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Social cohesion

In-depth review of the "social cohesion" concept

Prepared by Statistics Canada

Summary

This document has been prepared to provide basis for the in-depth review on social cohesion by the Bureau of the Conference of European Statisticians (CES). It identifies definitions and concepts related to social cohesion, specifically for the purposes of national statistical offices, and covers ongoing debates on defining social cohesion and its multi-dimensional nature. The document concludes that national statistical offices can benefit from approaches that satisfy their specific context and should avoid an overly encompassing definition of social cohesion that can undermine its analytical value. The review provides implications for the operationalisation of the concept by national statistical organisations and outlines a number of methodological priorities.

The current document is a shortened version of the paper for translation purposes.

As an outcome of the review in February 2023, the Bureau supported establishing a task team to collect information on how the concept of social cohesion is measured in different countries and to identify good practices. Canada will lead the task team.

The Conference is invited to endorse the outcome of the in-depth review, discuss the issues, challenges, conclusions and recommendations identified in the paper, and provide further input to the work of the new task team.

I. The discussion by the Conference of European Statisticians Bureau in February 2023

1. The Bureau of the Conference of European Statisticians (CES) regularly reviews selected statistical areas in depth to improve coordination of statistical activities in the UNECE region, identify gaps or duplication of work, and address emerging issues. The current paper provides the basis for the review by summarising the international statistical activities in the selected area, identifying issues and problems, and making recommendations on follow-up actions.

2. The CES Bureau made an in-depth review of social cohesion based on this paper in February 2023. The following comments were made:

(a) The paper is of high quality and very helpful in opening up the complex topic from the measurement perspective;

(b) Creation of a new universal conceptual framework for social cohesion should not be attempted. Instead, any further work should accept the richness of different cultural contexts that determine it, and establish certain anchor points or key elements;

(c) Surveys measure different aspects of social cohesion. There is no need for a separate social cohesion survey but we should rather link the data already available in the different surveys. This would not require any new data collection and would facilitate a coherent dissemination of results;

(d) Society is increasingly interested in the situation of specific population groups such as young people or migrants. An overall picture on social cohesion that could further provide statistical insights into such groups would be desirable;

(e) Further work would be needed on the operationalisation of the concept of social cohesion and on multidimensional measurement techniques.

3. In conclusion, the CES Bureau supported establishing a task team to collect information on how the concept of social cohesion is measured in different countries and to identify good practices. Canada will lead the task team.

II. Introduction

4. The concept of social cohesion broadly refers to social bonds or the ‘glue’ that connects societal members. Societies with higher levels of social cohesion are documented as generally being healthier, more resilient to external shocks and crises, and experiencing higher economic growth (OECD, 2011).

5. Reduced social cohesion can be characterised by diminished sense of belonging, increasing inequality of opportunity, declining trust in institutions, weakened social ties and numerous other economic, social, and political phenomena. These examples of phenomena leading to weakened cohesiveness are not new. The Covid-19 pandemic has highlighted rapid shifts in social dynamics and divisions, such as the reduction in social contacts during lockdowns and opposition to public health measures. Given the role social cohesion plays in holding societal members together, the concept has the potential to be an important tool for studying emerging trends.

6. While social cohesion is not a new concept and has been the subject of several past reviews by other international organisations, this review focuses more narrowly on its implications with regards to NSOs, including data collection and analysis. Given that past reviews have largely been issue or context specific, this review complements prior efforts by synthesising findings that can be applied across a broad range of contexts and emerging issues. The concept of social cohesion has previously been used to study topics such as globalisation, ethnic and group fractionalisation, inequality and barriers to social mobility, and numerous other issues.

III. Defining social cohesion

A. A quick overview of social cohesion as a concept

7. Social cohesion broadly refers to the strength of bonds or social distance between societal members. The concept of social cohesion has evolved since early sociological and psychological scholarship on the topic. The concept can be traced back to Émile Durkheim, one of the architects of modern sociology (Pahl, 1991), who defined social cohesion as the interdependence or solidarity between individuals with strong social bonds and without social conflict (Fonseca, Lukosch and Brazier, 2019). Building on these concepts in the 1950s, Talcott Parsons "argued for a functionalist approach, which could treat society as a system, composed of interdependent subsystems, held together by shared values reproduced by socialisation" (Jenson, 1998). Lott and Lott (1961) later defined social cohesion as reciprocal positive attitudes among individuals of a group. In the field of psychology, Sigmund Freud defined social cohesion as the phenomenon of individuals sharing common characteristics forming emotional ties (Fonseca, Lukosch and Brazier, 2019). Allport (1954) later theorised that common characteristics were not only unnecessary, but that intergroup contact could foster cohesion. His contact hypothesis posited that intergroup contact, under conditions such as equal status and common goals, reduces prejudice and fosters cooperation. The notion that social cohesion is not dependent on homogeneity across individuals is echoed in the current understanding of cohesiveness, which emphasises homogeneity in values, socio-economic opportunities, sense of belonging, social mobility, and social capital over homogeneity of individual characteristics.

8. More recent policy research has been highly influential in its attempts to explicitly define social cohesion (Chan, To and Chan, 2006), with a specific focus on socio-economic disparities and social exclusion. For example, the Council of Europe's (2008) approach to social cohesion emphasises a society's ability to ensure individuals' well-being, to minimise disparities and to avoid marginalisation. The Council of Europe's definition informs the European Committee for Social Cohesion's attention to the eradication of poverty, reduction of inequalities, and, more broadly, the promotion of social inclusion.

9. Overall, a plurality of definitions and applications of the concept of social cohesion have been advanced by international organisations, national governments and academic researchers. A selective sample of definitions is provided in Table 1 below.

10. The concept of social cohesion should be distinguished from similar concepts, such as social inclusion (UNECE, 2022) and social capital (Scrivens and Smith, 2013), which are also complex and multi-faceted. However, this differentiation is complicated by conceptual overlaps, empirical inter-relationships between concepts, and the lack of consensus in defining each concept (Scrivens and Smith, 2013; UNECE, 2022). That said, social cohesion focuses more specifically on the strength of the bonds between societal members relative to the other concepts.

Table 1
Select definitions of social cohesion

Definitions	Source
Social cohesion is a broad concept, covering several dimensions at once: sense of belonging and active participation, trust, inequality, exclusion and mobility.	OECD (2011)
Cohesion may evolve in primarily historical-cultural terms; that is, norms of trust and belonging have evolved together over time through symbolic politics and patterns of long-term state and nation formation. Alternatively, cohesion may evolve more rationally or functionally. In this analysis, social cohesion arises from networks of interactions, such as economic exchanges and interdependencies. Thus, trust and tolerance may arise from mutually beneficial economic exchanges and practical, everyday interactions.	UNDP (2020)
The connections and relations between societal units such as individuals, groups (and) associations' […]; it is the 'glue' that holds communities together. Cohesiveness is created from connections based on a shared sense of belonging and attachment, similar values, trust and a sense of 'social solidarity'.	Australian Institute of Health and Welfare (2005)
The ability of a society to ensure the welfare of all its members, minimising disparities, and avoiding polarisation.	Council of Europe (2005)
Social cohesion is based on the willingness of individuals to cooperate and work together at all levels of society to achieve collective goals.	Department of Canadian Heritage (Jeannotte et al., 2002)
Social cohesion involves building shared values and communities of interpretation, reducing disparities in wealth and income, and generally enabling people to have a sense that they are engaged in a common enterprise, facing shared challenges, and that they are members of the same community.	Canadian Policy Research Networks (Maxwell, 1996)
State of affairs concerning both the vertical and horizontal interactions 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, To and Chan (2006)
Social cohesion basically refers to the presence of structural and attitudinal mechanisms of solidarity, cooperation and exchange between citizens in a society. These constituting networks can be either material or structural (exchange of goods, economic interactions) or immaterial (informal relations, shared identities).	Botterman, Hooghe and Reeskens (2012)

B. A multi-dimensional concept

11. Social cohesion has been of increased policy and academic interest since mid-1990s. This work is more 'pluralistic' than earlier scholarship, with social cohesion defined across multiple dimensions. As a latent concept not directly observable or measurable, social cohesion is measured using key dimensions of interest. In this context, a dimension refers to a constituent part of social cohesion.

