ORIGINAL RESEARCH



The Intercultural Dialogue Index (ICDI): An Index for Assessing Intercultural Relations

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Abstract

Intercultural dialogue (ICD) refers to a process of contact, interaction and exchange of views on the basis of equality, respect, and mutual understanding between individuals or groups from diverse backgrounds. A large body of research has discussed ICD and its potential value for fostering social cohesion and peaceful coexistence across difference. However, there is a lack of robust benchmark data that precludes researchers and practitioners from empirically testing assumptions and hypotheses pertaining to ICD. This article discusses the development of the Intercultural Dialogue Index (ICDI), a proposed composite index for measuring the extent to which ICD is being pursued and implemented as a diversity management tool within different countries. The index builds on the conceptual assumptions underpinning ICD, uses publicly accessible data, and applies methods that allow for replication, upgrading and comparability with relevant indices. This article assesses ICD prevalence for 51 countries based on three interrelated dimensions covering legislative and structural environments as well as opportunities for intercultural encounters. Altogether, 31 indicators across the three dimensions are identified and grouped under 10 broad components to capture both macro- and micro-level factors affecting ICD and intergroup relationships nationally and globally. The article briefly summarises some preliminary ICDI findings and discusses key methodological constraints and conceptual challenges. Theoretical and practical implications of ICDI are also provided.

 $\textbf{Keywords} \ \ Intercultural \ dialogue \cdot Interculturalism \cdot Multiculturalism \cdot Super-diversity \cdot Index$

1 Introduction

In the context of persisting challenges and crises ranging from socio-cultural discrimination and economic inequalities to environmental degradation, and in the face of new acute health crises linked to global pandemics, the global community urgently needs meaningful

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dialogue, engagement and collaboration to overcome these problems in inclusive and sustainable ways. These complex challenges require new approaches that transcend cultural differences in order to harness the benefits of diversity that individuals and communities can bring to the collective task of achieving global peace and sustainable development. Against the backdrop of this urgent international setting, intercultural dialogue (ICD) has emerged as a salient concept in academic debates and policy circles around the optimal approaches to diversity management, particularly in Europe and Canada. With its strong emphasis on social cohesion, intercultural relations and civic integration, interculturalism has been presented as a possible theoretical alternative to multiculturalism which has been critiqued and in some cases blamed for the problems affecting the diversity agenda in many émigré societies (Cantle 2012). So far, much scholarly debate on interculturalism/ICD has focused on understanding its conceptual basis and its possible policy application, with little focus on its empirical examination or assessment across social domains. In fact, a recent systematic review of studies on interculturalism and ICD (Elias and Mansouri 2020) has shown that there is a dearth of quantitative research on the subject, with the Intercultural Cities Index (ICI) being one of the few initiatives explicitly dedicated to the quantitative measurement of ICD from a local, city perspective. The Council of Europe developed this tool to compare the extent to which several international cities attained levels of diversity, intercultural interaction and inclusiveness (Council of Europe 2016; Zapata-Barrero 2015). Using 15 indicators across 90 questions, the ICI tracks the performance of a city through an intercultural lens (Council of Europe 2016) and reports the findings through an interactive website that currently profiles 83 cities in 30 countries.

While the ICI provides a valuable tool for comparing ICD at the city level, there is no established comparable index at the national level that captures the important macro-level policies that create the requisite societal conditions for the pursuit of intercultural goals. This gap in research precludes both the assessment of countries' performance in achieving favourable intercultural relations, and the potential for making nuanced and meaningful international comparisons around the management of diversity. In this paper, we discuss and present the Intercultural Dialogue Index (ICDI) – an index designed for assessing and evaluating the existence or absence of pro-diversity conditions in different countries. The aim of the ICDI is to measure intercultural relations at a national level based on the conceptual and philosophical foundations underpinning ICD as an approach to building contact, dialogue and respect among ethnically, racially and culturally diverse groups. The proposed ICDI incorporates data from existing indices as well as several publicly available databases, rather than being merely based on questionnaires completed by relevant authorities, as is the case with the ICI. The index was developed following best practice in indexdevelopment approaches and established methods that are widely used in social science. Like many equivalent global indices, the ICDI can be used in combination with a range of international datasets for understanding and even modelling the relationship between ICD and other socio-economic and political outcomes at any given point in time.

