

# **SOCIETAL RESILIENCE AND COHESION: IDENTIFYING CONTRIBUTING FACTORS AND THEIR INTERACTIONS**

*A Koi Tū / INGSA research project*

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and Paul Spoonley

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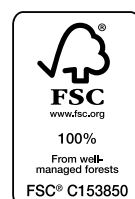
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## EXECUTIVE SUMMARY

Resilience is the capacity to cope with shocks and stress and to adapt and transform positively in the face of potentially disruptive change. At a societal level, resilience requires a level of cohesion among its members, reflected in a sense of community, identity, belonging and trust that drives cooperative and constructive action, particularly during times of stress.

Several lines of evidence indicate that societal cohesion is under strain in many places around the world, a trend that began well before COVID-19 emerged. The shock and ongoing global stress of the pandemic are occurring in the context of multiple concurrent disruptive changes, including digitisation and globalisation, climate change and environmental degradation, and demographic change. In this time of disruption and uncertainty, societal resilience and cohesion are more critical than ever.

Many interacting factors are at play. Weak social cohesion is often thought to be related to perceived unfairness and inequality, economic insecurity, and distrust of government and institutions. Polarisation of views is increasingly creating an ‘us versus them’ mentality, stoking disdain and ‘othering’, and hollowing out the middle ground where cooperation is most likely. This can manifest in social and political unrest, potentially leading to violent conflict and extremism. Lack of cohesion can also lead to poor recovery from disasters, low productivity and slow economic growth.

Understanding the dynamics that either bolster or undermine social cohesion is fundamental for developing policies to enhance resilience in the face of current and future challenges. Inevitably many will be on a scale that will require cooperation across cultures, communities and worldviews. Similar sets of factors are likely to be important at multiple levels, from communities to private sector businesses, to non-governmental organisations and nations. The importance of each factor and their interactions will vary depending on both context, views and experiences of different sectors of society.

Identifying factors that are amenable to change has become a priority for governments around the world. However, decisions to modify one identified factor must consider the effects this might have on a number of other dynamically interacting factors and resulting feedback loops. It is also critical to appreciate the underlying diversity of identities, values and worldviews of societal members who may be affected, and understand the plurality of perspectives and priorities. Rather than simply treating any society as a homogenous whole, effective development of societal resilience requires attention to that granularity and diversity.

This project set out to develop a tool for identifying and analysing the key factors, their interactions, and the levers of change in a manner that can be utilised at various levels of decision-making. Importantly, the tools allow an analysis of cohesion and resilience as perceived by different segments of society, which is likely to be critical to inform appropriate policy and societal actions.

This project had three overall goals:

- To understand what factors might be contributing to undermining or enhancing societal cohesion, and to define these in a way which would allow for application in specific contexts;
- To understand how these factors cluster and interact with each other; and
- To develop a tool kit to enable evaluation in the context of specific societies. (Subsequent use of the tool was beyond the project's scope, but is the logical next step.)

## Approach to factor identification and analysis

Led by Koi Tū: The Centre for Informed Futures on behalf of the International Network for Government Science Advice (INGSA), this project aimed to use a mix of discourse and formal processes to identify the factors involved in enhancing or undermining societal resilience and cohesion. Taking a transdisciplinary, systems-based approach to factor identification and interaction analysis, the first phase engaged an international group of experts across a wide range of disciplines in an iterative process of expert elicitation and survey tool development. This was followed by engagement with the INGSA network of international actors at the science-policy interface for gathering survey responses.

The overall goal of the tool development was to enable integration and reconciliation of knowledge across the broad range of relevant disciplines to address long-term issues relating to societal resilience. The supposition underlying the project was that there are multiple ways people perceive threats to societal resilience and cohesion, and that developing a common framework (systems map) and analytical tools to explore these differing perspectives and perceptions in specific contexts could elucidate important factors that are common and unique across different sections of a society. This transdisciplinary and systems-thinking approach acknowledges that such dialogue must extend beyond traditional policy elites. This will help decision-makers to identify potential pragmatic solutions by enabling a wider array of questions and innovative solutions to emerge. Through these tools, policies and strategies which are optimally suited to advancing wellbeing, cohesion and resilience in an empowered (democratic) society may be developed.

## Preliminary systems map – a global perspective

Over 30 experts across diverse demographics, countries and disciplines ranging from anthropology to economics were asked to develop a list of factors which might undermine societal cohesion and resilience. Recognising that various approaches and uses of the term “social cohesion” exist in the academic and policy literature, a standardised definition was agreed. We used the pragmatic and policy-focused definition derived from Chan et al. (2006):

*“Social cohesion is a state of affairs concerning both the vertical and the horizontal interactions among members of society as characterized by a set of attitudes and norms that includes trust, a sense of belonging and the willingness to participate and help, as well as their behavioural manifestations.”*  
(Chan et al., 2006)

At a workshop in London, which included many of these experts, the initial electronic list was expanded to 65 factors. These were then ranked and reduced to about 35 factors considered to be of the highest potential influence. As many of these factors were clearly interacting, each factor was then weighted via a customised survey tool for its influence on other factors, and on societal resilience generally. These data were used to create an interactions map that enabled visualisation of direct and indirect influences on each factor and the strength of the interaction. The factor-interactions visualisation tool was tested for its usability with a range of policymakers in New Zealand. They found it to be both intuitive and informative.

## Potential case study – Social cohesion in New Zealand

Developing the initial factor clusters and systems map via input of international experts and policy professionals is intended merely as a starting point, providing a useful heuristic for further deliberation. By definition, it cannot provide the specificity needed in any specific context. To be of value, the analysis needs to be shifted from a homogenised global perspective to a deep dive of a particular community so that the nuances and granularity of each component of society’s perspective can be understood.

The next stage will use the developed methodology for deeper analyses of specific countries, states or local jurisdictions, and through the views of different segments and identities within those societies. Only with such information can policymakers, and communities themselves, have the agency to affect change. Each case will be different, and views within each will also vary.

We specifically propose to apply the methodology in the New Zealand context. New Zealand offers an interesting case study in societal cohesion because of its high cultural diversity and unique bicultural foundations. It is generally considered to be a country where cohesion has not been significantly undermined by divisive identity politics. However, there are potential warning signs as it moves through the multiple transitions and transformations discussed above. Analysing the factors influencing cohesion and resilience in different parts of New Zealand society, and through the lens of different identities, will undoubtedly expose issues of postcolonialism and indigenous world views, urban/rural divides and the super-diversity of the largest city, Auckland, which is home to over one-third of the population. Engaging directly with different sectors of society to reveal nuanced perceptions and interactions may also foster an understanding that no one particular state of these complex systems will be wholly good or bad. The process can elucidate preferences and intervention points that may shift outcomes towards aligned societal values, ultimately leading to enhanced cohesion and resilience.