12. Discussions over the constituent dimensions of social cohesion are ongoing and different dimensions are used in literature. Jenson (1998) outlines five dimensions that juxtapose cohesive and non-cohesive factors. These dimensions include: belonging versus isolation, inclusion versus exclusion, participation versus non-involvement, recognition versus rejection, and legitimacy versus illegitimacy. Bernard (1999) later added equality

versus inequality as a sixth dimension (Bernard, 1999). Rajulton, Ravanera and Beaujot (2007) later adapted this multi-dimensional conceptualisation into three categories: economic (inclusion and equality), political (legitimacy and participation) and social (recognition and participation). Chan et al. (2006) identified social cohesion using three dimensions: trust, sense of belonging and willingness to participate and help. Meanwhile, the OECD (2011, 2014) provides a social cohesion framework comprised of three broad dimensions: social capital, which includes trust in institutions, civic engagement, perceptions of corruption and social norms; social inclusion, which includes poverty and inequality; and social mobility, which includes the degree to which people can or believe they can change their position within society. The framework includes both objective and subjective indicators. As another example, the Ipsos Social Cohesion Index combines several metrics as they relate to social relations (trust in people, shared priorities, diversity), connectedness (identity, trust in government, fairness), and focus on the common good (helping others, respecting laws, corruption) (Ipsos, 2020). A number of forms of discrimination (e.g., ethnicity, age, religious, sexual orientation) also feature as important elements of social cohesion, either as sub-components of dimensions such as social inclusion and recognition or as dimensions of their own.

13. The concept of social cohesion has been criticised for being overly broad and all-encompassing. Such breadth facilitates wide-ranging analytical possibilities but can also diminish the guidance that the concept provides in identifying key issues and trends. Identifying threats to social cohesion is challenging in this context. If left vaguely defined, the utility of social cohesion is limited in contrast with more narrowly defined concepts that can be applied to specific issues and contexts.

14. The relationships between dimensions of social cohesion and their position within theoretical models remain contested. Friedkin (2004) described the study of social cohesion as "increasingly confused" due to difficulties in reconciling a large number of competing dimensions that "occupy different theoretical positions with respect to one another as antecedent, intervening, or outcome variables". For instance, in their literature review, Schiefer and van der Noll (2017) identify social relations, sense of belonging, orientation towards the common good, (in)equality, quality of life, and shared values as six of the most common dimensions of social cohesion in the literature, but drop the latter three dimensions because they are viewed antecedents or consequences of social cohesion as opposed to dimensions of it *per se*.

15. As noted earlier, social cohesion is a latent concept, meaning that it is not directly observable and must instead be measured via its constituent dimensions or factors. Further, these dimensions (e.g., social capital, social inclusion) are often themselves latent concepts that must be measured using multiple indicators (Scrivens and Smith, 2013; UNECE, 2022). This necessitates the development of fairly large frameworks that are comprised of multiple dimensions, each of which is comprised of constituent indicators. Within these frameworks, relationships are often interdependent. Overall, social cohesion is difficult to operationalise and measure because it is a latent construct with high-levels of endogeneity and interdependence across its component measures.

C. A multi-level concept

16. Social cohesion is a multi-level concept, meaning that the 'glue' than binds societal members can be viewed through the experiences or outcomes of individuals, groups, communities, institutions and nations. The interaction between these levels of analysis needs further consideration.

17. Determining the unit of analysis is of critical importance given differences in context and cohesiveness across levels. For example, measures of cohesiveness at a municipal versus state level, or measures for specific groups versus the broader population may differ greatly. Moreover, different jurisdictions may choose to focus on different dimensions and levels of analysis based on their regional context as discussed in the next sub-section.

18. One simple but potentially useful categorisation is a two-by-two matrix that categorises dimensions across horizontal (i.e., society-centred) and vertical (i.e., state-

centred) levels of analysis, with both split into subjective and objective components (Chan, To and Chan, 2006; UNDP, 2020). This simple conceptualisation emphasises the importance of integrating the study of various dimensions of social cohesion across different levels of analysis.

D. Context specificity

19. Contextualisation is key given the high degree of regional specificities and different components of social cohesion across countries. For example, in the United States social mobility features prominently in discussions of social cohesion (OECD, 2011), while in the Netherlands greater emphasis is placed on participation and trust (Schmeets and te Riele, 2014; UNECE, 2022). In a study of Flemish regions in Belgium, Botterman et al. (2012) conclude that there can be no single measure of social cohesion when taking multi-dimensionality into account due to contextual differences across rural and urban areas.

20. Regional differences may also be reflected in the level of data disaggregation chosen, whether it be a particular group, institution, or other unit of analysis. Several countries may require adapting dimensions to account for ethnocultural or Indigenous elements of social cohesion. For example, Indigenous people may differ greatly in terms of their views of cohesiveness and the different barriers to social cohesion. Other examples also exist across different societal and ethnic groups in an array of countries, which may impact both the level of disaggregation needed when presenting results and the metrics/dimensions chosen.

21. Context across time periods is equally important given threats to social cohesion are dynamic and occur at different points in time. For instance, a specific focus on ethnic fractionalisation, political polarisation, or other issue relating to social cohesion within public discourse typically coincides with recent socio-political or economic events.

IV. Selected frameworks across countries

22. Several national frameworks, each reflecting their specific contexts, dimensions, and units of analysis, exist. This subsection provides an overview of select frameworks that arose under a range of different circumstances and provides a glimpse into the range of issues of interest when studying the topic of social cohesion.

23. In Canada, social cohesion is an important part of the Quality of Life Framework as defined in 2020/2021 through consultations led by the Department of Finance Canada and publicly released in Budget 2021 (Government of Canada, 2021). Within the Quality of Life Framework, “social cohesion and connections” includes key indicators such as sense of belonging to the local community, having someone to count on, trust in others, volunteering, satisfaction with personal relationships, loneliness, and the accessibility of one’s environment. This framework draws from prior work on social cohesion conducted by Heritage Canada in the late 1990s and early 2000s in which social connections and belonging, cultural and national identity, political participation, and economic inclusion were key themes (Jeannotte et al., 2002). Within the Canadian context, there also tends to be a focus on Indigenous people and diversity issues as areas of shared values and the analysis of discrimination (see Technical Appendix using Statistics Canada social survey data).

24. Although not a national framework, the European Committee for Social Cohesion, with members designated by Council of Europe members, is mandated to provide analysis and recommendations and promote dialogue regarding social cohesion (Council of Europe, 2022). Like its predecessor, the European Social Cohesion Platform, the European Committee for Social Cohesion facilitates dialogue and exchange of best practices among member states on issues, such as social cohesion, poverty eradication and minimum income programs, which are relevant to the promotion of social rights (Council of Europe, 2022). In 2005, the Council of Europe developed a comprehensive methodological guide on defining and measuring social cohesion (Council of Europe, 2005). The guide provides insights and contrasts the approach to social cohesion adopted by the Council with competing alternatives. Social cohesion is defined “[…] as the ability of a society to ensure the welfare of all its members, minimising disparities, and avoiding polarisation” (Council of Europe, 2005).

25. In the **United Kingdom**, the concept of 'community cohesion' was developed by the Community Cohesion Review Team in 2001. The 'Cantle report' (Home Office, 2001) produced by this team outlined the existence of "parallel lives" across different communities, offering a critique of multiculturalism whereby large groups (namely, "White British" and "Asian" people) live separate lives with little interaction and opportunities for the development of shared values diminish. The report outlines several dimensions of community cohesion, including common values and a civic culture, social order and social control, social solidarity and reduction in wealth disparities, social networks and social capital, and place attachment and identity (Home Office, 2001). One of the key recommendations of the report was to advocate for 'contact theory', whereby exposure to different groups and increased interaction can bridge gaps between groups. Cantle (2008) suggests the concept of community cohesion "offers a new framework to break down the barriers between different communities and understand the more fundamental causes of racism and the 'fear of difference'." Several initiatives to mainstream community cohesion in the United Kingdom followed (Department for Communities and Local Government, 2009).

