives and implementation contexts, which influence the effectiveness of family violence responses (Foote et al., 2015; Gear et al., 2021). Framing family violence prevention as a ‘wicked problem’ highlights the importance of taking a systems approach, as many authors have talked about the utility of systems thinking in the face of such problems (e.g., Williams and van ’t Hof, 2016), although the form systems approaches can take may vary depending on the emphases that are placed on structural, organisational, perspectival and/or coercive complexity (Jackson, 2019).

There is a tendency to confuse systems thinking with service integration (Carswell et al., 2020), and it is important to go beyond ‘joined up’ services to ask what the system should be providing to people in the first place. Our interest is how systems thinking can support participatory design by enabling stakeholders to develop a shared understanding of issues and potential responses, and ultimately develop feasible, sustainable and systemically desirable solutions to persistent problems that frustrate attempts to prevent and reduce family violence. The term ‘systemically desirable’ is important because it means more than a stakeholder wishlist: it is about what desirable solutions will work in the context in which they will be embedded (Checkland & Poulter, 2006). The systemic intervention reported here engaged stakeholders in creating a framework for a national service system that would govern, manage, coordinate and implement service development and delivery at local, regional and national scales.

This chapter makes three contributions to relevant scholarship. First, it speaks to the increasing awareness of the critical role that upstream prevention systems play in reducing the downstream need for urgent intervention and consequent costly service provision. Prevention systems usually consist of networks of organisations and may include lead or network-administrative bodies tasked with network management, leadership and governance (Khayat-zadeh-Mahani et al., 2018). Scholars such as Provan and Kenis (2007), Poole (2008) and Turrini et al. (2010) have noted the benefits of networks, including coordination, communication, learning and resource efficiencies, while others have drawn attention to problematic aspects, such as conflicts of interest (Holt et al., 2021) and how power relations marginalise some stakeholders in the design and evaluation of collaborations (Walsh et al., 2018; Clark, 2021; Sydelko et al., 2021). Given that societal challenges such as family violence cannot be addressed by any single organisation, policy or programme, there is a pressing need to understand how to design prevention networks to leverage stakeholder capabilities, insights and resources for collaborative advantage (Huxham & Vangen, 2004). The design process needs to explicitly consider what systemically desirable prevention networks should do, and also counter fragmentation through integration and systems change (Bensberg et al., 2021). This chapter demonstrates how Midgley’s (2000, 2006, 2015, 2018, 2023) systemic intervention approach provides a useful methodological basis for designing prevention systems, as it allows for critical reflection on the boundaries of analysis (including participation) and the combination of multiple systems methodologies

and methods to structure and facilitate stakeholder deliberations about problems and improvements. Through this facilitation, the findings and recommendations were co-created with stakeholders. The systemic intervention approach is illustrated with a detailed account of our work around family violence prevention.

The second contribution is to the development of thinking about the methodology of systemic intervention, examining Midgley's (1997) suggestion that political action and campaigning need to be seen as a legitimate part of systems practice. Our systemic intervention was undertaken as part of a philanthropically funded public inquiry, intended to influence government policy ahead of an upcoming general election, and we reflect on how the Inquiry's findings were received by the main political parties. A distinction is made between structural, social and political dimensions of viability, with this distinction shaping the systemic intervention so it was seen as salient, credible and legitimate by stakeholders.

Finally, a third contribution identifies the need to expand the boundaries of analysis to the supra-system by recognising how the system in focus (in this case, a family violence prevention network) is connected to or nested in other service systems. In New Zealand, as in other countries, the design of large-scale service systems intended to meet health or social needs typically involves recognising the importance of the government as a funder, regulator and service provider (Osborne et al., 2022). Future work to design national-level service systems needs to focus more on political viability by enhancing what systems thinkers call *boundary critique*: reflection on whose voices need to be listened to, what concerns are relevant and what could or should be done in response to those concerns (Ulrich, 1994; Foote et al., 2007; Midgley and Pinzón, 2011). Boundary critique needs to be undertaken, not only with stakeholders (including those with relevant lived experience) but also in the context of dialogue between the systems practitioners and public policy communities. Critically, the boundary critique needs to consider how the intervention interfaces with the machinery of government.

The chapter is structured into three parts, beginning with a description of the context of our project and the development of its participatory design approach, which needed to be sensitive to the social, cultural and political contexts surrounding family violence prevention. Several dilemmas that characterised our systemic intervention are discussed, and it is explained how the concept of viability, distinguished in terms of its structural, social and political dimensions, was used to craft the systemic intervention. Finally, the systemic redesign is presented along with reflections on the outcomes of the systemic intervention, considering its relationship with the machinery of government.

2 Background

The context of the systemic intervention was concern about New Zealand's alarming rates of family violence and child abuse, which, in 2012, led Sir Owen Glenn (a New Zealand philanthropist) to fund a NZ\$2m independent investigation of the

situation and potential solutions. This became known in the media as the Glenn Inquiry (henceforth referred to as ‘the Inquiry’), and it was explicitly intended to influence government policy (RNZ, 2013 & 2014a). The Inquiry collected first-hand accounts from approximately 500 victim-survivors, frontline workers and professionals about the challenges and failures of New Zealand’s existing approach to family violence prevention. *The People’s Report* documented accounts of ineffective, under-resourced, culturally inappropriate and ‘siloed’ services, and concluded that the system urgently needed transformation (Wilson & Webber, 2014a). These stories indicated a ‘broken’ system and the need for a systemic approach to address the disjointed efforts of government, non-government organisations, iwi (Māori tribes), hapū (Māori sub-tribes) and community groups. The Glenn Inquiry strongly held the view that government action to address family violence was inadequate (Stuff, 2015), and the Inquiry’s Chair, when the *People’s Report* was first published, noted:

I believe the country will be shocked by the descriptions of family violence ... and it is my hope that shock will translate quickly into widespread agreement, including between the main political parties, that something has to be done as a matter of urgency.

(Stuff, 2014)

A key challenge facing the Inquiry was translating the insights in the *People’s Report* into actionable recommendations. The Inquiry commissioned our team of systems thinkers (two of whom were then working in the Institute of Environmental Science and Research, an independent New Zealand government research institute, and the third was advising from the University of Hull in the UK) together with family violence prevention experts (from the University of Canterbury’s Te Awatea Violence Research Centre) to work with family violence sector academics and practitioners (‘sector experts’) to design a high-performing national system for policy and service delivery (Foote et al., 2014a, 2014b; Nicholas et al., 2014). Our participatory design approach would feed into the Inquiry’s *People’s Blueprint* recommendations, alongside other commissioned research, such as an economic analysis of family violence impacts. The recommendations were intended to advocate for changes to government policy and service delivery, including how the government should fund not-for-profit services (Wilson & Webber, 2014b). The timing around the publication of the *People’s Blueprint* was tight, given an upcoming general election. We selected and adapted well-known systems methodologies and methods to undertake a participative redesign of the family violence prevention system.