# INTRODUCTION

We are living in a world of constant and accelerating change. Climate change and ecological degradation, demographic change, global power shifts and strain on liberal democracies, transformation of economic models, and trends in technology use and misuse are all placing compounding pressure on societies. Many societies are struggling to keep up, let alone stay ahead of the changes. Change has been a feature of the evolution of human societies at least since the introduction of agriculture and settlement, but never has it been so rapid and pervasive in almost every aspect of our lives. Starting long before the novel coronavirus SARS-CoV-2 began its race through the global population, upending ‘normality’ on a grand scale, we have been confronted with an array of interconnected, rapid changes. And in the background of the COVID-19 pandemic, these major ongoing technological, demographic, economic, social, geopolitical and environmental changes continue to challenge individual and societal resilience in profound ways.

To date, our human experience has done little to prepare us for the long-term uncertainty brought on by these major transitions. Nonetheless, the pandemic revealed a remarkable level of adaptability, reflected in the speed at which the world pivoted to new ways of working, socialising, shopping and consuming, accessing healthcare and other services, and even daily living. But it also highlighted and exacerbated existing inequalities, leaving many individuals, communities, and nations struggling to cope.

In the face of such upheaval and ongoing uncertainty, societal resilience is critical at multiple levels. Yet, we know that our collective capacity for resilience is being challenged by the very factors driving the changes, and these factors interact in multiple, complex ways. Resilience at a societal level relies on social structures, processes and attitudes that promote cohesion and cooperation among its members, underpinned by norms of reciprocity and trust. At their heart, resilient societies are built on societal cohesion (Chan et al., 2006, Fonseca et al., 2018; Jewett et al., 2021; Larsen, 2014; Townshend et al., 2015).

## Defining societal resilience and cohesion

We define societal resilience as the ability of a society to adapt or transform positively in response to significant transitions or threats to its wellbeing. This requires the capacity to consider future threats and challenges and invest in efforts to prepare for both gradual change and acute shocks. A critical precursor of the broader concept of societal resilience is social cohesion, which we define in practical and policy terms as a willingness of members of a society, accepting their diversity, to cooperate in order to overcome adversity and thrive (Chan et al., 2006). Cohesion in a society is apparent when its members perceive that they are engaged in a common enterprise, that they face shared challenges, and they recognise that the strength of the whole is greater than the sum of its parts. It is held up by citizens’ belief that they share a ‘moral community’ which enables them to trust each other (Larsen, 2014). Social cohesion supports democracy – the ability of a society to make collective decisions peacefully and without major conflicts.

Whereas societal cohesion is sometimes viewed as a process (Vergolini, 2011), we view it as a societal state – one that is not just desirable, but is necessary for a society to function properly and to hold the capacity for resilience in the face of significant challenges. Nonetheless, we recognise social cohesion is a very dynamic state that requires constant attention. The OECD defines a socially cohesive society as one that “works towards the wellbeing of all its members, fights exclusion and marginalisation, creates a sense of belonging, promotes trust, and offers its members the opportunity of upward mobility” (OECD, 2012). This definition, as others, emphasises equality and inclusion, undoubtedly important factors for



overall societal wellbeing, but other factors are also relevant and vary within different contexts. Many frameworks focus on ethnic tensions and acceptance of diversity (Laurence et al., 2019; Van der Meer and Tolsma, 2014).

In their discussion of the multiple definitions of social cohesion used in both the academic and policy literature, Chan et al. (2006) developed a pragmatic and policy-relevant definition focused on two interacting vectors. The first is vertical – namely, the reciprocal levels of trust between those who are governed, and the institutions of power and governance. The second is horizontal – it reflects the ability of members and groups within a society with different identities, values and world views to have sufficient trust in and respect for each other to allow them to cooperate constructively for the benefit of society as a whole. Such a definition reflects the goals of democracies and links with current thinking in human development and the Sustainable Development Goals. Thus, as the project developed and unfolded, we formally adopted the following definition of Chan et al:

*“Social cohesion is a state of affairs concerning both the vertical and the horizontal interactions among members of society as characterized by a set of attitudes and norms that includes trust, a sense of belonging and the willingness to participate and help, as well as their behavioural manifestations.”*  
(Chan et al., 2006)

Using this definition, the analysis will focus on the root causes that may be generating risks to social cohesion and societal resilience, rather than on the consequences of its weakening. This differs from most analyses that focus on measuring outcomes, based on the commonly used definition of social cohesion derived from Jenson (1998). Policymakers have tended to focus on the latter, when the former is more informative for decision-making.

## **Framing the problem**

Recent trends have raised deep questions about the level of resilience and social cohesion present in liberal democracies facing rapid change. There are growing concerns about citizen discontent, civic disengagement and community fragmentation (Schiefer and van der Noll, 2017). Compounding intergenerational issues are becoming embedded, thus risking further division. Societies are increasingly divided by oppositional thinking around important issues – climate, immigration, wealth distribution and poverty reduction, technology and globalisation (and indeed public health measures during the COVID-19 pandemic), at the very time when collective action is essential. Therefore, the need to preserve or enhance societal cohesion and resilience has been rising on political and social agendas around the world (e.g. (Jones and Urasawa, 2012; Morris et al., 2011; Stanley, 2003; Jones and Fukawa, 2015; Toktomushev, 2017). The United Nations Development Programme (UNDP) has identified strengthening social cohesion between citizens and the state, as well as within and across individuals and social groups, as an imperative for peace-building and achieving the Sustainable Development Goals (SDG), and in particular, SDG 16 (UNDP, 2020).

Significant institutional and societal transformation will be needed to protect cohesion and enhance resilience in the face of such environmental, demographic, geopolitical and technological challenges. How can we identify levers for change? Governments, private and public sector organisations, and civil society need to better understand the factors driving or influencing the dynamics of social cohesion, and their implications for societal futures, policymaking, and strategic decisions. One ultimate goal of this project is to assist in engaging societal groups in a forward-looking deliberation that promotes such understanding and allows adjustments before problems arise or intensify. This will hinge on identifying the critical factors and interactions, and understanding where agency happens in the process.

# IDENTIFYING FACTORS AFFECTING SOCIETAL COHESION AND RESILIENCE

## Reference frameworks

A number of frameworks have been developed to explain the concept of social cohesion in terms of broad factors or indicators. Spoonley and Peace (Spoonley et al., 2005) outlined a policy indicator framework based on five key considerations: belonging, inclusion, participation, recognition and legitimacy. An OECD report (OECD, 2012) framed social cohesion around three broad dimensions: social inclusion (limiting discrimination, social exclusion and inequalities) social capital (networks of relationships, trust and identity between and within different groups of society) and social mobility (perceived prospects to advance). The UNDP has recently proposed a ‘Social Cohesion and Reconciliation Index’ (UNDP, 2020) that assesses eight indicators: trust in institutions; feeling adequately represented by institutions; human security (including personal safety, economic security, and political security – freedom of association and expression); freedom from corruption; satisfaction with civic life; ethnic group identification; and civic engagement.