26. While interest in social cohesion began in **New Zealand** in the early 2000s (Spoonley et al., 2005), the March 2019 Christchurch mosque attacks prompted renewed attention to the approach. The *Royal Commission of Inquiry into the Terrorist Attack on Christchurch Masjidain on 15 March 2019* posits that "societies that are polarised around political, social, cultural, environmental, economic, ethnic or religious differences provide conditions in which radicalising ideologies develop and flourish" (Royal Commission of Inquiry, 2020). The inquiry report goes on to state that "social cohesion is desirable for many reasons, one of which is that it is critical to preventing the development of harmful radicalising ideologies and downstream violent extremism". While the report offers a narrower version of social cohesion focused on reducing extremist violence, it revolves around common cohesiveness concepts such as a sense of belonging, social inclusion, participation, recognition, and legitimacy (Royal Commission of Inquiry, 2020). New Zealand emphasises Indigenous rights in its definition of social cohesion given "the context for creating a socially cohesive society in Aotearoa New Zealand is underpinned by Te Tiriti o Waitangi, Te Ao Māori perspectives and the Māori-Crown relationship"[1].

27. In **Australia**, the Department of Home Affairs lists social cohesion as one of its main functions, which is largely built around concepts of shared values, multiculturalism, and an inclusive national identity (Department of Home Affairs, 2022). The Australian Human Rights Commission, an independent statutory organisation established by an act of the Australian Federal Parliament, provides a resource guide to building social cohesion within local communities (Australian Human Rights Commission, 2015). Within the guide, the first step includes measuring social cohesion, and recommends using a benchmark such as the Scanlon-Monash Index. The Scanlon-Monash Index is comprised of five dimensions: sense of belonging, sense of worth, social inclusion and justice, political participation, views on discrimination, immigration and traditions and optimism about the future (Markus and Dharmalingam, 2013).

V. Selected examples of threats to social cohesion

28. The concept of social cohesion continues to garner interest in public and policy circles, perhaps reflecting the intuitive appeal of the concept and the role that cohesion may play in societies' abilities to respond to challenges, function effectively, and support rewarding lives. Ongoing interest could also reflect a recognition that social cohesion is more difficult to build than to tear down. For example, during the Covid-19 pandemic, public health measures were initially met with higher levels of national unity and support for health and other 'front-line' workers. However, the rapidity, and potentially the severity, with which these divided some national populations is testament to how swiftly cohesiveness can erode. Consequently, and perhaps unsurprisingly, interest in social cohesion tends to peak when cohesiveness is perceived to be threatened.

[1] http://www.beehive.govt.nz/release/social-cohesion-programme-address-incitement-hatred-and-discrimination

29. A comprehensive review of potential threats to social cohesion is not feasible given the breadth of the concept and range of potential risk factors. Broadhead (2022) broadly categorises threats to social cohesion as economic, socio-cultural and political, recognising that many issues span all three. For example, inequality of opportunity has economic implications, but can have socio-cultural and political implications as well. And as previously established, threats to social cohesion vary across national contexts.

30. Technology and social media warrant particular attention within the context of an increasingly digital society. While social media can play an important role in connecting individuals and facilitating the exchange of communications, it can also have negative impacts on social cohesion. It impacts all three categories of threats (i.e., social, political, economic) and have a socio-political role as a source of divisiveness due to the erosion of social ties and greater visibility of extreme views. Elements such as disinformation, algorithms favouring specific content, and social media replacing traditional forms of news merit attention within the social cohesion context and can be discussed further.

31. Threats to social cohesion are a helpful way of understanding the impacts of emerging issues on the various dimensions of social cohesion. However, it should be noted that the objective of this section is not to define social cohesion (see Section III on defining social cohesion) by what it is not, but rather to highlight selected aspects of the changing contexts in which social cohesion continues to be sufficiently reproduced or not.

A. Economic perspectives

32. Macroeconomic conditions and their impacts on individuals and households are relevant when considering threats to social cohesion. The year 2022 has been characterised by high rates of inflation, rising interest rates, disruptions in energy markets and other economic challenges. Households in many countries face mounting financial pressures, although exposure to economic risks is unevenly distributed across populations.

33. Economic threats to social cohesion include forms of relative deprivation (e.g., inequality), absolute deprivation (e.g., poverty, lack of access to necessary services, lack of economic security), and low social mobility. Absolute and relative deprivation of various forms (reduced socio-economic mobility, income and wealth inequality, poverty) undermine social cohesion, especially across socio-economic groups, but also across other dimensions (e.g., ethnic groups, gender).

34. Prior UNECE (2022) work links poverty and other forms of absolute deprivation (i.e., the lack of resources needed to cover basic necessities) to diminished social cohesion through the erosion of immediate well-being and sense of inclusion as well as through diminished expectations of a better future. As with perceptions of the future, high levels of social exclusion can negatively impact perceptions of social mobility, which can widen divides between socio-economic groups. Similarly, the lack of access to housing or essential services such as healthcare can contribute to societal marginalisation that hinders cohesiveness.

35. Relative deprivation largely comes in the form of inequalities and barriers to social mobility. Unlike absolute deprivation, relative deprivation emphasises growing divisions rather than exclusion that reaches or exceeds a specific threshold. Inequalities among excluded groups and privileged groups lower the sense of togetherness (Wilkinson and Pickett, 2009) and thereby undermine social cohesion. Furthermore, these inequalities and various forms of social exclusion can have spill off effects regarding individuals' perceived social mobility, and consequently their sense of solidarity with other societal members and feelings of inclusion. A commonly studied example of relative deprivation stemming from structural transformations to society is globalisation (Stanley, 2003; OECD, 2011; Green and Janmaat, 2011; Schiefer and van der Noll, 2017). A large literature on the 'hollowing-out' of the middle class and the employment displacement consequences of globalisation suggests some elements of globalisation are disruptive to social cohesion. The lessons from this literature suggest that elevated levels of inequalities, shocks to local employment and incomes, and perceptions of lower social mobility all hamper social cohesion.

B. Socio-cultural perspectives

36. A broad range of social and cultural issues are of potential relevance to social cohesion. Household financial worries are part of a broader set of concerns and fears expressed by national populations. The following three socio-cultural issues are considered: shared values and norms, the impacts of digital change, and social anxieties.

37. Weaker national identity or a lack of shared values (within or between groups) can weaken social cohesion. Jeannotte et al. (2002) define national identity as including elements such as civic and societal culture, heritage, history, symbols and values. They argue that values "underpin everyday life" and that "[…] the notion of a core set of values is appealing in times of increased uncertainty […]" (Jeannotte et al., 2002, 18). Similarly, cultural exclusion, whereby excluded minority groups are unable to participate in the culture of a society, reduces individuals' sense of belonging and recognition – two dimensions of social cohesion (Jeannotte et al., 2002). Shared social norms and practices provide a necessary 'common ground' that promotes social ties. While demographic changes and immigration can influence shared values, norms, and national identities, "[…] competing values and differing attitudes are critical contributors to long term social sustainability" (Jeannotte et al., 2002, 28) and are integral to democratic processes. Consequently, lower levels of societal diversity, or homogeneity in values, are not the solution to fostering social cohesion.

38. The enormous and widespread impacts of digitalisation are a social issue relevant to social cohesion. The breadth of the digital transformation is immense, affecting virtually all aspects of peoples' lives. The digital transformation – the social changes associated with information and communication technologies, automation, artificial intelligence, and other digital technologies – continues to reshape the lives of individuals, communities, and societies. Earlier academic scholarship on social cohesion in the late 1990s and early 2000s was framed in terms of the degradation of social capital and social participation (Putnam, 2000; Jeannotte, 2003), with some pointing to early digitisation, namely television, as weakening social ties. Although claims of eroding social cohesion due to digitalisation are disputed, there remain questions about links between social media usage and weaker social ties. Beyond potential social implications, the role of the internet and digital technologies is also central to debates on political polarisation (refer to the next subsection).

39. Greater visibility of extreme views and limited exposure to dissenting views can contribute to a polarisation in views (Levendusky, 2013). The impacts of 'echo chambers', whereby polarised opinions are amplified or reinforced due to the greater visibility of extreme views and a lack of exposure to dissenting, are likely to vary across countries as are the impacts of partisan media (Prior, 2013).

40. Geopolitical tensions, climate change, and reductions in well-being have also been highlighted as potential threats to social cohesion. The 2022 Edelman Trust Barometer reports that 'societal fears' are prevalent in the 28 countries surveyed, with worries about job loss and climate change topping the list (Edelman, 2022). Worries about cyber-security, erosion of personal freedoms and exposure to prejudice or racism are also reported by an increasingly large share of many national populations. While rises in social anxieties and deteriorations in well-being are typically considered an outcome of deteriorating social cohesion rather than its cause, such anxieties in combination with reductions in institutional trust could amplify the erosion of social cohesion (Edelman, 2022).