The success of the participatory design would depend on the extent to which the Inquiry, the family violence sector, and the current government saw the findings as salient, credible and legitimate (Cash et al., 2002). As a result, the concept of *viability* (Beer, 1984) guided the systemic intervention, and this refers to the ability of an

organizational (or multi-organizational) system to maintain a separate existence while it learns and adapts to opportunities and threats in its external operating environment. Beer (1984) developed the viable system model (VSM), which sets out the structural conditions necessary for viability in terms of five critical subsystems and information channels. These manage different aspects of system functioning, from operations to intelligence to governance (Ríos, 2012). However, the VSM has been criticised for paying insufficient attention to culture and power relations (Jackson, 2019). Indeed, a transformed system could not be imposed on stakeholders, and the potential for people to find new ways of relating together was critically important (Sagalovsky, 2015), so there was a need to challenge dominant ways of thinking, organising and allocating resources (van Raak & de Haan, 2017). At the same time, the participatory design needed to be culturally feasible and have sufficient alignment with existing norms and values (Checkland & Poulter, 2006) to secure the support of powerful individuals, groups and organisations, including the newly incoming government. In systemic interventions, it is often necessary to undertake critiques of the status quo while keeping on board stakeholders who will be responsible for implementing the system change, and sometimes significant tensions have to be addressed along the way (Smith, 2022; Smith & Midgley, 2025). Accordingly, the boundary of the analysis was widened to focus on the structural, social and political dimensions of viability.

3 Methodology

Our research and practice was grounded in a commitment to critical awareness, improvement and methodological pluralism (Midgley, 1996). We adopted Midgley's (2000, 2006, 2015, 2018, 2023) systemic intervention approach to guide our participatory work to support stakeholders in redesigning the existing family violence prevention system. This redesign was the basis for the stakeholders making evidence-informed recommendations to the Glenn Inquiry, which would then advocate for system change. While the language of intervention suggests implementation or the deployment of improvements in practice, Midgley (2000) considers systemic intervention in terms of three interrelated processes:

- *Boundary critique*, which examines and questions who or what (stakeholders, issues, knowledge) is included in or excluded from a systemic intervention, and this is intended to address power relations and resulting conflict and marginalisation processes that shape how problems and solutions are understood.
- *The creative design of methods*, which operationalises a commitment to combining ideas from different systems methodologies, and it also emphasises the importance of a bespoke, flexible and responsive approach to intervention by mixing methods and tailoring them to social, cultural and political contexts.
- *Action for improvement*, which involves implementing the bespoke approach and facilitating stakeholder reflections on how improvement can be understood, giving rise to recommendations for change.

We structured our boundary critique by drawing on soft systems methodology's (SSM) analysis one (focused on the design of the intervention in relation to stakeholder requirements), analysis two (the social context of whatever is being intervened in – i.e. the family violence prevention system) and analysis three (the political context, which could affect both the progress of the systemic intervention and the implementation or marginalisation of expected recommendations and potential outcomes) (Checkland & Poulter, 2006).

Given the tight timeframe we were subject to, we were unable to formally interview multiple stakeholders (a common practice in boundary critique) and drew on discussions with Glenn Inquiry managers and an in-depth understanding of the family violence sector from our team's family violence experts. Nevertheless, the SSM analyses helped alert us to potential marginalisation processes that might limit which stakeholder concerns would inform the design of a high-performing system, and identified several barriers to reaching accommodations between stakeholders about what a national response should look like that would need to be addressed by combining systems methods from different methodological sources. We needed to decide what was to be included or excluded in the system redesign process, including which stakeholders to involve, which viewpoints to consider and which aspects of the current system to maintain or change. Below, we explain how the SSM analysis one shaped our thinking, but insights from analyses two and three (relating to norms, values, roles and commodities of power), which are not discussed in this chapter, also influenced how the participatory design engaged with sector experts.

Analysis one examined three roles contributing to our systemic intervention: the client (the person or organisation who asked for the intervention), the practitioners (those undertaking the intervention) and the issue owners (stakeholders of the issue leading to the intervention).

Our boundary critique highlighted that the client, a wealthy New Zealander with the financial resources to establish an independent Inquiry, aimed to mobilise sector and public support for the transformation ahead of an upcoming general election. The Inquiry would be led and endorsed by other high-profile New Zealanders, including a former Supreme Court Judge and a previous Governor General of New Zealand (the Governor General is the representative of the British King, who is the official Head of State, even though the country is no longer a British colony).

Our understanding of the *client role* shaped the boundaries of our intervention in two ways. First, as it was an election year, it was inappropriate for government officials to participate in any stakeholder deliberation intended to influence government policy. However, excluding policymakers would run the risk that our design for a high-performing system might not align with current policy thinking, and the recommendations from the *People's Blueprint* might clash with the current configuration of the family violence policy subsystem and its beliefs, values, problem definitions and strategies (Howlett & Ramesh, 1998). To address this risk, we included ex-government officials with a working understanding of existing policy priorities. This ensured that the current policy perspective was not marginalised. The second

challenge was that the Glenn Inquiry became caught up in controversy after past allegations of violence surfaced against the client, and concerns were expressed about the Inquiry's safety processes related to how stakeholder information would be handled (RNZ, 2013). The Glenn Inquiry's director resigned and undertook separate work on a proposed integrated family violence system (Herbert & MacKenzie, 2014).

Our team faced a dilemma about whether to proceed with our systemic intervention: transformation would only be possible if the inquiry was seen as credible and legitimate by people in the family violence sector, policymakers and the public. Success would not be judged solely by direct participants, who we hoped would experience benefits like enhanced collaboration and shared learning, which Ackermann (2012) describes as important outcomes of deliberative processes. In addition to direct participants, stakeholders not involved in our workshops would also evaluate the effectiveness of our systemic intervention, and they might use criteria to do so that included whether our time had been funded by a 'tainted' source. Our team's family violence experts expressed the view that the controversy surrounding the Inquiry would settle over time, and they wanted us to go ahead because they saw considerable value in using a participatory systems approach to engage them and other sector experts. We therefore proceeded as planned.

Given that the Glenn Inquiry focused on the intersection of family violence and child abuse, our systemic intervention adopted an expansive understanding of family violence, including intimate partner violence, child abuse and neglect, elder abuse, inter-sibling abuse and parental abuse. Setting a wide boundary was important. While child abuse and other types of family violence have distinct protective and risk factors, necessitating tailored policy and service responses (Pineiro, 2006), we focused on the wider system that would address the patchwork of individual policies and programmes to ensure a coordinated and coherent approach across responses (Bensberg et al., 2021). This wider boundary of analysis swept in a diverse range of *issue owner roles* or stakeholders, and a review of the *People's Report* highlighted their diverse and conflicting perspectives, including disagreements about state, family and individual responsibilities, and the centrality of gender and ethnicity in addressing family violence. At the very least, there were victim-survivors and perpetrators, health and social service providers, law enforcement and judicial agencies, iwi and hapū, policymakers, politicians, researchers, communities and the public – all of whom held distinctive perspectives on the causes of family violence, what should be considered relevant to it, and how to address it appropriately.

Our team was also conscious that Māori were not just another issue owner, even though they are disproportionately represented in family violence statistics (Joint Venture, 2021). Instead, Māori are Te Tiriti o Waitangi (Treaty of Waitangi) partners with distinct constitutional rights in New Zealand related to partnership, participation and protection. The systemic intervention would therefore need to ensure that Māori involvement was meaningful rather than tokenistic, and that Māori concerns

and values were centrally placed in our systemic redesign, otherwise the vision for a transformed system would lack legitimacy (Foote et al., 2021).