While these various framings are useful, we did not start from an existing framework but rather evolved a list of factors independently in a transdisciplinary manner. Both the social science literature and our expert elicitation support the view that societal cohesion is a function of the level of vertical and horizontal trust within a society (Chan et al., 2006; Larsen, 2014; UNDP, 2020). Vertical trust is a reflection of the relationship between institutions of power and citizens. Horizontal trust allows groups of individuals with different world views and values to nevertheless live cooperatively. Human societies evolved based on structures, mores and rules to try and protect cohesion, but this could be compromised if power imbalances or inequalities became too great, thereby threatening trust and societal resilience during challenging times.

To approach these issues in the context of our rapidly changing modern world, we started with the questions: What are the characteristics of societal resilience? What factors influence its development, its maintenance, and possibly its demise? This system-wide analysis approach allows actors to understand the underlying causal factors that influence how components of society view themselves and society as a whole.

## Toolkit development

We approached these questions using a systems-based and policy-focused approach. The key to this work is that the factor identification and mapping was done from a highly transdisciplinary perspective, without a priori filtering, to capture the broadest range of possible causal concepts and identify gaps evident in disciplinarily siloed approaches. Harnessing the power of systems analytics, transdisciplinary conversation, and evidence synthesis enables novel and creative solutions to emerge.

To begin to frame the system parameters and identify factors, we sought input from across a very broad range of academic and policy-aware key opinion leaders with expertise from the humanities, social, digital and natural sciences. We conducted expert elicitation through email preparation followed by face-to-face workshops with international experts in London in January 2020. These workshops occurred just prior to the onset of border restrictions and lockdowns to restrict the spread of COVID-19, and the sudden reorienting of global priorities. At this point, all activities moved online. The expert elicitation and refinement of the factor list was followed by expert input via a customised online survey tool to define the nature and degree of factor interaction.

A challenge is that many of the factors identified are not easily or directly measurable, and we can rely only on surveys of human perception. By aggregating perceptions from experts, we can arrive at a suitable proxy for how these factors interact. This was done by asking participants to rate the strength of the relationship between two factors on a seven-point scale, which we refer to as “weighting” the factor relationship. Respondents were also asked about their level of confidence in a weighting, which allowed us to prioritise higher confidence responses. Figure 1 illustrates an example question posed to participants.

In the country where I live, my perception is that **perceptions of fairness and equity in the society** is related to **erosion of norms of discourse**.

Select one:

My confidence in weighting this interaction is:

If the direction of the interaction is not clear (i.e. you think this is a positive or negative relationship), or if you think there are contextual factors that affect this relationship in a significant manner, please comment below:

Figure 1. Factor interaction survey tool – example entry.

Following the expert elicitation step of factor identification and weighting, the online survey tool was used for global data gathering via the INGSA network.<sup>1</sup> This was undoubtedly slowed by the disruption of the pandemic, and response was lower than expected. We nonetheless gathered sufficient data to generate general systems maps and develop advanced data visualisation tools to help interpret the factor clustering and interactions.

With help from data visualisation and statistical experts, we developed a range of potential analytical and visualisation tools, which were then tested for their usability and utility with a range of policymakers across diverse agencies in New Zealand. The system mapping approach reveals both direct and indirect relationships between factors, helping to explain the intermediary relationships that cause two otherwise seemingly unrelated factors to actually be influenced by each other. The most senior policymakers found the approach valuable and insightful (Owens, 2021).

The toolkit thus informs a systems map of factors and their interactions that can be used with more precision in specific contexts. The methodology creates an intentional transdisciplinary approach which makes it suitable for broader consultations. It can be used for country- and sector-specific analyses, and for comparing understandings of the primary influences on the system from diverse segments of a society.

1 The survey and approach was approved by the UoA Human Participants Ethics Committee (ref: 024426).

# THE FACTORS AFFECTING SOCIETAL RESILIENCE – A SYSTEMS APPROACH

Our expert elicitation by email and in the London workshop initially identified some 65 factors. This list was reduced iteratively to 35 factors judged to be the most relevant in an interactive workshop setting, using a factor ranking tool in small group discussion followed by aggregation and iteration with the larger group. The preliminary analysis of factor weighting and interaction analysis of 7961 factor pair scores (after data cleaning) led to statistical clustering of the 35 factors into a smaller set of 14 clusters, which represent related factors. As the original study group was biased towards G7 countries, an additional cluster of factors was added to reflect issues of postcolonialism. This smaller number of factors/clusters allows us to simplify the survey tool and will enable further testing of the interactions and weightings with a larger survey sample, allowing for more refined demographic analyses.

The 15 clusters also fall under five broader, and overlapping themes, which are outlined below. The factor clusters and themes are not ranked for importance, but rather form the base of a customisable systems map. Factors can be tested and weighted for their significance to different communities and demographic subgroups within a society. This can help identify feedback loops and potential intervention points that might enhance social cohesion in differing contexts. Performing the analysis at a more granular level will be critical for understanding what matters to different groups, and what they see affecting their ability to participate in a cohesive and resilient society.

## Theme 1: Change and uncertainty

This theme encompasses factors particularly relating to environmental change and technological change and their associated uncertainties. The commonality and linkages between these factors is stress on individuals and communities, fear of change and uncertainty about the future. Indeed fear is argued to be a major factor in polarising people and their acceptance of authoritarianism (Davies, 2018).

### Factor 1 – Environmental change

This factor cluster revolves around concern about the future scale and impacts of climate change and environmental degradation leading to eco-anxiety and feelings of powerlessness to achieve change. Of note, in the interaction analysis, there is a correlation between socioeconomic status and the ability or perception of being able to take action that will have an impact, leading to pessimism about the future. This also relates to stocks and flows of trust in the decision-makers who are acting on behalf of those who feel powerless.

### Factor 2 – Technological change

This relates to how both societies and individuals deal with the relentless rapidity of change and technological emergence that can lead to significant economic and social disruption, with wide-ranging impacts. Digital technologies, such as the internet and particularly social media, impact heavily on the quality and tone of societal discourse and have empowered communication of polarising views. While beneficial in many ways, significant new technologies can also have destabilising effects on institutions, power relationships, social structures, economic systems and even cultural assumptions (Wallach, 2015).

## Theme 2: Identity, instability and inequality

This theme encompasses factors relating to identity and demographic change, and its links to inequality (both of opportunity and wealth and income), and the power disparities, and the degree (or lack) of

economic security and stability that ensue. It includes views about minority groups and whether or not they are perceived as a threat to economic and social/cultural security. Factor clusters in this theme are expected to be weighted highly in most contexts with regard to their impact on social cohesion and societal resilience. However, the significance of the interactions may vary depending on other factors of importance to different societal groups and identities.