C. Political perspectives

41. Political threats to social cohesion, and perhaps most specifically political polarisation, are relevant to social cohesion. Political polarisation is defined as the process whereby differences between groups are increasingly condensed into a homogeneous dimension.

42. Political polarisation is generally conceptualised at two levels: elite polarisation among leaders and mass polarisation in society more broadly. The focus here is on the latter. Political polarisation is further understood along ideological and affective dimensions. Ideological polarisation reflects divergent views on political issues, but does not encompass

people's feelings and sentiments towards 'in-group' or 'out-group' members (Owen et al., 2019). Such feelings and sentiments are captured by affective polarisation, typically framed as empathy towards 'in-group' members and antipathy, animosity or prejudice towards 'out-group' members (Iyengar and Westwood, 2015; Hobolt, Leeper and Tilley, 2021). Affective polarisation may lead to diminished communication and social interaction between groups, further entrenching the rift within society (McCoy, Rahman and Somer, 2018; Simas, Clifford and Kirkland, 2020).

43. A third type of polarisation, labelled interactional polarisation (Yarchi, Baden and Kligler-Vilenchik, 2021), refers to increasing uniformity within groups resulting from increased sorting across partisan divides and ideological consistency. The principle of homophily suggests that individuals gravitate towards networks of ideologically or attitudinally analogous people and is viewed as playing a role in polarisation (McPherson, Smith-Lovin and Cook, 2001). Partisan sorting and within-group consistency may not comprise political polarisation per se, but rather leads to intensified identification along existing party lines. It is this type of sorting that some commentators believe characterises developments in some countries (Baldassarri and Gelman, 2008; Mason, 2013; Owen et al., 2019; Besco, 2021).

44. Considering the determinants of political polarisation, explanations frequently centre on the dissatisfaction or marginalisation of groups in the population. Socioeconomic exclusion and barriers to mobility are viewed as drivers (Grechyna, 2016; Alesina et al., 2020), often articulated within the context of globalisation and issues such as immigration and international trade (Alesina et al., 2020; Rodrik, 2020). Autor et al (2020) provide evidence in the United States that higher import competition from China has led to increased polarisation linked to local labour market disruptions. Beyond economic factors, social and political factors, particularly the roles played by political leaders, are also viewed as critical.

45. Levels of trust, particularly in institutions, are relevant to political polarisation and to social cohesion more broadly. Institutions play a vital role in the functioning of societies and their public support and legitimacy are important. Declining levels of institutional trust are concerns in this context. The 2022 Edelman Trust Barometer reports low levels of institutional trust across many of the countries surveyed as well as low levels of trust in information sources and of people with opposing viewpoints (Edelman, 2022). Declining levels of trust have been observed along these and other dimensions in recent studies (Parkin, 2021; Pew Research, 2022).

46. Divergent viewpoints and political contestation are inherent parts of the democratic process. However, polarisation can be detrimental if it goes beyond 'normal' political contestation. This may involve the development of intergroup conflict dynamics that suppress or inhibit the expression of divergent viewpoints and political debate. Polarisation between groups in society may lead to a growing unwillingness to compromise and to blame political incivility on out-group members (Wolf, Strachan and Shea, 2012). Common understanding and agreement about basic facts can be eroded, further widening the distance between groups and diminishing the scope for dialogue (Alesina et al, 2020; McCoy, Rahman and Somer, 2018; McCoy and Somer, 2019).

VI. Implications for National Statistical Offices

47. As discussed throughout this review, definitions and the measurement of social cohesion continue to be debated. This reflects different conceptual approaches, different national contexts in which the concept is applied, and the broad range of potentially relevant economic, social and political phenomena. Identifying priorities for measurement and data collection on social cohesion is challenging in this context. The overlap between social cohesion and other concepts (e.g., social exclusion) and potential duplication across indicator frameworks are further considerations for NSO measurement and data collection priorities.

48. Coordination across NSOs is a further consideration. The specificity of social cohesion across space and time contributes to differences in frameworks and measures and raises the prospect that social cohesion warrants national rather than an international approach. That said, it would be a mistake to overlook common elements of social cohesion

observed across countries. Many of these elements are social phenomena such as social relationships (or social capital), trust, participation, and orientation towards the common good. Hence, international coordination may be more about indicator selection than agreement on conceptual dimensions.

49. Because social cohesion is both a multi-dimensional and latent concept, any single, cumulative measure of it will be insufficient. The relative weight placed on constituent indicators has long been a fundamental challenge to the construction of social indices. Social cohesion is no exception. One must gauge cohesiveness by appraising levels and trends across multiple dimensions and several indicators constituting each dimension. Indicator frameworks are useful for flagging emerging trends and for drawing international comparisons, but ultimately leave one uncertain about exactly how much social cohesion has changed over time. Consequently, most studies on this topic focus on specific dimensions of social cohesion rather than social cohesion overall. In this light, it may be better to position social cohesion as an approach rather than a concept.

50. NSOs are generally well-positioned to provide economic information relevant to social cohesion. Data from surveys and administrative sources provide information on employment, income, taxes and transfers, business ownership, pension coverage, and other characteristics. Such information is typically available for individuals, households, businesses, neighbourhoods, regions, and nations—that is, across the levels of analysis at which social cohesion is said to operate. Approaches to social cohesion emphasising poverty, income inequality, earnings trajectories or disruptions in local labour markets have much to draw on. That said, economic indicators alone are not enough to populate models of social cohesion or to investigate the inter-related roles of economic, socio-cultural and political factors.

51. While administrative data provide a wealth of economic indicators, they provide few socio-cultural or political indicators. Voter participation rates and survey completion rates are notable exceptions. Consequently, NSOs still rely extensively on household surveys for such information. This raises a number of implications. First, declining response rates on household surveys raise the prospect of unobserved selection bias among survey participants. This is certainly relevant to social cohesion as individuals with low levels of trust in government may be less likely to respond to NSO surveys than other individuals. This could result in the strength of social cohesion being over-estimated. Survey population weights may not be sufficient to correct this, particularly if survey non-response is driven by unobserved characteristics (e.g., societal or ideological viewpoints) rather than by observed characteristics used to construct survey weights (e.g., age, region, income). Unobserved selection bias has been observed in political polling, with several organisations estimating the under-counting of the Republican vote by polls conducted during the 2020 Presidential election in the United States (Keeter et al., 2021).

52. Social media content and other on-line data are another source of information warranting consideration. For instance, web-scraping and data metering are techniques used to collect and analyse publicly available information regarding viewpoints and sentiments relevant to social cohesion (DDP, 2020). One shortcoming of such data is that little information is available regarding the characteristics of individuals posting such content and the degree to which their views are representative of those in the broader population. More research is needed to determine the extent to which online data can be used to study aspects of social cohesion.

53. In addition to who responds to NSO surveys, how people respond to surveys has implications for the measurement of social cohesion. Survey framing effects refer to the situation whereby a respondent's answer to a question is influenced by the theme or prior content on the questionnaire. Survey mode effects refer to the situation whereby a respondent's answer to a question is influenced by how they complete the survey, for example, by completing a questionnaire online by themselves or via a telephone interview with an interviewer. Survey framing and mode effects have the potential to influence all survey responses, although their potential impact on subjective questions are of particular consideration. Individuals may be less willing to accurately report how they view or feel about a topic if they think their response could illicit a negative response from an interviewer (i.e., social desirability bias or the 'shy voter' effect) or if their line of thought has been

'primed' by the sequence of questions asked. Forthcoming Canadian evidence shows that responses to life satisfaction, trust and other questions vary significantly across survey modes and themes.

54. While measurement error is an inherent part of the survey process, it takes on particular importance in the context of indicator frameworks. Such frameworks are used to track indicator levels (or results) over time, with increases or decreases intended to signal positive or negative trends in society. Erroneous conclusions regarding these trends could result if year-over-year changes in indicator levels are confounded by selection bias, survey framing effects and/or survey mode effects. Longer durations of time between data collection on specific indicators are likely to exacerbate these challenges.