The diversity of ‘issue owners’ created three key challenges for our systemic intervention and shaped our *practitioner roles*. Attention needed to be paid to both process and content complexity (Ackermann, 2024). The first challenge related to harnessing the sector’s social complexity in ways that would lead to accommodation around a national response. The selection of sector experts would influence the credibility and legitimacy of the systemic intervention, and the set of participants needed to include practitioner and academic expertise in areas such as child abuse, family violence, elder abuse and sexual violence. The people bringing this expertise needed to be well-regarded by those in the family violence sector, and they had to be able to provide diverse perspectives. There was also a need to mediate strongly held stakeholder views by creating a safe space for social learning and engaging with the scholarly literature to combine stakeholder perspectives with policy and scientific knowledge. Reviews of the literature canvassed a variety of topics, including New Zealand government legalisation, policies and initiatives; research on the prevalence, incidence and different types of intimate partner violence, child abuse and sexual violence (and any intersections), plus the impacts of these things and challenges of responding to them; and reviews of international frameworks for addressing violence against women, including the need to adopt a ‘holistic’ (we would say systemic) approach to interventions (Taylor et al., 2014a, 2014b).

The second challenge was that the team’s systems thinkers were very aware that they lacked subject matter expertise, so credibility and legitimacy with our stakeholders, including our sector experts, might have been an issue. While this challenge was partially addressed by our team’s family violence experts reviewing the scholarly literature and being able to provide expert commentary during workshop discussions, we would need to carefully emphasise our process expertise and critically reflect on the potentially problematic aspects of our identities (we were male and non-Māori), showing how the systemic intervention took questions of structural injustice and power relations seriously. See Midgley et al. (2007) for a discussion of the role of practitioner identity in systemic interventions. Not only would our approach need to be conscious of boundary judgements around whose perspectives, experiences and expertise would be considered, but we would also need to attend to issues of salience, credibility and legitimacy through attention to these boundary judgements and through the process of critically informed engagement with sector experts (Gregory & Romm, 2001).

4 Crafting the systemic intervention

The participatory design took the problem of partial perspectives seriously by creating a safe space where stakeholders could reflect on boundaries of relevance (whose voices should be heard and what issues should be considered), enabling

them to rethink what might actually be possible and desirable to change. This is critically important in the context of joining up fragmented systems at multiple scales (Helfgott et al., 2023). Following Midgley's (2000) approach to methodological pluralism, interactive planning (IP) methods (Ackoff, 1981; Ackoff et al., 2006), SSM (Checkland, 1981; Checkland & Poulter, 2006), critical systems heuristics (CSH) (Ulrich, 1987, 1994) and the VSM (Beer, 1984; Espinosa, 2022) were selected and adapted. Individually, these systems methodologies have been applied to various wicked problems, but the systemic intervention aimed to draw methods from them that could be combined synergistically to address the following challenging questions specific to the Glenn Inquiry's context:

- 1 How can we encourage sector experts to think creatively about the elements that constitute a transformed system?
- 2 How can shared learning between sector experts about the future be encouraged that moves beyond entrenched views?
- 3 How can a design for the future move beyond merely patching up what some see as poorly funded and fragmented service delivery?
- 4 How can the significant system building that has occurred at the national and regional levels be recognised (so we avoid starting from scratch), but without replicating or reinforcing problematic aspects of the current system of service provision?
- 5 How can the workshop outputs be socially robust and triangulated with other sources, including the scholarly and policy literature on high-performing family violence prevention systems?

Specifically, IP provided the rationale for a stakeholder-informed, idealised design system to focus engagement and strategising about system change and encourage creative thinking beyond the status quo; CSH surfaced and developed a shared understanding of the desirable qualities of the transformed system by critically examining boundaries, values and assumptions, and by making stakeholder tensions visible and discussable; and the VSM highlighted the links between resourcing, activities and purpose, and it structured stakeholder discussions about key features of the transformed system that would lend themselves to adaptation and structural viability.

Eight to twelve participants drawn from academic institutions, leading national providers (including peak bodies) and subject and sector experts in previous roles in central government agencies attended three full-day workshops to design a transformed system to address family violence. The workshops mirrored the IP stages of formulating the 'mess' (workshop 1), ends planning (workshop 2) and means planning (workshop 3) (Flood & Jackson, 1991). Idealised design (Ackoff et al., 2006) was a key part of ends planning in workshop 2 – planning as if the service system no longer exists, but making sure the design is technologically feasible, viable and adaptable into the future. Twelve CSH questions (Ulrich, 1994)

were integrated into the planning, as they helped stakeholders be more critical with respect to motivations for systems change: who should have decision-making authority, what should count as relevant expertise, and what will give a transformed system legitimacy. Midgley et al. (2023) note that embedding these questions into idealised design is particularly useful for governance innovation. We also used the CATWOE mnemonic from SSM [Customers, Actors, Transformation, Worldview, Owners and Environmental constraints] (Checkland & Poulter, 2006), which helps build mutual understanding between stakeholders on the specifics of the different transformations they want to bring about. Finally, means planning was enhanced with the VSM (Beer, 1984), as it offers a template for diagnosing organisational problems and designing new institutions or organisations. The latter was used participatively to facilitate stakeholder discussions, as explained by Espejo and Harnden (1989), Espinosa (2022) and Sydelko et al. (2024).

The first workshop began by mapping the current family violence system, although following Checkland (1981), we were agnostic about whether the existing policy development processes and service delivery already constituted a ‘system’ in the formal sense of the term. Formulating the ‘mess’ included interactive exercises using methods such as rich pictures (Checkland, 1981) to identify the various issues, opportunities, threats and interactions the transformed system would need to address. Reflecting on the rich pictures, the sector experts critiqued New Zealand’s current approach by ascribing formal and informal purposes to the existing system using SSM’s language of transformation (the T in CATWOE), and they reflected on the boundaries of their systemic understanding by asking questions from Ulrich (1987) on who benefited, how success was defined and who had decision-making power. The experts also considered what social, cultural, political and economic factors might constrain greater levels of system performance, and they created scenarios to explore potential outcomes of the current situation. Having formulated the ‘mess’, our sector experts began to develop a shared understanding of the context and areas for change, including the way the existing system of service development and delivery – encompassing government policies, sector capabilities and societal discourses – reproduced persistent problems. This understanding highlighted the need for a systemic understanding and interventions at both service touchpoints as well as government and societal levels. Aspects of the ‘mess’ considered germane included how the status quo:

- reinforced a ‘Western’ worldview at the expense of Māori perspectives, seen most notably in the system’s foci on individuals and nuclear families, downplaying the importance of whānau (extended families), hapū (villages) and iwi (tribes) – it would be necessary to look at the impact of family violence in terms of Māori cultural values and practices (also see Ahuriri-Driscoll et al., 2005);
- focused on outputs rather than outcomes;
- drifted towards popularism and simplistic analyses, while ignoring more nuanced understandings of family violence, such as structural analyses;

- amplified disconnects between service providers and the government when it came to planning;
- failed to listen sufficiently to the voices of those most affected by family violence; and
- struggled to make use of research and evaluation when commissioning and improving services.

The second workshop focused on ends planning, with an emphasis on idealised design. Here, we treated the national response as if it was a purpose-built system. After imagining that the current system had disappeared overnight, stakeholders were tasked with selecting a mission and determining the desired properties of the new design, as if they had the power to redesign the system. Central to idealised design is the capacity to question taken-for-granted assumptions that limit creativity by encouraging stakeholders to have “imaginative irreverence for things as they are and encourages exploration of areas previously precluded by self-imposed and culturally imposed taboos” (Ackoff, 1978, p. 28). However, idealised designs should not be utopian but should remain technologically feasible, viable and adaptable (Ackoff, 1981; Ackoff et al., 2006).