Based on robust benchmark data on the degree of cultural, social and political interconnectedness in a particular country, the ICDI aims to generate a holistic and transparent analysis of the state of intercultural relations in a country, which can be used to assess different dimensions related to ICD. The index incorporates 31 key *indicators* grouped into 10 *components* across three broad *dimensions* or domains. The carefully selected indicators include sociodemographic, cultural and political variables, available in the form of indices or databases. Each of the indicators is directly or indirectly related to ICD, either as an input (policy indicator) or an output (intergroup and structural indicator). This multi-dimensional, multi-level combination offers enabling tools for the improvement of



intercultural relations at the country level. Constrained by data completeness, robustness and availability, the ICDI version presented in this paper provides a preliminary analysis for 51 countries, which can be extended in future as new data becomes available. The index, in its current articulation, provides an international data-driven snapshot of cultural diversity and ICD across different contexts and jurisdictions. More critically, it also has the potential to serve policymakers as an indicator for identifying areas needing optimal intervention measures and policy consideration. The rest of this paper details the context and methodology of the index development, and the key findings. Section 2 provides a brief background; the underlying theoretical basis for an intercultural index is outlined in Sec. 3. In Sec. 4, the approach, methods, and statistical analyses utilised in the development of the index are discussed in detail. Section 5 provides a discussion of the key findings, theoretical and practical implications. A summary of the main theoretical and practical implications of this study are presented at the end of Sec. 5.

2 Background

Over the past few decades, countries around the world have become socio-politically hyper-dynamic, demographically super-diverse, and culturally more complex. Technological revolution and new forms of communication have led to increasing inter-connectedness between individuals and groups across nation-states, with local and international human mobility becoming more salient than ever before. This deep and pervasive global interconnectedness has resulted in multilevel, intercultural encounters between diverse people across many spheres and domains. Thus, cross-cultural understanding is no longer a luxurious pursuit for only those individuals interested in other cultures. For many people living in multicultural societies, intercultural understanding and competence are indispensable skills for harmonious relationship in the everyday reality of super-diversity (Vertovec 2007). Social interactions with people from different cultures has become commonplace, whether in schools, workplaces, public services or markets, all of which are becoming multicultural hubs. This in turn has engendered ubiquitous cross-cultural interactions which has become an everyday lived reality. Cities have become *super-diverse*, exhibiting more complex features than ever before, with simplistic binary features no longer sufficient to capture the multidimensional web of connections people engage with on a daily basis (Mansouri 2017; Vertovec 2007). ICD, therefore, has become an indispensable part of social, economic, cultural and political life.

Reflecting these new lived realities, many international organizations, such as UNESCO and the Council of Europe, have adopted and promoted ICD as a policy framework for addressing the challenges of cultural diversity governance, with research on the subject growing exponentially over the last decade or so (Cantle 2012; Modood and Meer 2012; Taylor 2012; Zapata-Barrero 2015; Mansouri 2017; Mansouri and Arber 2017). Though its definitions vary across disciplines and application domains, there is broad consensus that ICD, in general terms, seeks to bridge differences across cultural groups and individuals, while aiming to engender and facilitate intercultural affinities and respectful co-existence (Elias and Mansouri 2020). ICD 'occurs among individuals who speak different languages

¹ Detailed country reports that contextualise the index with policy and demographic diversity for each of the 51 countries is available in the website: [Removed for this peer review].



and for whom words and objects have diverse meanings' (Sarmento 2014, 611). It signals a significant policy, intellectual and discourse paradigm shift towards inter-group engagement, cross-cultural interaction and individual pedagogic transformation, all essential ingredients for individuals and groups to successfully engage across difference on the basis of respect, mutuality and empathy (Mansouri 2017).