### **Factor 3 – Identity and demography**

This cluster of factors relates to individual and group identity, and issues of and reactions to changing demographics resulting from rising immigration. This would include international and refugee migration and cross-border movements (including those displaced by climate change, war; destabilisation of neighbouring regions) that result in ethnic and religious co-location, sometimes in ways that escalate anxieties. Demographic shifts may impact several aspects of public service delivery, including healthcare (cost, demand for healthcare services), education, housing and other resource allocation decisions. The extent to which these shifts strain a system can influence perceptions around the acceptance of new migrants. Countries experiencing migration crises may be subject to extremist trends and political backlash that can erode social cohesion (International IDEA, 2017).

In turn, these factors can influence national identities. It is important to note that concepts of cultural and national identities as signals of togetherness or cohesion may be constructed over time to be more or less inclusive of certain groups (UNDP, 2020). Homogenous but cohesive groups can, in fact, be very exclusive, rejecting ideas from the outside, and appealing to ethnic, religious or racial solidarity in an exclusionary way. Political elites may mobilise around such divisive identity themes for political power, scapegoating immigrants and framing ethnic minorities as a threat (in terms of physical safety, job security, and/or threat to culture and values). This may increase ‘cohesion’ of the existing majority but is likely to decrease the cohesion and resilience of the society as a whole.

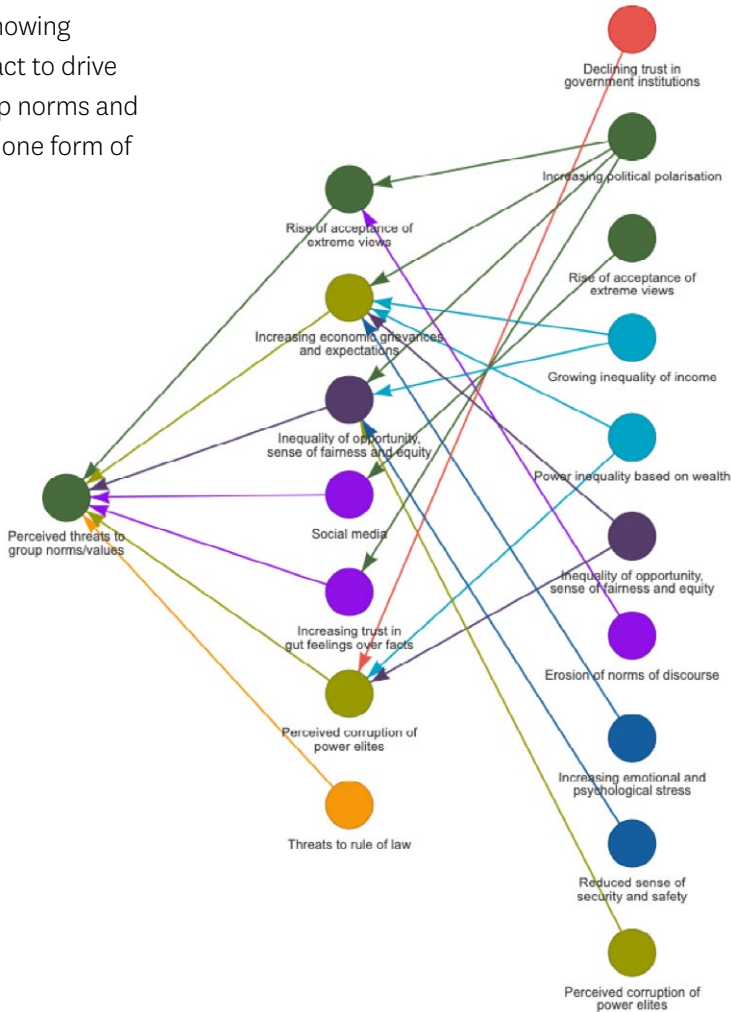
Indeed, there is evidence that some individuals in more ethnically-diverse communities are more likely to report perceive-threat and prejudice. Individuals who report more perceived-threat and prejudice also report lower local cohesion (Van der Meer and Tolsma, 2014). However, this will inevitably vary by context and by groups within a population, and is likely to depend on the nature of the perceived threat(s). Indeed, a threat does not necessarily arise from perceived differences (for example, the presence of different ethnic groups), and in many cases, it might be more about social and economic precariousness (see Factor 6).

The mapping and weighting of interactions may help identify the processes that cultivate perceived threats in a society (Figure 2). Some factors will be mediators of effects, some will be modulators, and some will have a direct influence. This will require further analysis.

### **Factor 4 – Postcolonial, intergenerational history and indigeneity**

The imperialism of the 18th–20th centuries was replaced in the late 20th century by decolonisation. This transition, however, left a number of grievances and societal tensions. In countries such as Australia, New Zealand and Canada, this is most obvious in the relationship between indigenous peoples and the descendants of European settlers and later migrants. This has become a dominant societal and political tension. In countries such as Jamaica, the UK and the USA, the same issues are reflected in anger over slavery. In Europe, the issues of recent migration from non-European nations are in part a reflection of similar tensions over ‘indigeneity’.

Figure 2. Network map showing how various factors interact to drive perceived threats to group norms and values, as extracted from one form of the visualisation tool.



**Factor 5 – Economic inequality**

This cluster revolves around inequality of wealth and income, resulting in perceptions of power imbalances. Such inequalities stir socioeconomic divisions and grievances based on unmet economic and quality-of-life expectations.

Economic inequality is distinct from poverty – it relates to the unequal flows of money and stocks of wealth. This cluster highlights the effects of the dramatic relative increase in income earned by the rich, and their net assets, compared to incomes and assets of most others (measured by GINI coefficient). It also includes inequality of opportunity, and its perpetuation and accentuation, based on demographic factors such as family, gender, age, etc. Inequality of opportunity relates to the ability to access quality education and/or meaningful employment, and therefore the opportunity for upward mobility (Fine et al., 2019). Often the issue is linked to perceptions of fairness of resource distribution rather than to absolute or relative levels of resource (Dewar et al., 2017).

This cluster of factors encompasses both income inequality and wealth inequality, as well as equality of treatment (lack of discrimination or bias). Overt wealth inequality has risen significantly in recent times, both in developing and advanced economies. The central placing of this cluster suggests that more equal societies may be more resilient than less equal ones – that there are costs to society to living with high inequality, including effects on societal cohesion. As economies develop, the failure to distribute the gains equitably is a divisive factor that fuels resentment and distrust (UNDP, 2020). Yet however



important this cluster of factors may be, a recent (but pre-COVID-19) analysis by the McKinsey Global Institute reported that:

*“Citizens’ beliefs are not correlated with specific economic outcomes across G-7 countries. It is not the case that citizens in the most equal or unequal economies, or those with the highest or lowest levels of growth and employment, are the most or least satisfied. This suggests that citizen discontent is influenced by a range of economic and noneconomic factors.” (Fine et al., 2019)*

This observation aligns with the findings of the study by the Joint Research Centre of the European Commission (JRC) on fairness in European countries, which suggested that it is one’s individual circumstances relative to others, rather than absolute income, that influences attitudes (Dewar et al., 2017). Both are consistent with our global systems map, but need to be explored in different local contexts and across a range of identities and groups within society, rather than simply looking at the country level. For example, the issue of social mobility – the perceived opportunities for movement between different social classes or occupational groups, and advantages or disadvantages that go with this (in terms of income, employment security, opportunities for advancement etc) – is often highlighted in indices of social cohesion (e.g. (OECD, 2012; UN ECLAC, 2007)). However, this may feature in some contexts and societal components more strongly than others.