55. The political dimensions of social cohesion raise other considerations for NSOs. Most broadly, in light of declining trust in governments and public institutions in many countries, it is likely more challenging and important than ever before that NSOs maintain public confidence and support. In terms of social cohesion measurement, indicators such as ideological outlooks or opinions on policy issues may be outside the purview of NSOs. NSOs must balance their mandates of informing the public on emerging social trends and the requirement to remain apolitical. This may create a situation where NSOs must refrain from collecting some information relevant to social cohesion, such as people's views on political issues, parties or figures.

56. However, NSOs can contribute to ongoing debates while remaining apolitical. Survey questions on trust in institutions, such as governments, media, academia, and others, constitute other valuable metrics of cohesion or divisiveness. Moreover, while political behaviour beyond participation is likely outside NSOs' purview, affective (i.e., social distance between in-group and out-group members) polarisation, as opposed to ideological (i.e., political views, opinions or affiliations) polarisation, is social in nature rather than inherently political. Measures of such societal divides would contribute substantively to the study of social cohesion while remaining apolitical and impartial.

VII. Conclusion

57. Social cohesion is a multi-dimensional concept referring to social connectedness (the 'glue' that connects members of a society), solidarity and trust amongst individuals, within and across communities and organisations, and within society at large.

58. This review provided an overview of the evolution of the concept of social cohesion from its earlier interpretation of interdependence and solidarity between individuals to the introduction of measures of social inclusion/exclusion in the 1990s. While the academic literature remains largely focused on the sociological dimensions of social cohesion, the policy literature complements this approach by highlighting the role of socio-economic disparities and social mobility as key social cohesion dimensions.

59. As established in this review, the concept of social cohesion can be overly broad and all-encompassing if not adequately defined through a set of relevant dimensions and levels of analysis. Given studying social cohesion in its broadest sense is infeasible and likely impractical, social cohesion is likely more helpful to researchers as an approach to studying specific dimensions of social cohesion or specific threats to social cohesion rather than identifying an index that regroups a rigid set of indicators. Given different dimensions can point to conflicting or contradictory impacts on social cohesion, studying specific cohesiveness dimensions is preferable to the construction of an overarching index that could dilute or mask crucial differences across dimensions.

60. Operationalisation of the social cohesion concept remains difficult given cohesiveness is a latent construct (i.e., not directly observable or measurable) with high levels of endogeneity and interdependence across its component measures. However, the frameworks identified in this review provide a useful guide as to how researchers and policy analysts can study emerging issues across a range of different contexts and dimensions. Moreover, the frameworks identify commonalities in dimensions and levels of analysis across a range of issues that can be tailored to best fit contextual needs.

61. NSOs could play an important role in studying emerging threats to social cohesion. Specifically with respect to socio-cultural and political ties, existing analytical gaps stand to benefit from additional quantifiable metrics. Moreover, addressing ongoing methodological challenges concerning declining survey response rates, survey mode effects, survey design, and potential alternative data sources (e.g., social media) are priorities in the study and measure of social cohesion.

VIII. Recommendations for future work

62. Taking into consideration the conclusions of the in-depth review and the empirical (but not prescriptive) backdrop provided in the technical appendix, it is proposed that interested NSOs work in collaboration through an informal network to:

(a) Explore the operationalisation and empirical applications of the concepts outlined in this review rather than further engage in theoretical debates regarding social cohesion.

(b) Identify the dimensions of social cohesion deemed to be most relevant and informative within their national context.

(c) Share with international partners their current and proposed national survey content designed to better measure the constituent dimensions of social cohesion.

(d) Investigate how low social survey response rates, unobserved selection bias and other methodological issues impact the measurement of social cohesion at the national level and explore strategies to address these issues.

(e) Explore alternative data sources (e.g., web-scrapping of publicly available social media data) to diversify and improve measurement of social cohesion.

IX. Technical appendix

63. The in-depth review above focuses on theoretical and conceptual aspects of social cohesion. This appendix provides a complementary empirical approach, highlighting the steps and results from a factor analysis to identify and quantify dimensions (or factors) germane to social cohesion using Statistics Canada's 2020 General Social Survey (GSS) on Social Identity.

A. Using social surveys to identify dimensions of cohesiveness

64. While social cohesion may be conceptualised across many dimensions, the extent to which each of these dimensions can be operationalised using available data may be limited. Statistics Canada's 2020 GSS offers an interesting test case. The 2020 GSS was designed to:

> "[…] provide an overall picture of Canadians' identification, attachment, belonging and pride in their social and cultural environment. The key components of the survey include the following topics: social networks, civic participation and engagement, knowledge of Canadian history, appreciation of national symbols, shared values, confidence in institutions, and trust in people. In addition, the survey also covers people's possible experiences of discrimination before and during the Covid-19 pandemic."[2]

65. Although GSS was not specifically designed with the intention of measuring social cohesion, its questions offer scope to operationalise the concept across a range of dimensions. This provides a backdrop against which data gaps, measurement, interpretation and other issues can be identified and from which lessons can be learned. In this respect, the 2020 GSS offers a useful test case at the intersection of social cohesion theory and data. While the results correspond to many of the theoretical dimensions outlined in the in-depth review, they are

[2] Surveys and statistical programs - General Social Survey - Social Identity (SI) (statcan.gc.ca)

preliminary results based on exploratory research and do not provide a complete profile of social cohesion. The dimensions presented should not be construed as a prescriptive model.

B. Identifying social cohesion dimensions using factor analysis

66. The analysis of social cohesion using Statistics Canada's 2020 GSS on Social Identity began with an initial assessment of survey questions. A set of 55 variables pertaining to social cohesion was selected, including variables pertaining to confidence and pride in Canadian institutions, civic participation, social capital, shared values, sense of belonging, and exclusion.

67. An exploratory factor analysis was then conducted. Factor analysis is a statistical method which aims to describe variability among a set of correlated observable variables with a smaller number of latent (i.e., unobservable) variables called factors (i.e., dimensions of social cohesion). It does this by modelling variable responses in a dataset as a linear combination of underlying factors (plus an error term) and estimates the relationship between each variable and a set of factors using a decomposition of the covariance matrix of the dataset. Factor analysis is commonly employed to reduce the dimensionality of a dataset where variables are believed to reflect a smaller number of underlying factors which are not or cannot be observed directly.

68. A series of steps was taken to reduce that set of variables to a smaller number that would generate stable factor analysis results. In a first step, variables that had a high number of missing values were dropped. Questions about the income and education of the respondent's friends, for example, were dropped for this reason. Next, through successive iterations of exploratory factor analysis models, the Kaiser-Guttman criterion was used to determine the appropriate number of factors, and variables that had high 'uniqueness'—whereby most of the variation in a variable was not sufficiently explained by the optimal number of factors - and variables that did not 'load' on to any factor (or dimension) were excluded. This process yielded a solution where nine factors were identified, yielding results for uniqueness and loadings onto factors that met the criteria used in each iterative step. The analysis is based on 25,195 survey respondents, and the resulting covariance matrix was deemed appropriate for factor analysis based on conventional tests (Kaiser-Meyer-Olkin's Measure of Sampling Adequacy = 0.89; Bartlett's Chi-squared Test = 796,519.3 on 903 degrees of freedom).

69. Table 1A below shows the 'factor loadings' of each variable used in the analysis on each of the nine factors identified. Factor loadings quantify the magnitude of the relationship between a variable and a given factor and range from -1 to 1. A factor loading with greater magnitude (farther away from 0) indicates that the factor better predicts that variable in a lower dimensional space, and that the projection of the variable onto that factor yields smaller errors. Only factor loads of 0.30 or more are shown in Table 1, with smaller loadings suppressed. Note that the ordering of the nine factors in Table 1A is important, with Factor 1 explaining the largest proportion of the total sample variation (11.7%) and Factor 9 explaining the smallest proportion (4.7%). Overall, the nine-factor model explained 64.3% of the total variation in the data. This information is shown in the summary statistics at the bottom of Table 1A.