At the individual level, ICD focuses on engendering behavioural transformations and cultural attitudinal changes that challenge existing hierarchical relations between groups (Barrett 2013; Bouchard and Taylor 2008; Cantle 2015). This potential transformation is hinged on the assumption that ICD leads to cross-cultural learning, mutual self-reflection and reciprocal understanding (Abdallah-Pretceille 2006). Research across wide ranging disciplines indicates that cultural knowledge, skill, and competence are critical for effective intercultural engagement (Odora-Hopper 2007). This has been shown in different settings, including education (Walton et al. 2013), healthcare (Alizadeh and Chavan 2016), workplaces (Johnson et al. 2006), and overseas immersion programs (Zhang and Zhou 2019). The ICD framework builds on this growing scientific evidence that highlights the benefits of active, deliberative and empathetic cross-cultural engagement. Indeed, dialogue among members of different cultures is not a new phenomenon, however, the emergence of globally concerted policy initiatives seeking to promote such dialogue is relatively recent (Council of Europe 2008). As such, ICD as a concept, is still debated in academic and policy circles, with no universally applicable instrument available to assess or measure its utility and impact. A recent systematic review of studies on interculturalism, broadly, and ICD more specifically, reports a broader conception of ICD 'predicated on interactive contact and mutually transformative dialogue between individuals and groups across difference' (Elias and Mansouri 2020, 34).

Although the literature on ICD has expanded in recent years, no attempt has been made yet to assess it at a state level, nor to develop a predictive tool for its application as a measure of the intercultural state of affairs. This paper, therefore, proposes the ICDI, a national-level measure of ICD designed to assess the extent to which there exists societal and structural conditions that can affect diversity management and intercultural relations. The proposed ICDI is designed to serve as a tool for understanding how different countries are tracking in relation to diversity management and intercultural harmony. This country-level analysis has the potential to also highlight, in a predictive manner, possible intercultural conflicts and tensions on the basis of an empirical analysis of reported data in key societal domains.

3 Theoretical Framework

As countries become increasingly super-diverse (Vertovec 2007), with complex socio-economic, cultural and political characteristics, how can they optimally manage these multiple forms of diversity? This has been a topic of great academic and policy debate over the last century. Two visions of social policy with opposite theoretical notions have particularly stood out in a spectrum of diversity management policies: assimilation and multiculturalism. Assimilation involved a process whereby people from diverse cultural backgrounds adopt and incorporate the majority or mainstream culture (Alba and Nee 1997). After decades of policy and practice, it was heavily criticised by social scientists for imposing ethnocentric and patronising demands (Alba and Nee 1997).

In the 1980s, multiculturalism emerged as an alternative to replace assimilation in many societies. Multiculturalism is an approach to diversity management based on the



recognition and political accommodation of minority groups from different ethnic, cultural and religious backgrounds (Taylor 1994; Modood 2007). Essentially, it is a vision of a society where all ethno-cultural groups are accepted as equal. In many societies (e.g., UK, Canada, and Australia), the adoption of multiculturalism has been related to anti-discrimination legislations and policies (Banting and Kymlicka 2013; Meer and Modood 2009). However, there have been growing debates around the shortcomings of multicultural policies have led to ethnic cleavage, cultural separation, and a depletion of trust and social cohesion (Vertovec and Wessendorf 2010; Cantle 2012). However, these criticisms, which place the burden of social integration exclusively on immigrants, remain heavily contested (Banting and Kymlicka 2013; Meer and Modood 2009). Recent scholarship has argued for the mainstreaming of the diversity agenda so that interaction and contact may extend to diverse groups including majority society, in order to engender cultural understanding and social cohesion (See Elias and Mansouri 2020).

In this context, interculturalism has been proposed as the basis for recalibrating multiculturalism with a focus on exchange, dialogue and contact between groups across difference (Mansouri and Modood 2020; Zapata-Barrero 2019). Interculturalism rests on the notion that groups can bridge differences and overcome prejudice through intergroup interactions based on mutual respect to find shared values (Belo 2017). Within the broad interculturalism literature, ICD is a specific practical conduit aimed at enacting the inclusive, deliberative dimensions of interculturalism. There are several characteristics that distinguish interculturalism and more specifically ICD, from multiculturalism and assimilation – the two extremes of the migrant integration continuum. Unlike multiculturalism, interculturalism and ICD focus on individuals rather than groups, emphasise intergroup contact, have local and grassroots perspectives, and contain transformative capacity in terms of attitudes towards difference. Unlike assimilation, interculturalism and ICD recognise cultural diversity, consider identity as fluid rather than fixed, reject ethnocentrism, emphasise shared values, and aim to bridge cross-cultural conflict.