The workshop began by exploring the overarching purpose of a transformed system. We worked with the Glenn Inquiry’s stated aim and refined it using SSM’s CATWOE method to create the following system definition (or mission) for what needed to be brought into being:

A system that reduces the rate of family violence by giving credence to the experience of those most affected by such violence and changing how New Zealand deals with these problems. The ultimate goal, specified by the Glenn Inquiry, is to make New Zealand a great place for families, particularly women and children.

After confirming the transformed system’s mission, we examined the first-hand accounts of the diverse affected stakeholders in the *People’s Report*. This is when we used the CSH questions (Ulrich, 1987, 1994), and in line with many previous CSH applications (e.g., Cohen & Midgley, 1994; Midgley et al., 1998; Boyd et al., 2004), we modified the questions to improve their accessibility (Midgley, 2017) and to make them specifically relevant to the family violence prevention system. We then applied these adapted questions to generate a list of desired properties so that the vision of the transformed system was considered relevant, credible and legitimate by our sector experts. In line with the mission and Ulrich’s (1987) original intent for the questions, we asked the experts to be especially mindful of those who would be affected by system change but might not be involved in implementing it, or who could become marginalised in the process, such as children, women and Māori. We also reflected on the conditions that encourage political viability, given that our analysis of the ‘mess’ strongly indicated the need for increased and

TABLE 10.1 Properties of the idealised design (extract)

Who is this system designed to benefit?	<ul style="list-style-type: none"> • Those who have been subject to family violence and those who are at risk of abuse. • Those who have perpetrated abuse and those who are at risk of doing so. • The whole society, as family violence sends ripples over time throughout the community. • An important tension exists between a focus on victims and perpetrators, and those at risk of being a victim or perpetrator.
Who will have the power to decide what matters and what success will look like, and how should they work?	<ul style="list-style-type: none"> • Decision makers need a framing of need that includes primary (prevention), secondary (crisis response) and tertiary (rebuilding lives) responses. • Stakeholder participation is vital in decision-making bodies. • Decision makers need to include cross-government representatives, service providers, researchers, iwi and hapū, and be responsive to service user feedback. • Decision makers need to use evidence generated from well-designed planning processes, impact and outcome evaluations, cost/benefit analyses and analyses that account for the needs and cultures of particular populations. • An important tension exists between centralised and standardised vs. context-dependent planning and implementation.

sustained investment in policy change; service development and delivery; striking a balance between prevention, crisis and recovery-focused services; and securing cross-party commitment in Parliament. Extracts of important properties of the idealised design are listed in Table 10.1, and they include areas of active debate or disagreement among our sector experts and those working in the wider family violence system. Our application of the CSH questions identified at least seven conditions that would need to be met by the system:

- 1 Exist to improve the situation of those who have been subject to family violence, those vulnerable to such abuse, those who have perpetrated abuse and those who are vulnerable to doing so.
- 2 Monitor system performance using evaluation evidence (outcomes data) and the lived experiences of individuals and communities directly affected.
- 3 Represent service users in governance and balance the advice of experts with that of communities and practitioners who are informed by the experience of those most affected.
- 4 Focus on prevention response, and recovery in planning and implementation; involve stakeholders; use the best evaluation evidence; and balance central control with local context.

- 5 Secure cross-party political commitment and government capacity to advise on direction and interventions.
- 6 Use accurate documentation and well-designed evaluations that are culturally responsive.
- 7 Be based on commitments to human dignity, the application of human rights and respect, and the recognition of cultural diversity.

The third and final workshop supported sector experts in exploring how a transformed system might sustainably give practical effect to the desired properties. The VSM (Beer, 1984; Espinosa, 2022) was used to structure these discussions and help participants think about how a transformed system's idealised properties might be realised. This movement from IP (Ackoff et al., 2006), incorporating the CSH questions (Ulrich, 1994), to institutional design using the VSM (Beer, 1984) was borrowed from Midgley et al. (1997, 1998), who first put together this combination of systems approaches to redesign housing services for older people. We engaged with the sector experts to outline requirements for a 'viable system'; that is, an integrated approach that produces the desired outcomes and will remain effective over time. Key communication and accountability channels were discussed. Finally, we conceptualised viability as both 'structural viability' (how the necessary functions in the system need to work together) (Beer, 1984) and 'socio-political viability' (how the system can be made relevant, credible and legitimate in the eyes of key stakeholders) (Wynne, 1983; Espinosa et al., 2005).

The VSM focuses on five critical functions, or subsystems, and how they work together to ensure viability. We labelled each subsystem with numbers, as recommended by Beer (1984), to avoid negative value judgements that can sometimes come with the use of management terms like 'strategy' and 'operations': System 1s ('operational units'), System 2 ('coordination'), System 3 ('tasking, resourcing and monitoring performance'), System 4 ('scanning and planning') and System 5 ('purpose and guidance'). Figure 10.1 shows the model of the transformed system created by the participants, which does not allocate responsibilities to particular organisations, but instead focuses on what needs to be done to deliver a viable system (specific allocations could happen later, at the implementation stage).

We report on illustrative recommendations from the sector experts here, but the full systemic redesign can be found in Foote et al. (2014a, 2014b), including our team's recommendations to the Glenn Inquiry that were co-created with stakeholders. The System 1s involve operational activities that carry out the main work of the transformed system, and include prevention, targeted prevention, response and advocacy, which were populated with programmes after an evidence-based review. System 2 enables coordination between the operational activities, so they work together rather than undermine each other. This involves service mapping and knowledge sharing, as well as developing national best practice guidelines and tools that reflect a common language and set of core values. System 3 ensures that operational activities are appropriately tasked, resourced and held accountable, and

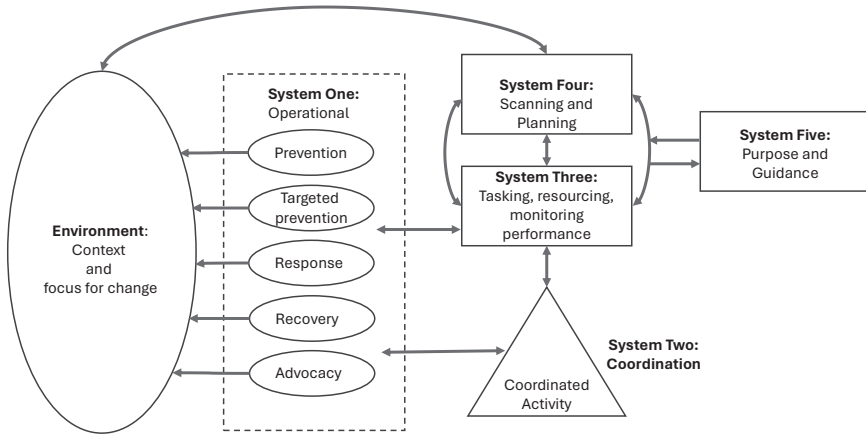


FIGURE 10.1 The transformed system (adapted from Foote et al., 2014a, p. 36).

it focuses on improving how funding agencies identify and evaluate programmes and initiatives, noting the need for methods to incorporate community perspectives in decisions about purchasing services and monitoring performance. System 4 alerts the transformed system to new developments, including threats and opportunities, and includes a proposal for a national Family Safety Authority that would ensure decision makers are well informed on national and international trends and developments. The Family Safety Authority would also standardise data on family violence so it can be meaningfully tracked over time and triangulated with other data. Finally, System 5 provides a coherent and explicit purpose for the transformed system, and arbitrates when there are difficult to resolve conflicts between the need for ongoing, high-performing and well-resourced operational activities (as judged by System 3) and pressure for change to business as usual to meet emerging threats and opportunities (identified through System 4). Our sector experts highlighted the need for a national policy framework with commitment and ownership across political parties, sector stakeholders and Māori. Such a framework would facilitate and express broad ‘buy-in’ to the underlying values, strategies and outcomes driving the transformed system to prevent and reduce family violence.