Figure 3 shows the network map of factors affecting perceptions of economic inequality and economic grievance. Figure 4 shows a representation of the primary influences, drawn from the same analysis.

Figure 3. Network map of factors influencing economic grievance. The influence of a factor on another factor is shown if the influence is at least 'high'. The thicker lines represent relationships where the influence is at least very high.

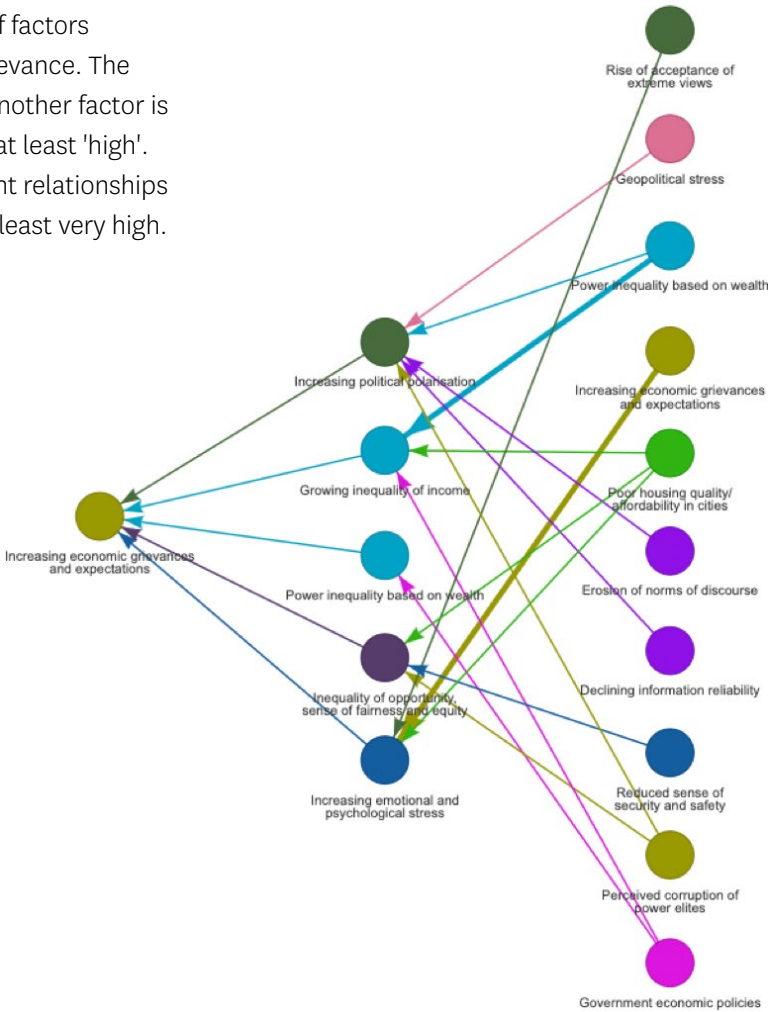
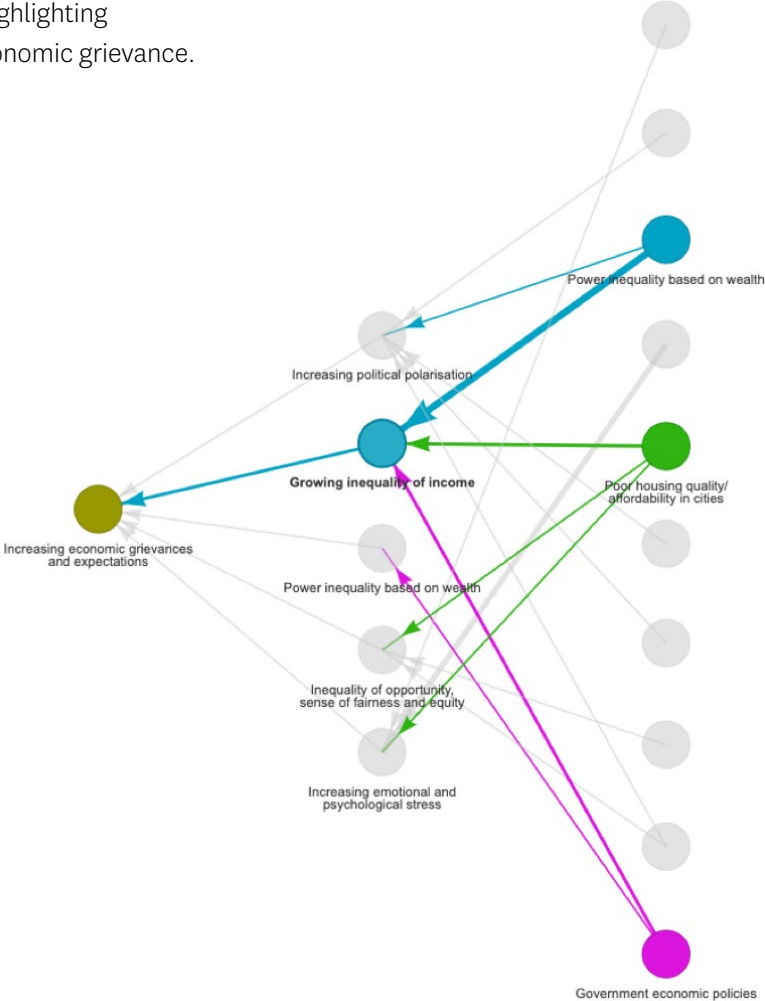


Figure 4. Network map highlighting primary influences on economic grievance.



**Factor 6 – Personal economic security and stability**

This cluster encompasses aspects of individual circumstances and perspectives on economic security and stability. It specifically includes job security (or insecurity) due to changing labour markets, and the precariousness of work due to increasing rates of casualisation and automation. It also includes issues of housing quality and affordability in cities, noting that jobs are centred in cities but liveability is declining.

**Factor 7 – Economic policies**

The cluster comprises government policies with economic impacts. It includes taxation, redistribution and macro issues of wealth change within and between generations – all of which influence a wide range of factors that ultimately impact cohesion and societal resilience. The network map of these factors highlights feedback loops – for example, where government economic policies have impacts on labour market and job insecurity, which feed back to influence economic policies (Figure 5).



Figure 5. Network map of influences of government economic policies.



**Theme 3: Information and control**

This theme encompasses factors relating to perceptions of power and control and where this lies, as well as reliability of information flows and effects on public discourse, and their further impacts on trust.