Broadly conceived, ICD is a process of interaction, exchange and dialogue among individuals from diverse cultural backgrounds, with an emphasis on fostering social harmony and peaceful coexistence. Scholarly research on ICD, and the broader related concept of interculturalism, exhibits significant divergence in the understandings of the theoretical novelty of ICD, particularly in comparison to other well-established concepts such as multiculturalism, cosmopolitanism and transnationalism. A comprehensive review of this literature, particularly in relation to the definitions of ICD and interculturalism (Elias and Mansouri 2020), reports that the most popular definitions of ICD are those provided by the Council of Europe and UNESCO:

[ICD] is understood as a process that comprises an open and respectful exchange of views between individuals and groups with different ethnic, cultural, religious and linguistic backgrounds and heritage, on the basis of mutual understanding and respect. (Council of Europe 2008, 17)

[ICD is the] equitable exchange and dialogue among civilizations, cultures and peoples, based on mutual understanding and respect and the equal dignity of all cultures is the essential prerequisite for constructing social cohesion, reconciliation among peoples and peace among nations. (UNESCO 2017)

The two definitions are conceptually related, both emphasising respect, mutuality, understanding, and equality as the bases for the process of cross-cultural exchange and dialogue. Most of the reviewed studies conceptualised ICD as involving respectful exchange



between individuals or groups from diverse ethnic or cultural backgrounds (Elias and Mansouri 2020). This conceptualisation also highlights the key notions of respect, mutuality and equality that underpin the process of dialogue and exchange.

ICD heavily draws on the intergroup contact literature and sees contact and interaction across difference as the key missing ingredients of previous theories of diversity policy, most notably, assimilation and multiculturalism (Council of Europe 2008; Zapata-Barrero 2019). While assimilationist policies have been criticised for undermining the salience of difference by aiming for conformity to dominant norms, much of the critique of multicultural policies relates to the absence of contact altogether (Rodríguez-García 2010; Vertovec and Wessendorf 2010). In ICD, difference is assumed as a salient social fact (Vertovec 2007), and intergroup contact across difference is approached proactively to facilitate mutual understanding through dialogic interaction. In other words, intercultural contact, under the right societal conditions and involving minority and majority cultural groups, is predicted to lessen prejudice and encourage openness to difference (Mansouri 2017; Zapata-Barrero 2019)

While many studies have attempted to articulate the theoretical basis of ICD, the task of defining it operationally and measuring its impact empirically remains a considerable methodological challenge. To understand the relationships between ICD and various measures of its social, economic, and political indicators, it is important first to be able to operationally define and specifically measure ICD itself. Until now, the ICI has been the only tool available to measure intercultural interactions and inclusivity, and only at the city level - it does not allow for cross-country comparison (see Introduction). A study by UNESCO (2018, 45) highlights this critical knowledge gap related to 'a scarcity of policy and practice-relevant data to measure the capacities of societies to facilitate dialogue' which precludes the assessment of ICD. This deficit also contributes to the 'conceptual fragmentation, limited operational engagement, and reluctance to use evidence in policies and action towards effective dialogue' (UNESCO 2018, 45). Yet, the literature provides sufficient theoretical foundations for developing a tool that can enable the measurement of intercultural engagement and interactions among groups at the national level. For example, the intercultural communication literature offers vital theoretical insights as to how intercultural understanding emerges through dialogic interaction. As Chen (2010, 6) shows, there is direct relationship between intercultural engagement and intercultural sensitivity, as shown in 'the importance of intercultural sensitivity in the globalizing society through its negative relationships with ethnocentrism and intercultural communication apprehension.' Research also highlights the role of intercultural awareness, intercultural effectiveness, and intercultural competence in fostering cross-cultural understanding (Abdallah-Pretceille 2006; Alizadeh and Chavan 2016; Walton et al. 2013). Therefore, understanding the underlying theoretical assumptions of ICD, and potential indicators that directly or indirectly contribute to its realisation, is the first step towards the development of an ICD index.

Drawing on both the UNESCO and Council of Europe definitions of ICD, we identify three key features that form the foundational basis of the ICDI:

- National-level legislations, policies and implementation strategies indicating an overall legislative/policy framework relevant to ICD;
- (ii) Underlying structural, demographic, socio-economic, cultural and political environment, which indicates the overall structural makeup of a country; and,
- (iii) Intercultural environment, which affects intergroup dynamics and determines the opportunities for interaction and dialogue that can emerge.