5 Discussion

Having provided an account of our systemic intervention, we now turn to the question of whether the participatory design had created a systemically, socially and politically robust vision for a coherent and impactful approach to family violence prevention. While the workshop participants were confident that the systemic redesign represented an improvement, and our team’s recommendations mirrored stakeholder deliberations about what would constitute a high-performing family violence prevention system, uncertainty existed about how the team’s

recommendations would be taken up by the Glenn Inquiry and then be presented to the government who would be free to accept, reject or ignore any recommendations. Overall, there was a clear connection between the systemic redesign and the Glenn Inquiry's *People's Blueprint* (minus systems terminology and technicalities, which were removed to facilitate accessibility to a more general audience). Also, the press release accompanying the publication of the *People's Blueprint* contained a quotation from Sir Owen Glenn, who had funded the Inquiry. He noted that:

The Blueprint provides the basis of just such a coherent, integrated strategy. Now that the Inquiry's work is done, the challenge is laid down to implement it. I am anxious to see the strategy adopted by political parties, across the spectrum, and taken up over the whole of our society.

(Glenn Inquiry, 2014)

Yet, the *People's Blueprint* recommendations received a mixed response. The Chair of a prominent anti-violence organisation and former principal Family Court judge described the report as “comprehensive and courageous” (RNZ, 2014a). Women's Refuge strongly supported the *People's Blueprint* proposals for a single court for domestic violence cases and a monitoring agency to ensure outcomes for victims and those at risk (RNZ, 2014b). The then Ministers of Justice and Social Development noted that the report contained “useful contributions to the insights and information being gathered by officials” and “reinforced the importance of taking collective action on family violence” (Beehive, 2014). However, they also pointed out that “there are a number of initiatives in place across Government ... which address the issues raised in this report” and that there was a “ministerial working group ... taking a broad [whole of government] look at how the Government is working on family violence, how effective those interventions are, and what more can be done” (Beehive, 2014; Stuff, 2015).

A year after the *People's Blueprint* had been published, Sir Owen Glenn expressed disappointment that no government official had been in contact to discuss the Inquiry's recommendations, and the widespread public support for change that the Inquiry hoped to mobilise was not realised in practice (Stuff, 2015). Nevertheless, the opposition party Leader, Jacinda Ardern, who would become New Zealand's 40th prime minister (2017–2023), was critical of the government's approach, describing it as “picking off bits without looking at the whole” (Stuff, 2015). Marama Davidson, who was a member of the Glenn Inquiry, would go on to become the Minister for the Prevention of Family and Sexual Violence under Ardern's Labour Party-led government. She introduced *Te Aorerekura*, New Zealand's first national strategy to eliminate family and sexual violence, which prioritised ‘whole of government’ action, including investment in prevention and integrated responses (Joint Venture, 2021).

It was unclear how we should judge the impact of the participatory design. As noted, while our sector experts found value in our participatory systems approach,

and the Glenn Inquiry had drawn on the accommodations between stakeholders to make recommendations, the lack of engagement from politicians and officials in the then-government was puzzling. This was especially so, as our team's systemic intervention was one of a number of initiatives at the time that had attempted to articulate a 'whole system' solution to family violence prevention. Others included the work of Ruth Herbert, who had left the Glenn Inquiry and co-authored *The Way Forward* (Herbert & MacKenzie, 2014). Indeed, our team was also commissioned by the government's Social Policy Evaluation and Research Unit to develop a 'whole of system' evaluation methodology (Foote et al., 2015), and Carswell et al. (2020) reviewed New Zealand research on the family violence system for the Office of the Auditor-General. Their report included a chapter on systems approaches.

While we were careful to incorporate inquiries into social and political viability within our systemic intervention, our understanding of the fateful ways in which the family violence prevention sector was nested in or connected to other service systems (such as the health, legal and political systems) was limited. Indeed, these service systems may have had resource dependencies and overlapping interests or interacted with similar stakeholders: it is common for stakeholders to borrow strategies from, form alliances with or come into conflict with neighbouring systems (Laamanen & Skålen, 2015). To what extent was the lack of political engagement with the Inquiry report a result of it being seen as a threat to such neighbouring systems?

One finding of our 'formulating the mess' exercise, early on, was that the ex-government officials we involved had expressed some concern that the then-government might perceive the independent funding of a public inquiry as a challenge to their own policy making rather than an aid to it. If the government viewed the Inquiry as unwelcome, then their lack of engagement is quite understandable. Based on what the ex-government officials told us, we believe that this was a significant factor, but it is unlikely that any representative of the then-government would admit to it, so it is not possible to validate the claim any further.

We are pleased that the new, incoming government chose to create a national, whole-of-government family violence prevention strategy, as mentioned above. So, the eventual outcome was close to what our participants had planned. However, the precise causal relationship between the Inquiry and the eventual policy outcome remains unclear, not least because causality in such situations is nearly always highly complex, and may be seen differently by different stakeholders (Midgley et al., 2013; Foote et al., 2021; Reed et al., 2021): it could be that the *People's Blueprint* raised the profile of the issue of family violence, so the next government was willing to prioritise it; perhaps the Inquiry had influenced some key stakeholders participating in the new policymaking; maybe the *Blueprint* was consulted by civil servants; or possibly a whole-of-government approach to family violence prevention had been on the agenda of the incoming government before the Inquiry took place. Without further research, it is impossible to know for sure.

As a general point, it is surprising that many systemic interventions pay only cursory attention to the ‘supra-system’ by (perhaps) noting the big-picture drivers shaping the problem context. They often have only a thin understanding of the wider considerations that impact systemically desirable and culturally feasible change (Checkland, 1981). While this may not be a significant issue for systemic interventions in local contexts where structural and social viability can be addressed with sound processes and shared learning (Midgley, 2000), we suggest that future systemic interventions to design national-level service systems need to place greater emphasis on *political viability*, which means taking seriously the machinery of government, including the role of policy sub-systems in agenda setting and implementation. While there is a risk that widening the boundaries of analysis by ‘sweeping in’ policy or political considerations too early on might lead to unnecessary compromises, understanding the context in which the use (or non-use) of any findings or recommendations will be shaped by interests, values and concerns of policy and political actors is crucial. This analysis may suggest a different combination of systems methods to structure systemic redesign, but equally, it may point to the need to enrol different stakeholders in either the client, practitioner or issue owner roles (Lewis, 2007).

This greater engagement with policy and political contexts will necessarily involve dialogue between the systems practitioners and public policy communities. However, we are conscious that policymakers face obstacles in using systems ideas and methodologies, such as the diversity of systems methodologies and associated jargon terms in the literature (Cabrera et al., 2023) and the limited ability of government agencies to adopt systems approaches in the context of business-as-usual policymaking (Foote et al., 2015; Haynes et al., 2020; Hobbs & Midgley, 2020). It may therefore be incumbent on systems practitioners to better understand the tensions and trade-offs (McColl-Kennedy et al., 2020), conflict over public value (Skålén et al., 2024) and the role of legitimacy (Kinder et al., 2022) in public service ecosystems.