**Factor 8 – Non-governmental influences on trust**

This cluster relates to the power and influence of non-governmental actors, including non-elected elites, institutions and companies or entities, and conversely the extent to which ordinary citizens feel their voice is heard. These dynamics affect both vertical and horizontal vectors of trust within a society. This includes, for example, the influence of wealthy political donors or lobbyists, and the influence of big tech companies that control data. Perceptions of power of unelected technocratic authorities may undermine trust in knowledge institutions and governments, and lead to suspicion of knowledge elites, and scepticism about scientific and other experts. The malevolent role of foreign and mal-information actors is included. There is an inverse relationship between vertical trust in a society and conspiracy theories that can then be fueled by misinformation and thus fuel further distrust (Freeman et al., 2020) including undermining vaccinations (Sturgis et al., 2021).

**Factor 9 – Information and public discourse**

This cluster centres around the impact of social media, including declining information reliability, information targeting and bias reinforcement, and generally destabilised information environments,

resulting in difficulty identifying reliable information. This is related to an increasing trust in gut feelings over facts (belief bias), the emergence of conspiracy belief, and an erosion of norms of discourse with the emergence of anonymity online and ad hominem in electronic discourse. A further sub-factor relates to influences on personal and group identity (e.g. narcissism, sense of opportunity, unrealistic expectations, changes in expectations of transparency and accountability).

The state and perception of information reliability have important flow-on effects on key elements of societal cohesion, including polarisation and trust in democracy (see Figure 6).

Figure 6. Network map of influences of declining information reliability on other critical factors.



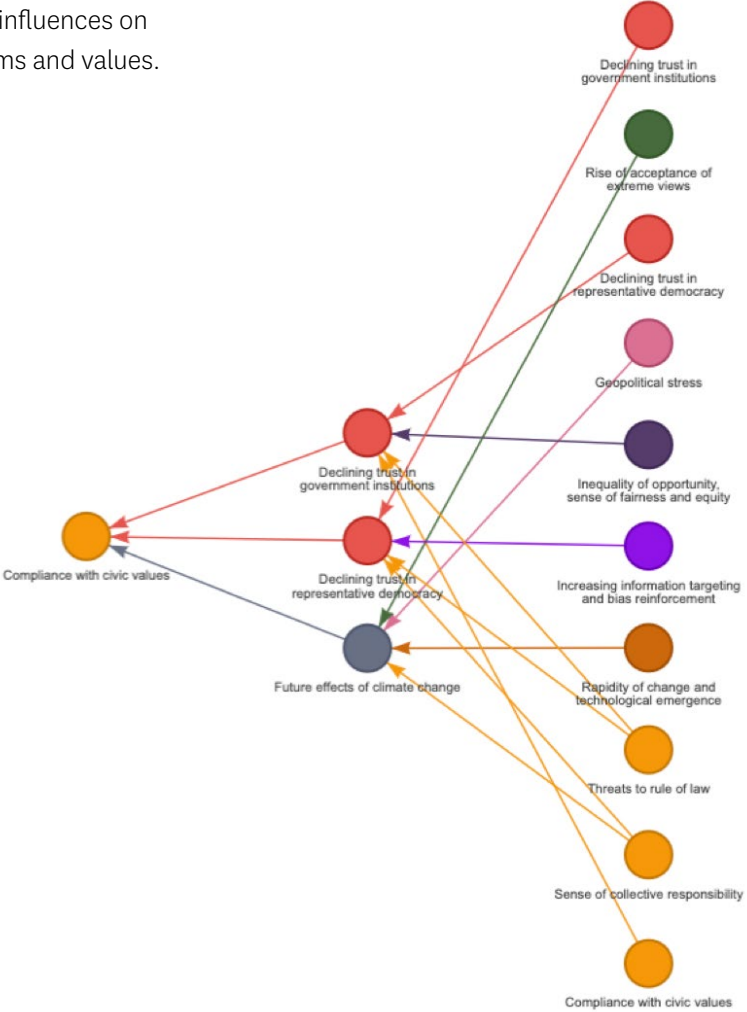
**Theme 4: Boundaries, norms and stresses**

This theme encompasses factors relating to social boundaries and societal norms, as well as psychological states and stresses.

**Factor 10 – Social boundaries and norms**

This factor cluster relates to whether or not a community shares a sense of collective responsibility, underpinned by compliance with civic values, respect for norms of behaviour, and a willingness to acknowledge and action shared values. It is influenced by threats to the rule of law, and the ability of society to uphold established laws that are deemed fair and just, mediated by declining trust in institutions (Figure 7).

Figure 7. Network map of influences on compliance with civic norms and values.



Perceptions of preferred social norms can influence the formation of new social group structures and fuel changed group identity (factor 4). Self-selecting online communities and their world views concentrate these identities, often in problematic ways.

**Factor 11 – Psychological states and stresses**

Perceptions of security/insecurity of having essential human needs met, such as food and housing, livelihoods, personal security and freedom from violence and crime, can influence emotional and psychological stress (see also factor 6). Societal and personal strains experienced as a result of modern lifestyles and work patterns also contribute, as do mental health status affecting the ability to adapt and recover from adversity. Mental health status is a particular concern for youth (WHO, 2008), and this is known to be getting worse (Menzies, et al. 2020).

An individual’s sense of personal security and safety may including real or perceived criminality or threats. This is often influenced by an increased awareness of conflict via social or other media, which itself tends to be biased or filtered. Fear can be driven by political and other actors, as fed through various media.

**Theme 5: Power relationships, trust and ideologies**

This theme encompasses factors relating to trust in government institutions, perceived corruption of power elites, influences (or lack) of community support institutions on a sense of inclusion and community, and the development of polarisation and normalisation of extreme views as shown in Figure 6.

## **Factor 12 – Trust in institutions of government**

This factor set relates to trust in representative democracy, or indeed, mistrust that democratic/ electoral processes are fair, leading to declining public trust in government accountability and integrity. It includes trust in political, economic or social leaders, institutions, and processes such as elections, access to justice, taxation, budgeting, and the delivery of public services. Social trust is linked to (real or perceived) levels of corruption in the state apparatus (Larsen, 2014).

*“Governments, parliaments and political parties are increasingly viewed by their electorates as unable to cope with complex policy problems. Many see a crisis of legitimacy in democratic institutions and processes, coupled with a creeping erosion of public trust, which exposes democracies as fragile and vulnerable.” – The Global State of Democracy (International IDEA, 2017)*

A perceived lack of voice in the process leads to mistrust in government institutions’ ability to meet individual and community needs. This leads to low voter turnout and poor political participation because of a perception that an individual’s vote does not elicit responsiveness from elected officials (Gest 2020).

Trust in governments appears to be waning around the world. McKinsey’s 2019 study on inequality found that almost half of voters surveyed feel disconnected from democratic processes and believe their vote does not matter (Fine et al., 2019). Decreased trust makes governing more difficult, just as polarisation (factor 15) can reduce the acceptance of political compromise and the ability to have constructive deliberation over issues.