70. The nine factors resemble the theoretical dimensions outlined in the in-depth review (refer to Section III on defining social cohesion). For example, confidence in institutions resembles the legitimacy dimension (Jenson, 1998), whereas trust, neighbourhood ties and discrimination capture elements of social inclusion and recognition (Jenson, 1998; Jeannotte et al., 2002). Similarly, electoral participation partially captures the civic participation dimension (Jenson, 1998; Jeannotte et al., 2002), while regional and ethnocultural belonging measure a broader sense of belonging (Jenson, 1998; Jeannotte et al., 2002). Finally, the relative importance of respondent's views in contrast with their perceptions of societal views broadly captures the shared values dimension for select topics included in the 2020 GSS (Jeannotte et al., 2002).

71. Factor 1 – Confidence in Institutions – 2020 GSS variables pertaining to confidence in institutions loaded onto Factor 1. Confidence in Canada's federal parliament, justice

system and courts, schools, banks and major corporations ranged from 0.70 to 0.83. Factor loadings for confidence in the Canadian media and police were slightly lower, at around 0.65, while the factor loading on confidence in local merchants and business people was relatively low (0.45). Overall, Factor 1 most strongly reflects confidence in national and provincial institutions. Pride in diversity and in the way democracy works in Canada also loaded on to Factor 1, albeit at weak levels (0.41 and 0.46 respectively). One interpretation is that individuals who have confidence in the institutions of their nation will also express pride towards the nation. Pride in diversity and in the way democracy works in Canada also load on to Factor 3 - Sense of geographic/jurisdictional belonging (more on this below).

72. Factor 2 – Trust – Questions pertaining to trust of people with the same or different ethnicity, religion and language loaded strongly onto Factor 2, each with a factor loading above 0.90. Trust of strangers and trust of neighbours loaded onto this factor as well, but with values of 0.55 and 0.60 respectively. Further model testing did *not* yield a solution in which 'general trust' was identified as a distinct factor. Lastly, confidence in local merchants and businesses had a modest but notable factor loading on the Trust factor (0.34), suggesting that confidence and trust in local businesses overlap.

73. Factor 3 – Discrimination and unfair treatment (A) – 2020 GSS respondents answered a battery of questions pertaining to discrimination or unfair treatment on various bases that they may have experienced over the five years prior to the COVID-19 pandemic. Experiences of discrimination or unfair treatment on the basis of age, sex, physical appearance, disability, sexual identity and gender identity loaded on to Factor 3, with factor loadings generally ranging from 0.64 to 0.78. Experiences of discrimination or unfair treatment on the basis of race or colour, ethnicity or culture, language and religion loaded very weakly onto this Factor, and instead constitute a distinct Factor 6 in the model, as discussed below.

74. Factor 4 – Electoral participation - Questions pertaining to participation in the prior federal, provincial and municipal elections loaded on to Factor 4, with factor loadings all above 0.90. Respondents' intentions to vote in the next federal election also loaded on Factor 4, with a factor loading of 0.70.

75. Factor 5 – Municipal/National belonging – GSS respondents answered a battery of questions regarding their sense of belonging to various groups and communities. Sense of belonging to one's local community, municipality, province and to Canada loaded on to Factor 5. Factor loadings were stronger for variables pertaining to the local level, that is, sense of belonging to the municipality (0.88) and one's local community (0.78) than for variables pertaining to broader entitles, specifically, their province (0.74) and the nation (0.62). GSS respondents were also asked about their sense of belonging to people with the same ethnic or cultural background, the same religion and the same first language. These variables had fairly low factor loadings on Factor 5 (0.25 to 0.33), but fairly high factor loadings on Factor 8. They are thus treated as a distinct dimension, as discussed below.

76. Factor 6 – Discrimination and unfair treatment (B) – Factor 3 above captures experiences of discrimination or unfair treatment on the basis of age, sex, physical appearance and other characteristics, as noted above. Experiences of discrimination or unfair treatment on the basis of race or colour, ethnicity or culture, language and religion loaded on to Factor 6 and stand as a distinct concept. Factor loadings were higher on discrimination or unfair treatment on the basis of ethnicity or culture (0.92) and race or colour (0.80) than on the basis of language and religion (at 0.69 and 0.65 respectively). Discrimination or unfair treat on the basis of physical appearance had a lower factor loading on Factor 6 (0.34) than on Factor 3 (0.65).

Table 1A

Variable	*Factor 1 - Confidence in institutions*	*Factor 2 - Trust*	*Factor 3 - Discrimination (A)*	*Factor 4 - Electoral participation*	*Factor 5- Geographic belonging*	*Factor 6 - Discrimination (B)*	*Factor 7 - Relative issue importance*	*Factor 8 - Ethno-cultural belonging*	*Factor 9 - Neighbourhood ties*
Confidence in institutions: Police	0.656	*0.098*	*0.221*	*0.010*	*0.095*	*0.136*	*-0.140*	*0.073*	*0.128*
Confidence in institutions: Justice system and courts	0.793	*0.087*	*0.199*	*-0.057*	*0.118*	*0.003*	*-0.082*	*0.023*	*0.021*
Confidence in institutions: School system	0.739	*0.123*	*0.166*	*-0.013*	*0.136*	*0.058*	*-0.039*	*0.070*	*0.059*
Confidence in institutions: Federal parliament	0.825	*0.087*	*0.124*	*-0.070*	*0.153*	*-0.041*	*-0.013*	*0.042*	*-0.036*
Confidence in institutions: Banks	0.721	*0.076*	*0.108*	*-0.026*	*0.071*	*0.062*	*-0.133*	*0.109*	*0.063*
Confidence in institutions: Major corporations	0.697	*0.094*	*0.159*	*-0.054*	*0.075*	*0.038*	*-0.176*	*0.117*	*0.076*
Confidence in institutions: Local merchants/business people	0.452	0.333	*-0.068*	*0.048*	*0.074*	*0.146*	*0.009*	*0.072*	*0.161*
Confidence in institutions: Canadian media	0.652	*0.171*	*0.041*	*-0.005*	*0.121*	*0.075*	*0.025*	*0.030*	*0.009*
Pride: The way democracy works in Canada	0.459	*0.083*	*0.129*	*0.049*	0.350	*-0.046*	*-0.027*	*0.117*	*-0.062*
Pride: Canada’s diversity	0.414	*0.033*	*0.155*	*-0.077*	0.337	*-0.022*	*-0.210*	*0.159*	*-0.042*
Sense of belonging: Local community	*0.193*	*0.120*	*0.082*	*0.061*	0.783	*0.011*	*-0.051*	*0.215*	*0.260*
Sense of belonging: Town or city	*0.217*	*0.107*	*0.082*	*0.047*	0.875	*0.003*	*-0.045*	*0.199*	*0.152*
Sense of belonging: Province	*0.236*	*0.107*	*0.081*	*0.106*	0.749	*0.095*	*-0.066*	*0.248*	*0.100*
Sense of belonging: Canada	0.318	*0.117*	*0.051*	*0.107*	0.620	*0.034*	*-0.003*	*0.231*	*0.030*
Sense of belonging: People with same ethnic background	*0.162*	*0.048*	*0.086*	*0.000*	0.327	*-0.070*	*-0.048*	0.777	*0.070*
Sense of belonging: People with same religion	*0.176*	*-0.014*	*0.086*	*-0.030*	*0.245*	*-0.110*	*-0.127*	0.708	*0.084*
Sense of belonging: People with same first language	*0.163*	*0.017*	*0.071*	*0.012*	*0.264*	*-0.010*	*-0.049*	0.825	*0.055*
Faced discrimination: Age	*0.140*	*0.020*	0.582	*-0.104*	*0.071*	*0.257*	*-0.055*	*0.038*	*0.029*
Faced discrimination: Ethnicity	*0.070*	*0.086*	*0.215*	*0.059*	*0.004*	0.919	*-0.060*	*-0.003*	*0.094*
Faced discrimination: Race or colour	*0.093*	*0.113*	*0.232*	*0.077*	*0.020*	0.803	*-0.006*	*-0.009*	*0.085*
Faced discrimination: Religion	*0.058*	*0.069*	*0.293*	*0.000*	*0.001*	0.647	*-0.035*	*-0.127*	*-0.011*