To support systems practitioners in this endeavour, we propose enhancing the theory and practice of boundary critique (Midgley et al., 1998; Midgley, 2000; Córdoba & Midgley, 2003, 2006, 2008; Foote et al., 2007; Midgley & Pinzón, 2011) by drawing on theoretical frameworks that clarify the relationships between the system in focus and the supra-system, such as the way Lewis (2007) uses Actor Network Theory and Foote et al. (2021) use institutional logics. Indeed, frameworks such as Geels’ (2002) multiple level perspective (MLP), Fligstein and McAdam’s (2012) strategic action fields and Helfgott et al.’s (2023) multi-level integrated planning and implementation process are possible candidates, given their foci on multiple levels of analysis, agents and agency, stability and change, and context. While the use of frameworks such as the MLP are common in systemic design practice (Systemic Design Toolkit, 2021), there is potential here for the wider systems thinking community to learn from it.

For example, Simoens et al. (2022) apply the MLP to examine the role of discursive dynamics within socio-technical systems, focusing on how certain discourses

can lead to lock-ins, where problem framings become entrenched, making it difficult to implement new solutions or approaches. Indeed, this framework signals the importance of niche projects in generating alternative discourses and the non-linear way in which new understandings about problems and solutions can challenge, replace or be assimilated into dominant ways of thinking and organising. It is highly likely that our use of the VSM (Beer, 1984) was perceived by some stakeholders beyond our participant group as making the case for integrated service provision rather than addressing family violence prevention as a wicked problem, which would require the prioritisation of children, women and Māori. Our alternative framing is unlikely to overcome the dominant understanding of systems in ‘whole of government’ discourses.

Of course, it is an open question to what extent these theories lend themselves to “generalizable analytical tools that [actors] can use to develop ... strategic assessments of the sociological contexts in which they act” (Noy, 2008, p. 3). This situation creates an opportunity to explore the utility of these frameworks in future systemic interventions.

6 Conclusion

Our chapter has reflected on a systemic intervention to engage family violence prevention stakeholders in a redesign of a system that was considered ‘broken’ and in need of transformation. We have illustrated how systemic intervention’s boundary critique and creative design of methods can craft an approach that is sensitive to structural, social and political conditions needed for a viable approach to family violence prevention. In doing so, we have shown how methods drawn from a variety of different systems methodologies guided stakeholder deliberations about a transformed system.

Our research contributes to the ongoing discussion about using systemic and participative methods in service design, particularly within the domain of family violence prevention. We make the case that service systems need to be structurally, socially and politically viable, but beyond the meaningful engagement of stakeholders, there is a need for understanding how the wider system in which the redesigned service system is nested shapes what changes are considered systemically desirable and culturally feasible.

We note the need to enhance boundary critique with frameworks that account for social theories of change, and we suggest Geels’ (2002) multiple level perspective, Fligstein and McAdam’s (2012) strategic action fields and Helfgott et al.’s (2023) multi-level integrated planning and implementation process, amongst others, as prime candidates for future research on augmenting boundary critique with multi-level analysis in systems practice.

As New Zealand continues to refine its approach to family violence prevention, the lessons drawn from this intervention can inform future efforts. This work not only paves the way for more systemic and sustainable transformations in social policy, but also serves as a model for grappling with similar ‘wicked problems’.

Acknowledgements

The authors acknowledge the various sector experts who generously contributed their time and insights to our participatory analysis of New Zealand's family violence system. We also thank our team's family violence experts (Dr Sue Carswell and Prof Annabel Taylor) and colleagues at the Institute of Environmental Science and Research who provided the content expertise that was critical to the workshops (Dr David Wood, Dr Ann Winstanley and Maria Hepi). The project was made possible with funding from the Glenn Inquiry.

References

- Ackermann, F. (2012). Problem structuring methods 'in the dock': Arguing the case for soft OR. *European Journal of Operational Research*, 219(3), 652–658.
- Ackermann, F. (2024). Managing grand challenges: Extending the scope of problem structuring methods and behavioural operational research. *European Journal of Operational Research*. <https://doi.org/10.1016/j.ejor.2024.01.024>
- Ackoff, R. (1978). *The art of problem solving*. Wiley.
- Ackoff, R. (1981). *Creating the corporate future*. Wiley.
- Ackoff, R. L., Magidson, J., & Addison, H. J. (2006). *Idealized design: Creating an organization's future*. Wharton School Publishing.
- Ahuriri-Driscoll, A., Baker, V., & Midgley, G. (2005). *Whānau and whānau development in Te Awakairangi: Te Rūnanganui o Taranaki Whānui ki te Upoko o te Ika a Māui Inc. Whānau Development and Learning Communities Initiatives*. Client report for Te Puni Kōkiri. Institute for Environmental Science and Research.
- Beehive (2014, 28 November). Ministers respond to Glenn Inquiry report. <https://www.beehive.govt.nz/release/ministers-respond-glenn-inquiry-report>
- Beer, S. (1984). The viable system model: Its provenance, development, methodology and pathology. *Journal of the Operational Research Society*, 35(1), 7–25.
- Bensberg, M., Joyce, A., & Wilson, E. (2021). Building a prevention system: Infrastructure to strengthen health promotion outcomes. *International Journal of Environmental Research and Public Health*, 18(4), 1618.
- Boyd, A., Brown, M., & Midgley, G. (2004). Systemic intervention for community OR: Developing services with young people (under 16) living on the streets. In G. Midgley & A.E. Ochoa-Arias (Eds.), *Community operational research: OR and systems thinking for community development*. Kluwer.
- Cabrera, D., Cabrera, L., & Midgley, G. (2023). The four waves of systems thinking. *Journal of Systems Thinking*, 3, 1–51. <https://doi.org/10.54120/jost.000051>
- Carne, S., Ress, D., Paton, N., & Fanslow, J. (2019). *Using systems thinking to address intimate partner violence and child abuse in New Zealand*. Issue paper 13. New Zealand Violence Clearinghouse.
- Carswell, S., Paulin, J., Kaiwai, H., & Donovan, E. (2020). *Experiences of the family violence system in Aotearoa: An overview of research 2010 – early 2020*. Office of the Auditor-General.
- Cash, D., Clark, W. C., Alcock, F., Dickson, N. M., Eckley, N., & Jäger, J. (2002). Salience, credibility, legitimacy and boundaries: Linking research, assessment and decision making. *Assessment and decision making: Faculty research working paper series*. John F. Kennedy School of Government, Harvard University.