## **Factor 13 – Perceptions of powerlessness**

Many individuals feel that society is unfair to them and that the system does not work for them. This is typically associated with a feeling of disempowerment to effect change in their situation. This cluster overlaps with other clusters but reflects economic grievances, and expectations of economic and job prospects not being met. The grievances become projected on to a perception of corruption and arrogance on the part of power elites.

## **Factor 14 – Inclusion and community**

This factor-set hinges on the strength of institutions of communal support, such as community social groups, sports clubs, and religious groups. These subfactors influence general perceptions of fairness and equity with regard to group identity, and in this way the cluster intersects with factors in Theme 2. Tensions arising from lack of support may manifest in blame and stereotyping of minorities and a trend towards populism and exclusion of those perceived as the ‘other’. The interactive influences of strong community groups on societal resilience are highlighted in Figure 8.

## **Factor 15 – Polarisation and extremism**

Political polarisation acts both as a factor in undermining societal resilience and as an outcome of it. It can be defined by the increasingly entrenched divisions between different political world views, allowing little room for compromise. Polarisation may arise from normalisation of extreme views, or a shift of mainstream views (changes to what is considered 'normal'), potentially including radicalisation. This would include support for authoritarianism in contexts where there is a desire for order and hierarchy or strong political leadership. This may stem from perceived threats to group norms or values (factor 10) from actions undertaken to address minority or gender rights, etc (also known as cultural backlash). This can stimulate the expression of authoritarian predispositions/inclinations.

Figure 8. Network diagram highlighted the linkages from strength of community groups' to societal resilience.



## DEEP DIVE: TOWARDS A CONTEXTUAL UNDERSTANDING

As an overall caveat, the analysis to date is based on generalised opinions and input from global experts and thus cannot be used or interpreted in a specific context. Rather than make sweeping generalisations, it is important to understand any society in a granular context and assess how different sections of society perceive the factors that are important to maintain, or may undermine social cohesion. Broadly based trust and values surveys may allow some overall statement. Still, they do not drill down to find the actual factors that may actually be addressable by looking at how different identities/groups within society think about cohesion and resilience.

The next step will be to use the approach and toolkit we have developed and apply them through a standardised process across different subgroups and sectors within a selected society as a case study. While we will initially use focus groups to ensure understanding, the members will then have the chance to work with the survey tool and software online. They will be asked to rank the 15 clusters (and add if they see something missing). They will then be asked to identify important interactions, from which a specific system map will be produced. Focus groups will then be asked to use this information to suggest how best to intervene to enhance cohesion.

## A possible case study

We suggest that New Zealand presents an excellent case study. New Zealand is generally considered a relatively cohesive society. In the most recent output of the World Values Survey (2014; data collected between 2011 and 2014) it was one of the most trusting societies in terms of horizontal trust – and trust actually grew in the vertical direction during the COVID-19 pandemic. New Zealand was also unique in that it was one of only a few countries where the young generation had more trust than the older generations over the years surveyed. COVID-19 disruptions may have changed these attitudes, particularly among youth from disadvantaged communities, who may have seen their situations worsen and their safety nets further fray.

Despite being relatively cohesive, New Zealand society faces the same global challenges as other countries (climate change, demographic change, technological change). It also faces local challenges, with increasing tensions stemming from its colonial history, its inconsistent recognition of its founding partnership between colonisers and those colonised (as reflected in a Treaty of Waitangi), and the intergenerational disadvantage that Māori communities continue to face. External migration has been proportionately very large in recent years, creating multiple social and economic pressures. As a result, we anticipate very different perceptions of what is important to different segments of New Zealand society.

New Zealand's largest city, Auckland, is super-diverse and substantially different in character compared to the rest of the country. Auckland is home to 1.65 million people and is considered one of the most cosmopolitan and ethnically diverse in the world. Its ethnic mix is about 50 percent European, 16 percent East Asian, 15 percent South Asian (both largely very recent migrations), 16 percent Pacific peoples, and 12 percent indigenous Maori. Social cohesion is considered to be high, but policy risk analyses highlight risk to its maintenance. Socioeconomic inequality has grown.

We are currently planning a pilot in Auckland using 10-15 subgroups (identifying differently by characteristics of age, ethnicity, culture, socioeconomics, gender, etc) to test the model. We have a number of specific hypotheses to test and we will choose the initial subgroups based on these. We believe we will identify social understandings that have previously not been considered. For example, we have two groups of Asian migrants that make up substantive parts of our population – those that have been here for three or more generations, and those who have recently arrived. They are likely to have different views on how they fit in New Zealand society, yet policies currently view them the same. There are many other questions asked in this study related to age, ethnicity, and socioeconomic and environmental priorities.

Beyond the process and toolkit design described above, we have developed an additional specialised systems mapping toolkit<sup>2</sup> to allow lay participants to fully engage with understanding the complexities of societal resilience and cohesion. Our approach will be to use this combination of tools in facilitated conversations with specifically selected population subgroups (representing different identities and combinations thereof) to show how the 15 clusters interact. We will then ask the participants to individually rank or Q-sort the 15 factors and seek where the commonalities and differences of priority lie. Alongside the systems analysis, this will allow policymakers and other actors to consider specific global or specific interventions to enhance resilience.

A flowchart of the proposed case-study interrogation process is shown in Figure 9.

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2 Developed through a partnership with Cognitive Performance Labs using Ako Maps<sup>®</sup> software (<https://akomaps.com/about/>).

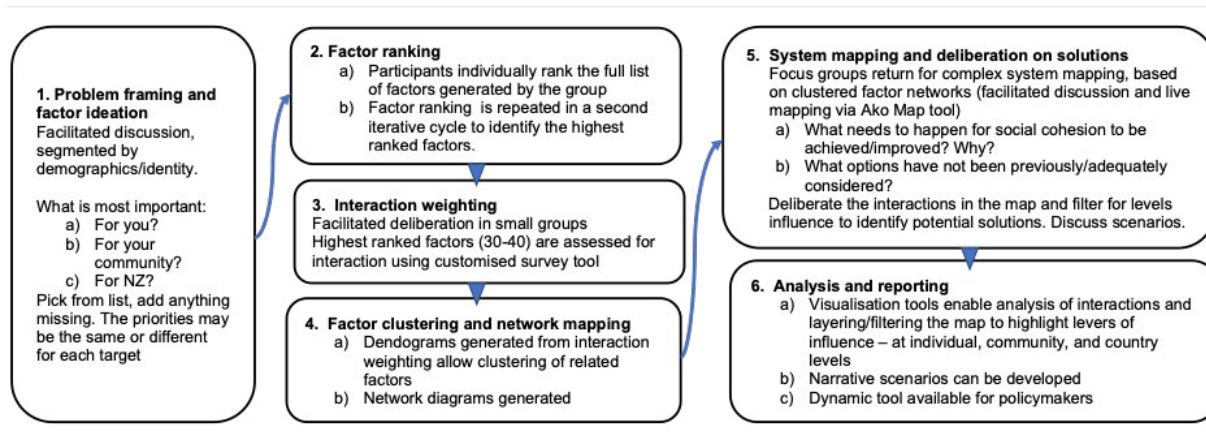


Figure 9. Process flow for case study deliberation and system mapping.