Variable	*Factor 1 - Confidence in institutions*	*Factor 2 - Trust*	*Factor 3 - Discrimination (A)*	*Factor 4 - Electoral participation*	*Factor 5- Geographic belonging*	*Factor 6 - Discrimination (B)*	*Factor 7 - Relative issue importance*	*Factor 8 - Ethno-cultural belonging*	*Factor 9 - Neighbourhood ties*
Faced discrimination: Language	*0.026*	*0.088*	*0.182*	*0.118*	*0.039*	0.693	*-0.004*	*-0.041*	*0.081*
Faced discrimination: Physical characteristics	*0.170*	*0.056*	0.645	*-0.015*	*0.066*	0.342	*-0.098*	*0.053*	*0.080*
Faced discrimination: Sex	*0.179*	*-0.062*	0.640	*-0.092*	*0.030*	*0.148*	*-0.187*	*0.103*	*0.016*
Faced discrimination: Gender	*0.147*	*0.026*	0.784	*-0.017*	*0.050*	*0.191*	*-0.148*	*0.028*	*0.058*
Faced discrimination: Sexual orientation	*0.166*	*-0.016*	0.745	*0.037*	*0.051*	*0.092*	*-0.188*	*0.069*	*0.106*
Faced discrimination: Disability	*0.142*	*0.058*	0.637	*0.004*	*0.076*	*0.085*	*-0.063*	*0.006*	*0.039*
Trust: Strangers	*0.074*	0.543	*-0.029*	*0.069*	*0.029*	*0.110*	*0.058*	*-0.066*	*0.096*
Trust: Neighbours	*0.207*	0.592	*0.149*	*0.086*	*0.115*	*0.082*	*-0.041*	*0.051*	0.339
Social capital: Number of people you know in your neighbourhood	*0.018*	*0.117*	*0.078*	*0.136*	*0.106*	*0.055*	*-0.031*	*0.074*	0.743
Social capital: Do your neighbours help each other	*0.121*	*0.161*	*0.108*	*0.066*	*0.127*	*0.106*	*-0.018*	*0.041*	0.642
Social capital: Number of neighbours you could ask a favour from	*0.043*	*0.143*	*0.049*	*0.118*	*0.087*	*0.055*	*0.008*	*0.049*	0.815
Trust: people with different language	*0.178*	0.902	*0.011*	*0.047*	*0.089*	*0.051*	*0.054*	*0.021*	*0.074*
Trust: people with different religion	*0.182*	0.920	*0.047*	*0.041*	*0.091*	*0.046*	*0.036*	*0.059*	*0.073*
Trust: people with different ethnicity	*0.179*	0.937	*0.000*	*0.037*	*0.101*	*0.052*	*0.070*	*0.036*	*0.048*
Electoral participation: Federal election	*-0.092*	*0.057*	*-0.051*	0.938	*0.018*	*0.076*	*0.063*	*-0.021*	*0.089*
Electoral participation: Provincial election	*-0.088*	*0.044*	*-0.002*	0.972	*0.013*	*0.083*	*0.039*	*-0.011*	*0.107*
Electoral participation: Municipal election	*-0.050*	*0.034*	*-0.017*	0.910	*0.041*	*0.060*	*0.006*	*0.006*	*0.109*
Electoral participation: Will vote in next election	*0.066*	*0.125*	*-0.081*	0.703	*0.153*	*0.026*	*0.127*	*0.015*	*0.059*
Values: Difference in personal and perceived societal valuation of the importance of human rights	*-0.143*	*-0.007*	*-0.148*	*0.022*	*-0.074*	*-0.016*	0.541	*-0.020*	*0.007*
Values: Difference in personal and perceived societal valuation of the importance of gender equality	*-0.113*	*0.052*	*-0.197*	*0.094*	*-0.043*	*0.068*	0.688	*-0.050*	*0.024*

Variable	*Factor 1 - Confidence in institutions*	*Factor 2 - Trust*	*Factor 3 - Discrimination (A)*	*Factor 4 - Electoral participation*	*Factor 5- Geographic belonging*	*Factor 6 - Discrimination (B)*	*Factor 7 - Relative issue importance*	*Factor 8 - Ethno-cultural belonging*	*Factor 9 - Neighbourhood ties*
Values: Difference in personal and perceived societal valuation of the importance of ethnic and cultural diversity	*-0.037*	*0.064*	*-0.075*	*0.043*	*-0.020*	*-0.106*	0.807	*-0.049*	*-0.033*
Values: Difference in personal and perceived societal valuation of the importance of respect for Indigenous culture	*-0.096*	*0.078*	*-0.132*	*0.051*	*-0.002*	*-0.041*	0.810	*-0.063*	*-0.048*
Sum Sq Loadings	5.024	3.577	3.354	3.31	3.024	2.809	2.377	2.141	2.029
Proportion Var	0.117	0.083	0.078	0.077	0.07	0.065	0.055	0.05	0.047
Cumulative Var	0.117	0.2	0.278	0.355	0.425	0.491	0.546	0.596	0.643

77. Factor 7 – Relative issue importance – 2020 GSS respondents were asked about the extent to which they personally agree with values such as gender equality, respect for Indigenous culture, ethnic and cultural diversity, and human rights, as well as about the degree to which they think Canadians in general agree with these values. The difference between their personal views and perceived societal view was calculated, capturing the degree to which individuals felt their views were congruent or incongruent with Canadians in general. These four 'relative issue importance' variables load on to Factor 7, with factor loadings on relative importance attached to respect for Indigenous culture and for ethnic and cultural diversity both around 0.81.

78. Factor 8 – Ethno-cultural belonging – Factor 8 captures ethno-cultural belonging based on respondents' sense of belonging to people with the same ethnic or cultural background, the same religion and the same first language. Factor loadings of these questions range from 0.71 to 0.83.

79. Factor 9 – Neighbourhood ties – The ninth factor identified pertains to peoples' social ties and assessments of their neighbours and neighbourhoods. Questions regarding social contacts, helpfulness and reciprocity with neighbours load onto this factor, with factor loading ranging from 0.64 to 0.82.

80. Overall, the application of factor analysis to Statistics Canada's 2020 GSS on Social Identity illustrates one approach to the measurement of social cohesion. The approach yields nine factors that are consistent with, or applicable to, the theoretical models discussed above. These constitute a set of outcomes across which the social cohesion of population subgroups can be compared. Again, we emphasise that these dimensions are not comprehensive and are not being presented as recommendations.

81. Among the dimensions not included in the empirical results are economic inclusion (OECD, 2011), affective polarisation, and aspects of civic engagement such as volunteering (Rajulton, Ravanera and Beaujot, 2007). While this Technical Appendix does not include economic inclusion and civic engagement variables (except for electoral participation), such variables are available through other Statistics Canada surveys and administrative data sources. The same is not true of affective polarisation.

82. In the case of affective polarisation, social and political animosity can play an important role in hindering cohesiveness. As discussed in the in-depth review, this dimension can be difficult to capture in NSO surveys due to the requirements of remaining apolitical and impartial. One way forward could be to include social survey questions on feelings of antipathy or empathy towards people with different political views without necessarily delving into respondent's views or beliefs. Another approach could include feeling thermometer question gauging antipathy or empathy towards specific institutions, public officials, the media, and others. Further on questionnaire content, GSS questions about the importance that individuals place on specific values (or issues) and the importance they feel the general public places on these could be easily adapted to different topics (e.g., climate change, energy policy) and national contexts and offers a useful formulation for capturing shared values.