- Checkland, P. (1981). *Systems thinking, systems practice*. Wiley.
- Checkland, P., & Poulter, J. (2006). *Learning for action: A short definitive account of soft systems methodology, and its use for practitioners, teachers and students*. Wiley.
- Clark, A. (2021). *Dealing with pluralism and marginalisation processes in multi-organisational collaboration: Augmenting the viable system model with team syngegrity* [Doctoral Thesis, Victoria University of Wellington]. Open Access https://openaccess.wgtn.ac.nz/articles/thesis/Dealing_With_Pluralism_And_Marginalisation_Processes_In_Multi-Organisational_Collaboration_Augmenting_The_Viable_System_Model_With_Team_Syngegrity/16960747
- Cohen, C., & Midgley, G. (1994). *The North Humberstone diversion from custody project for mentally disordered offenders: Research report*. Centre for Systems Studies.
- Córdoba, J. R., & Midgley, G. (2003). Addressing organisational and societal concerns: An application of critical systems thinking to information systems planning in Colombia. In Cano, J. (Ed.), *Critical reflections on information systems: A systemic approach*. Idea Group.
- Córdoba, J. R., & Midgley, G. (2006). Broadening the boundaries: An application of critical systems thinking to IS planning in Colombia. *Journal of the Operational Research Society*, 57, 1064–1080.
- Córdoba, J. R., & Midgley, G. (2008). Beyond organisational agendas: Using boundary critique to facilitate the inclusion of societal concerns in information systems planning. *European Journal of Information Systems*, 17, 125–142.
- Espejo, R. & Harnden, R. (eds.) (1989). *The viable system model: Interpretations and applications of Stafford Beer's VSM*. Wiley.
- Espinosa, A. (2022). *Sustainable self-governance in businesses and society: The viable system model in action*. Routledge.
- Espinosa, A., Harnden, R., & Walker, J. (2005). Cybernetics and participation: From theory to practice. *Systemic Practice and Action Research*, 17, 573–589.
- Family Violence Death Review Committee. (2017). *Fifth report: January 2009 to December 2015*. Family Violence Death Review Committee.
- Fligstein, N., & McAdam, D. (2012). *A theory of fields*. Oxford University Press.
- Foote, J., Carswell, S., Wood, D., & Nicholas, G. (2015). *Measuring the effectiveness of 'whole-of-system' response to prevent family violence*. Social Policy Evaluation and Research Unit.
- Foote, J. L., Gregor, J. E., Hepi, M. C., Baker, V. E., Houston, D. J., & Midgley, G. (2007). Systemic problem structuring applied to community involvement in water conservation. *Journal of the Operational Research Society*, 58, 645–654.
- Foote, J., Midgley, G., Ahuriri-Driscoll, A., Hepi, M., & Earl-Goulet, J. (2021). Systemic evaluation of community environmental management programmes. *European Journal of Operational Research*, 288(1), 207–224.
- Foote, J., Taylor, A., Nicholas, G., Carswell, S., Wood, D., Winstanley, A., & Hepi, M. (2014a). *Toward a transformed system to address child abuse and family violence in New Zealand*. Report commissioned by the Glenn Inquiry. Institute of Environmental Science and Research.
- Foote, J., Taylor, A., Carswell, S., Nicholas, G., Wood, D., Winstanley, A., & Hepi, M. (2014b). *Selecting interventions to reduce family violence and child abuse in New Zealand*. Report commissioned by the Glenn Inquiry. Institute of Environmental Science and Research.
- Flood, R., & Jackson, M. (1991). *Creative problem solving: Total systems intervention*. Wiley.

- Haynes, A., Garvey, K., Davidson, S., & Milat, A. (2020). What can policy-makers get out of systems thinking? Policy partners' experiences of a systems-focused research collaboration in preventive health. *International Journal of Health Policy and Management*, 9(2), 65–76.
- Helfgott, A., Midgley, G., Chaudhury, A., Vervoort, J., Sova, C., & Ryan, A. (2023). Multi-level participation in integrative, systemic planning: The case of climate adaptation in Ghana. *European Journal of Operational Research*, 309(3), 1201–1217.
- Herbert, R., & MacKenzie, D. (2014). *The way forward: An integrated system for intimate partner violence and child abuse and neglect in New Zealand*. The Impact Collective.
- Hobbs, C., & Midgley G (2020). *Enhancing systemic capability in the Civil Service: Report of key findings*. Centre for Systems Studies client report to the UK Cabinet Office: <https://hull-repository.worktribe.com/output/4084807> (accessed 24 May 2024).
- Holt, D., Højlund, H., & Jensen, H. (2021). Conflict and synergy in health promotion partnerships. *Health Promotion International*, 38(4), daab189.
- Howlett, M., & Ramesh, M. (1998). Policy subsystem configurations and policy change: Operationalizing the postpositivist analysis of the politics of the policy process. *Policy Studies Journal*, 26(3), 466–481.
- Huxham, C., & Vangen, S. (2004). Doing things collaboratively: Realising the advantage or succumbing to inertia? *IEEE Engineering Management Review*, 32(4), 11–20.
- Gear, C., Ting, C. J., Eraki, M., Eppel, E., & Koziol-McLain, J. (2021). Integrated system responses for families impacted by violence: A scoping review protocol. *BMJ Open*, 11, e051363.
- Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Research Policy*, 31(8–9), 1257–1274.
- Glenn Inquiry (2014, 14 November). Glenn Inquiry funder keeps promise [press release]. <https://ndhadeliver.natlib.govt.nz/webarchive/20141210152931/https://glenninquiry.org.nz/news>
- Gregory, W. J., & Romm, N. R. (2001). Critical facilitation: Learning through intervention in group processes. *Management Learning*, 32(4), 453–467.
- Jackson, M. C. (2019). *Critical systems thinking and the management of complexity*. Wiley.
- Joint Venture (2021). *Te Aorerekura: National strategy to eliminate family violence and sexual violence*. <https://tepunaonui.govt.nz/#moemoea> (accessed 24 May 2024).
- Khayatzaheh-Mahani, A., Ruckert, A., & Labonté, R. (2018). Obesity prevention: Co-framing for intersectoral 'buy-in.' *Critical Public Health*, 28(1), 4–11.
- Kinder, T., Six, F., Stenvall, J., & Memon, A. (2022). Governance-as-legitimacy: Are eco-systems replacing networks? *Public Management Review*, 24(1), 8–33.
- Laamanen, M., & Skälén, P. (2015). Collective-conflictual value co-creation: A strategic action field approach. *Marketing Theory*, 15(3), 381–400.
- Lewis, P. (2007). Using ANT ideas in the managing of systemic action research. *Systems Research and Behavioral Science*, 24(6), 589–598.
- McColl-Kennedy, J. R., Cheung, L., & Coote, L. V. (2020). Tensions and trade-offs in multi-actor service ecosystems. *Journal of Business Research*, 121, 655–666.
- Midgley, G. (1996). What is this thing called critical systems thinking? In R.L. Flood & N.R.A. Romm (Eds.), *Critical systems thinking: Current research and practice*. Plenum.
- Midgley, G. (1997). Dealing with coercion: Critical systems heuristics and beyond. *Systems Practice*, 10, 37–57.
- Midgley, G. (2000). *Systemic intervention: Philosophy, methodology, and practice*. Kluwer/Plenum.