## CONCLUSION

Societies around the world are currently experiencing a number of disorienting shifts that are so discontinuous with their history that the strains on individuals, families, communities, institutions and governments are manifesting in a profound disequilibrium at many levels of societal interaction. How do societies remain resilient in the face of this changing reality; this ‘perfect storm’ of parallel transformations and transitions?

The problems facing societies are “collective action problems”. They cannot be resolved by individuals acting alone but rather require cooperation, which is founded on trust and societal cohesion. Societal cohesion, and therefore resilience, does not require unanimity of voice. In fact, a willingness to challenge ideas, and an openness to different views is important, as it enables continuous improvement, adaptability, and self-correction in the system. Vertical trust and cohesion is maintained by institutional checks on those who govern, by those who are governed. Horizontal trust among citizens requires an understanding of other viewpoints, even if there is disagreement.

Every society will experience the changes in different ways, as will different sectors of society, depending greatly on how they identify themselves in relation to others in society, including those in power. We have developed an approach to identifying key factors and interactions in the complex system as it relates to societal cohesion and resilience. It can be applied to different contexts and combined with a deliberative systems mapping approach to support a broader understanding of the issues and identify where action can be taken to enhance cohesion and resilience.



## REFERENCES

- Chan, J., To, H.-P., Chan, E., 2006. Reconsidering Social Cohesion: Developing a Definition and Analytical Framework for Empirical Research. *Soc. Indic. Res.* 75, 273–302.
- Davies, W. 2018. *Nervous States: How Feeling Took Over the World*.
- Dewar, M., Celikel Esser, F., Benczur, P., et al, 2017. What makes a fair society? Insights and evidence. JRC.
- Fine, D., Manyika, J., Sjatil, P.E., Tacke, T., Tadjeddine, K., Desmond, M., 2019. Inequality: A persisting challenge and its implications. McKinsey Global Institute.
- Fonseca, X., Lukosch, S., Brazier, F., 2018. Social cohesion revisited: a new definition and how to characterize it. *Innov. Eur. J. Soc. Sci. Res.* <https://doi.org/10.1080/13511610.2018.1497480>
- Freeman, D., Waite, F., Rosebrock, L., Petit, A., Causier, C., East, A., Jenner, L., Teale, A.L., Carr, L., Mulhall, S., Bold, E., Lambe, S., 2020. Coronavirus conspiracy beliefs, mistrust, and compliance with government guidelines in England. *Psychol Med* 1–13. <https://doi.org/10.1017/S0033291720001890>
- International IDEA, 2017. *The Global State of Democracy: Exploring Democracy’s Resilience*. International IDEA, Stockholm.
- Jenson, J., 1998. Mapping social cohesion: The state of Canadian research. CPRN Study F03. Ottawa.
- Jewett, R.L., Mah, S.M., Howell, N., Larsen, M.M., 2021. Social Cohesion and Community Resilience During COVID-19 and Pandemics: A Rapid Scoping Review to Inform the United Nations Research Roadmap for COVID-19 Recovery. *Int. J. Health Serv.* 51, 325–336. <https://doi.org/10.1177/0020731421997092journals.sagepub.com/home/joh>
- Jones, R., Fukawa, K., 2015. Achieving Fiscal Consolidation while Promoting Social Cohesion in Japan. OECD.
- Jones, R.S., Urasawa, S., 2012. Promoting Social Cohesion in Korea. <https://doi.org/doi:https://doi.org/10.1787/5k97gkdfjqf3-en>
- Larsen, A., 2014. Social cohesion: Definition, measurement and developments. Institut for Statskundskab, Aalborg Universitet.
- Laurence, J., Schmid, K., Hewstone, M., 2019. Ethnic diversity, ethnic threat, and social cohesion: (re)-evaluating the role of perceived out-group threat and prejudice in the relationship between community ethnic diversity and intra-community cohesion. *J. Ethn. Migr. Stud.* 45, 395–418.
- Menzies, R., Gluckman, S.P., Poulton, R., 2020. Youth Mental Health in Aotearoa New Zealand: More Urgency Required. *Koi Tu: The Centre for Informed Futures*.
- Morris, A.B., McDaid, M., Potter, H., 2011. Promoting community cohesion in England. *Sch. Leadersh. Manag.* 31, 281–296.
- OECD, 2012. *Perspectives on Global Development 2012: Social Cohesion in a Shifting World*.
- Owens, R., 2021. Visualising Societal Resilience.
- Schiefer, D., van der Noll, J., 2017. The Essentials of Social Cohesion: A Literature Review. *Soc Indic Res* 132, 579–603.
- Spoonley, P., Peace, R., Butcher, A., O’Neill, D., 2005. Social cohesion: A policy and indicator framework for assessing immigrant and host outcomes. *Soc. Policy J. NZ* 24, 85–110.
- Stanley, D., 2003. What Do We Know about Social Cohesion: The Research Perspective of the Government’s Social Cohesion Research Network. *Can. J. Sociol.* 5–17.
- Sturgis, P., Brunton-Smith, I., Jackson, J., 2021. Trust in science, social consensus and vaccine confidence. *Nat. Hum. Behav.* 1–7. <https://doi.org/10.1038/s41562-021-01115-7>
- Toktomushev, K., 2017. Promoting Social Cohesion and Conflict Mitigation: Understanding Conflict in the Cross-Border Areas of Kyrgyzstan and Tajikistan. University of Central Asia – Institute of Public Policy and Administration (IPPA) Working Paper No. 40.
- Townshend, I., Awosonga, O., Kulig, J., Fan, H.Y., 2015. Social cohesion and resilience across communities that have experienced a disaster. *Nat. Hazards* 75, 913–938.
- UN ECLAC, 2007. *A system of indicators for monitoring social cohesion in Latin America*. United Nations.
- UNDP, 2020. *Strengthening social cohesion: Conceptual framing and programming implications*. United Nations Development Programme.



- Van der Meer T, Tolsma, J., 2014. Ethnic diversity and Its effects on social cohesion. *Annu Rev Sociol* 40, 459–78.
- Vergolini, L., 2011. Social cohesion in Europe: How do the different dimensions of inequality affect social cohesion? *Int. J. Comp. Sociol.* 52, 197–214. <https://doi.org/10.1177/0020715211405421>
- Wallach, W., 2015. *A Dangerous Master: How to Keep Technology from Slipping Beyond Our Control*. Basic Books.
- WHO, 2008. *Social cohesion for mental well-being among adolescents*. WHO Regional Office for Europe, Copenhagen.
- World Values Survey, 2014. *WVS Wave 6 (2010-2014)*.



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