C. Dimensions of social cohesion, by sex, age group and immigration status

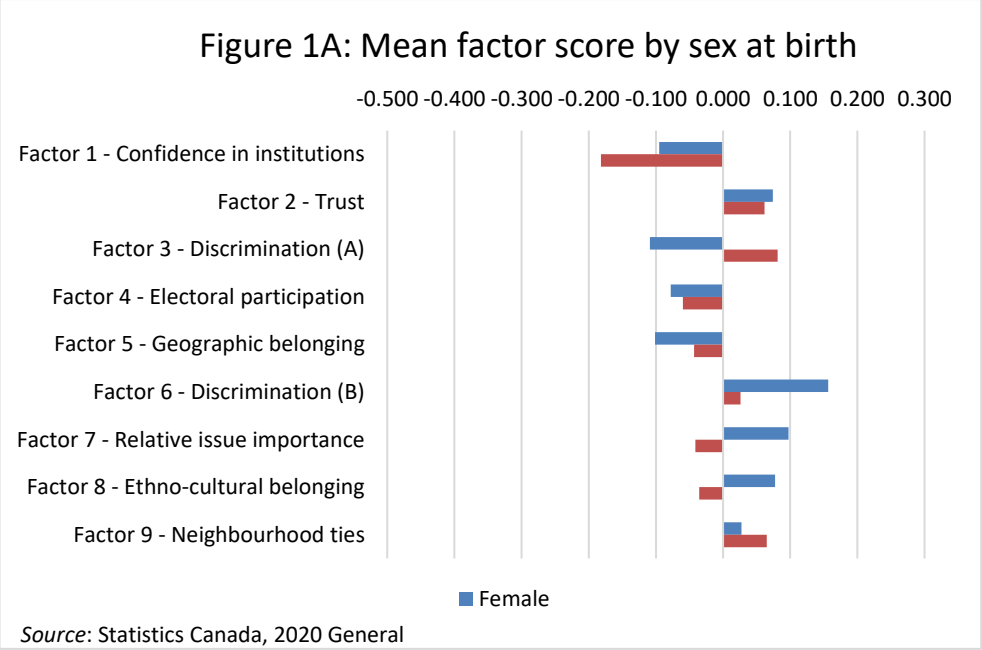
83. An in-depth analysis of the many characteristics associated with the nine dimensions of social cohesion is beyond scope of this appendix. Instead, factor scores on each dimension are shown by sex at birth, age group, and immigration status below. This is done for illustrative purposes, providing an initial assessment of how social cohesion may vary across subgroups in population.

84. A factor score on each of the dimensions was computed for each GSS respondent based on their answers to the survey questions and the factor loadings produced by factor analysis. Each factor score is coded such that lower scores are indicative of a negative outcome (e.g., lower confidence in institutions, weaker sense of belonging, experiences of discrimination or unfair treatment) and higher scores are indicative of a positive outcome

(e.g., greater electoral participation, experiences of discrimination are rare or absent). These scores are calculated with the suppression of factor loadings between -0.3 and 0.3.

85. Mean factor scores observed among women and men generally do not vary widely (see Figure 1A). Still, women had higher average factor scores on Factor 2 (trust), Factor 8 (ethno-cultural belonging) and Factor 7 (relative issue importance), suggesting stronger social cohesion among them on these dimensions. Conversely, women's average factor score on Factor 3 (discrimination A) was lower than men's, signalling greater reporting of negative experiences in this dimension. Factor 3 (discrimination A) includes discrimination or unfair treatment on the bases of gender, age, physical appearance, physically or mental disabilities, sexual identity and gender identity.

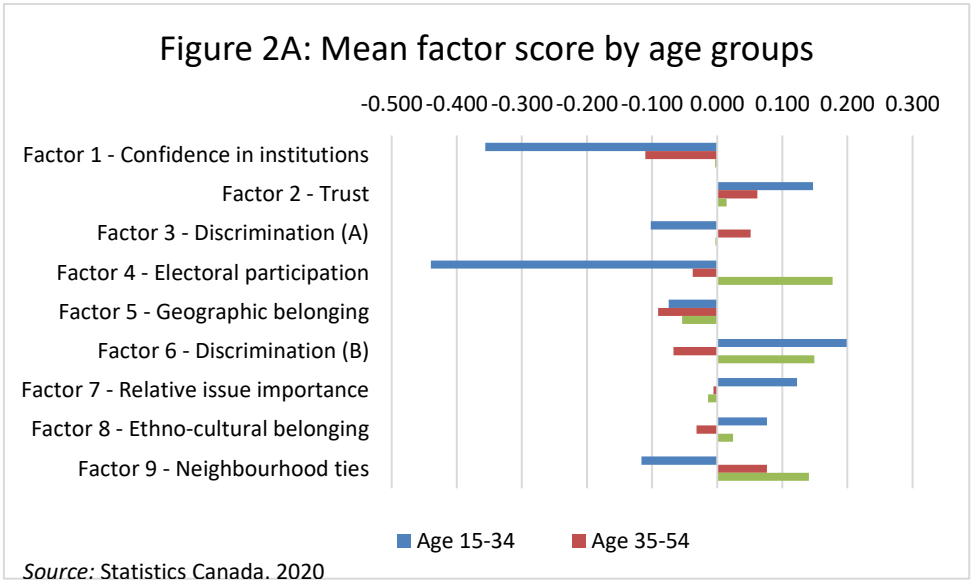
Figure 1A
Mean factor score by sex at birth



Source: Statistics Canada, 2020 General

86. Larger differences in average factor scores are observed across age groups than across gender (see Figure 2A). Young adults, broadly defined as individuals aged 15 to 34, have average factor scores that are lower than those observed among older age groups. Young adults notably have lower factor scores on Factor 1 (confidence in institutions), Factor 3 (discrimination A), Factor 4 (electoral participation) and Factor 9 (neighbourhood ties). The average factor score on Factor 7 (relative issue importance) signals that young adults are more likely than individuals in older age groups to feel they place greater importance on the specified values than Canadians in general.

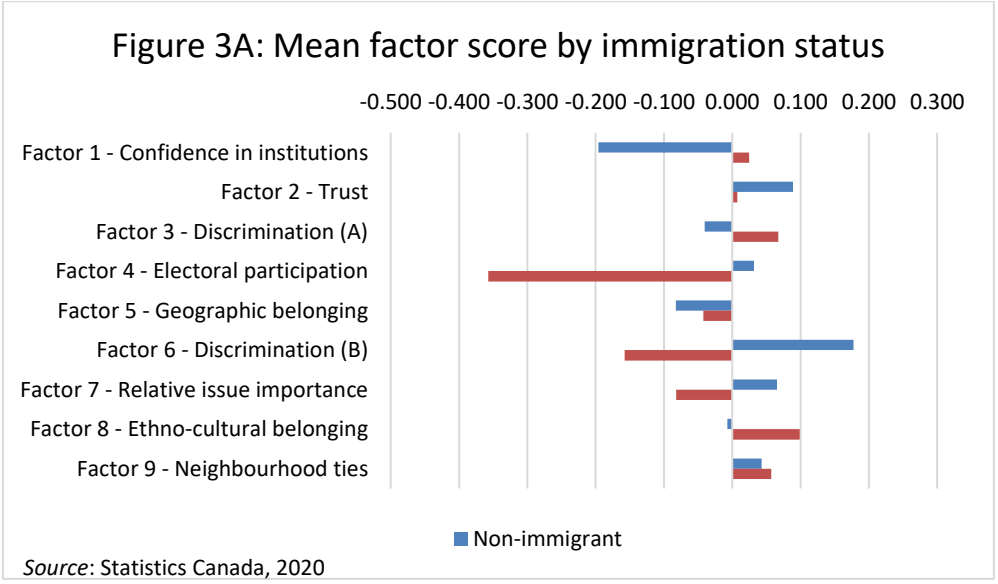
Figure 2A
Mean factor score by age groups



Source: Statistics Canada. 2020

87. As depicted in Figure 3A, comparing individuals born in Canada and those who immigrated to Canada, immigrants have relatively high scores on Factor 1 (confidence in institutions) as well as on Factors 5 and 8 which capture different aspects of belonging (geographic and ethno-cultural belonging respectively). And while immigrants have higher factor scores on Factor 3 (discrimination A), indicating fewer negative experiences of discrimination or unfair treatment on the basis of age, sex, physical appearance, disability, sexual identity or gender identity, they have lower factors scores and hence more negative experiences of discrimination or unfair treatment on the basis of race or colour, ethnicity or culture, religion and language (discrimination B). Immigrants have lower factor scores on Factor 4 (electoral participation) and on Factor 7 (relative issue importance), the latter indicating that they attach less importance to the specified values than they think Canadians in general do.

Figure 3A
Mean factor score by immigration status



Source: Statistics Canada, 2020

88. The descriptive evidence above indicates that select population groups may score high (i.e., positively) on some dimensions of social cohesion and score low (i.e., negatively) on others. Among immigrants in Canada, for example, confidence in institutions and sense of belonging to various communities appear to contribute positively to their social cohesion, while experiences of racial discrimination and weaker neighbourhood ties appear to contribute negatively. Summarising such complexities in a single measure of social cohesion would obscure more than it would reveal, underscoring the importance of clearly identifying the dimensions of social cohesion deemed in-scope and understanding the various ways they contribute to or detract from social cohesion.

IX. Acknowledgements

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