- Midgley, G. (2006). Systemic intervention for public health. *American Journal of Public Health*, 96, 466–472.
- Midgley, G. (2015). Systemic intervention. In H. Bradbury-Huang (Ed.), *The Sage handbook of action research* (3rd ed.). Sage, pp. 157–166.
- Midgley, G. (2017). Critical back-casting. *Integration and Implementation Insights*, <https://i2insights.org/2017/02/09/critical-back-casting/> (accessed 24 May 2024).
- Midgley, G. (2018). Systemic intervention: Theory, methodology and practice. *Proceedings of the 5th Jubilee International Research and Practice Conference on System Analysis in Economics*, Moscow, Russia, November 2018.
- Midgley, G. (2023). The systemic intervention approach. *Journal of Systems Thinking*, 3, 1–24. <https://doi.org/10.54120/jost.000050>.
- Midgley, G., Ahuriri-Driscoll, A., Foote, J., Hepi, M., Taimona, H., Rogers-Koroheke, M., & Wood, D. (2007). Practitioner identity in systemic intervention: Reflections on the promotion of environmental health through Māori community development. *Systems Research and Behavioral Science*, 24(2), 233–247.
- Midgley, G., Cavana, R. Y., Brocklesby, J., Foote, J., Ahuriri-Driscoll, A., & Wood, D. (2013). Towards a new framework for evaluating systemic problem structuring methods. *European Journal of Operational Research*, 229, 143–154.
- Midgley, G., Elkins, A., Loneragan, G. H., Babowicz, M., Dass, M., Grohn, Y. T., Jordan, E., Lhermie, G., Lunt, L., McIntosh, W. A., Piñeiro, J. M., Sawyer, J., & Scott, H. M. (2023). *Toward system change to tackle antimicrobial resistance: Improving the voluntary stewardship of antimicrobials in US agriculture*. Centre for Systems Studies, University of Hull.
- Midgley, G., Munlo, I., & Brown, M. (1997). *Sharing power: Integrating user involvement and multi-agency working to improve housing for older people*. Policy Press.
- Midgley, G., Munlo, I., & Brown, M. (1998). The theory and practice of boundary critique: Developing housing services for older people. *Journal of the Operational Research Society*, 49(5), 467–478.
- Midgley, G. & Pinzón, L. (2011). Boundary critique and its implications for conflict prevention. *Journal of the Operational Research Society*, 62, 1543–1554.
- New Zealand Productivity Commission (2015). *More effective social services*. New Zealand Productivity Commission.
- Nicholas, G., Foote, J., Taylor, A., Carswell, S., Wood, D., Winstanley, A., & Hepi, M. (2014). *Getting it together*. Report commissioned by the Glenn Inquiry. Institute of Environmental Science and Research.
- Noy, D. (2008). Power mapping: Enhancing sociological knowledge by developing generalizable analytical public tools. *American Journal of Sociology*, 39, 3–18.
- Osborne, S. P., Powell, M., Cui, T., & Strokosch, K. (2022). Value creation in the public service ecosystem: An integrative framework. *Public Administration Review*, 82(4), 634–645.
- Pinheiro, P. S. (2006). *World report on violence against children*. United Nations Secretary-General's Study on Violence against Children.
- Poole, D. (2008). Organizational networks of collaboration for community-based living. *Nonprofit Management and Leadership*, 18(3), 275–293.
- Provan, K & Kenis, P. (2007). Modes of network governance: Structure, management and effectiveness. *Journal of Public Administration Research and Theory*, 18, 229–252.
- van Raak, R., & de Haan, F. (2017). Key features of modern health systems: Nature and historical evolution. In J. Grin & J. Broerse (Eds.), *Towards sustainable transitions in healthcare systems*. Routledge. pp. 46–84.

- Reed, M.S., Ferré, M., Martin-Ortega, J., Blanche, R., Lawford-Rolfe, R., Dallimer, M., & Holden, J. (2021). Evaluating impact from research: A methodological framework. *Research Policy*, 50(4), 104147.
- Ríos, P. (2012). *Design and diagnosis for sustainable organizations: The viable system method*. Springer.
- Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155–169.
- RNZ. (2013, 19 July). Glenn rethinking role on abuse inquiry. <https://www.rnz.co.nz/news/national/214887/glenn-rethinking-role-on-abuse-inquiry>
- RNZ (2014a, 28 November). Glenn inquiry releases final report. <https://www.rnz.co.nz/news/national/260465/glenn-inquiry-releases-final-report>
- RNZ (2014b, 28 November). Women's Refuge backs Glenn inquiry. <https://www.rnz.co.nz/news/national/260493/women's-refuge-backs-glenn-inquiry>
- Sagalovsky, B. (2015). Organizing for lean: Autonomy, recursion and cohesion. *Kybernetes*, 44(6/7), 970–983.
- Simoens, M. C., Fuenfschilling, L., & Leipold, S. (2022). Discursive dynamics and lock-ins in socio-technical systems: An overview and a way forward. *Sustainability Science*, 17(5), 1841–1853.
- Skålén, P., Engen, M., & Jenhaug, L. (2024). Conflicts over public value within public service ecosystems: A strategic action field approach. *Public Management Review*, 1–22. <https://doi.org/10.1080/14719037.2024.2329226>
- Smith, A.J. (2022). *Towards a "good enough justice": Gillian Rose, interpretive systemology, and the mandatory introduction of british values in schools* [PhD thesis, University of Hull].
- Smith, A.J., & Midgley, G. (2025). Accommodation and critique: A necessary tension. *Systems Research and Behavioral Science*, 42(1), in press.
- Stephens, A. (2023). Feminist-systems thinking: From mere principles to a United Nations framework. *Journal of Systems Thinking*, 1–10. <https://doi.org/10.54120/jost.0000026>
- Stephens, A. & Liley, W. (2021). Violence prevention education: Problem structuring for systemic empowerment in health settings. In G. S. Metcalf, K. Kijima, & H. Deguchi (Eds.), *Handbook of Systems Sciences*. Springer.
- Stuff (2014, 15 June). Tag all family abusers: Judge. <https://www.stuff.co.nz/national/crime/10159387/Tag-all-family-abusers-Judge>
- Stuff (2015, 28 November). Millionaire philanthropist Sir Owen Glenn says he was 'vilified' for domestic violence inquiry. <https://www.stuff.co.nz/national/74417653/millionaire-philanthropist-sir-owen-glenn-says-he-was-vilified-for-domestic-violence-inquiry>
- Sydelko, P., Espinosa, A., & Midgley, G. (2024). Designing interagency responses to wicked problems: A viable system model board game. *European Journal of Operational Research*, 312, 746–764.
- Sydelko, P., Midgley, G., & Espinosa, A. (2021). Designing interagency responses to wicked problems: Creating a common, cross-agency understanding. *European Journal of Operational Research*, 294(1), 250–263.
- Systemic Design Toolkit (2021). systemicdesigntoolkit.org (accessed 10 November 2024).
- Taylor, A., Carswell, S., Haldane, H., & Taylor, M. (2014a). *Towards a transformed system to address child abuse and family violence in New Zealand: Literature review – part one*. Te Awatea Violence Research Centre, University of Canterbury.
- Taylor, A., Carswell, S., Haldane, H., & Taylor, M. (2014b). *Towards a transformed system to address child abuse and family violence in New Zealand: Literature review – part two*. Te Awatea Violence Research Centre, University of Canterbury.

- Turrini, A., Cristofoli, F., Frosini, F., & Nasi, G. (2010). Networking literature about determinants of network effectiveness. *Public Administration*, 88(2), 528–550.
- Ulrich, W. (1987). Critical heuristics of social system design. *European Journal of Operational Research*, 31(3), 276–283.
- Ulrich, W. (1994). *Critical heuristics of social planning: A new approach to practical philosophy*. Wiley.
- Williams, B., & van 't Hof, S. (2016). *Wicked solutions: A systems approach to complex problems*. Lulu.com.
- Wilson, D., & Webber, M. (2014a). *The people's report: The people's inquiry into addressing child abuse and domestic violence*. The Glenn Inquiry.
- Wilson, D., & Webber, M. (2014b). *The people's blueprint: Transforming the way we deal with child abuse and domestic violence in New Zealand*. The Glenn Inquiry.
- Walsh, M., Kittler, M.G., & Mahal, D. (2018). Towards a new paradigm of healthcare: Addressing challenges to professional identities through community operational research. *European Journal of Operational Research*, 268, 1125–1133.
- Wynne, B. (1983). Redefining the issues of risk and public acceptance. *Futures*, 15(1), 13–32.