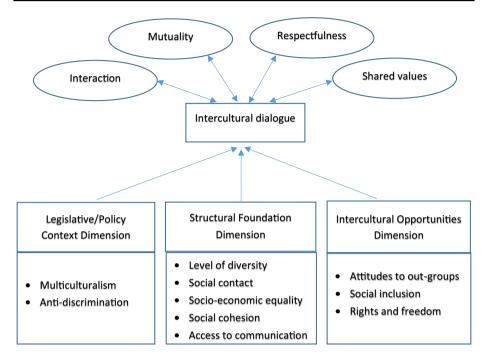


Fig. 1 Underlying structure of intercultural dialogue

ICD has a legislative aspect, particularly in relation to its implementation, where it requires institutions and policies that enable positive intergroup contact under the requisite conditions of respect and equality (Zapata-Barrero 2016). Its emergence is rooted in immigration and diversity policy debates, and it has essentially been presented as a policy instrument (Bouchard and Taylor 2008; Council of Europe 2008). ICD also has structural aspects, since meaningful cross-cultural dialogue requires certain minimum conditions in terms of social, economic and political infrastructure (Besley and Peters 2011; Elias 2017; Zapata-Barrero 2016). For example, ICD can effectively take place only in a peaceful environment (Phipps 2014). Finally, an environment of better intergroup relations is more likely to produce an increased level of ICD than an environment where racism and other forms of intergroup hostility are rife (Cantle 2012; Council of Europe 2008).

We conceive of these three interrelated dimensions as potentially vital for the sustenance of ICD as a diversity policy praxis. The *legislative-policy context* (LPC) dimension indicates a legal and policy environment that offers a national pro-diversity framework with legislative protection from discrimination. This ensures political and legal provisions for the conduct of intercultural contact and dialogue among groups. The *structural foundations* (SFs) dimension encompasses the macro-structures that affect the capacity of individuals and groups in their pursuit of civic engagement. These reflect diverse socio-economic, political, technological and security conditions that directly or indirectly determine the possibility of ICD. The *intercultural opportunities* (ICO) dimension outlines some of the factors that can influence group dynamics in a pluralistic society. These relate to the constraints that can be placed on individuals and groups, as well as underlying individual-level determinants of ICD. Figure 1 provides a conceptual framework outlining the relationship



between ICD and these three dimensions, and the relationship between the dimensions. The single arrows indicate these potential relationships while the double arrows show the themes that underlie ICD as conceptualised in the literature (Council of Europe 2008; Elias and Mansouri 2020). Below, we outline the justification for the inclusion of the 31 indicators we use to measure each component within the three dimensions. All indicators are selected based on the principle of relevance or fitness-for-purpose as suggested by a widely used index construction guideline (OECD 2008).

3.1 The Legislative-policy Dimension

The Council of Europe (2008, 5) states that 'intercultural dialogue cannot be prescribed by law.' However, this does not mean that it is unrelated to laws and policies. In fact, certain laws and policies, such as multicultural policies and anti-discrimination laws, can directly affect the possibility of pursuing and implementing ICD initiatives (Barrett 2013; Wiater 2010). The public and policy debate regarding the distinction between multiculturalism and interculturalism aside (Meer and Modood 2012), theoretical and empirical research indicates that interculturalism is in many cases connected to and dependent on multiculturalism (Modood and Meer 2012); the two are indeed complementary in several ways (Mansouri and Modood 2020; Levrau and Loobuyck 2013). Multiculturalism and interculturalism both emphasise pro-diversity ideological stances and policy approaches, an acceptance of difference, and an attachment to social harmony and intercultural understanding.

Vertovec and Wessendorf (2010) list eight measures that have characterised multicultural policies: public recognition of ethnic minority organisations; provisions for cultural diversity in schools; access to social services; public materials in multiple languages; laws related to diversity; religious accommodation; provisions related to cultural food and rituals; and accommodation in media and broadcasting. An equally important variable that can indicate a country's commitment to ICD is the presence of anti-discrimination laws and related initiatives (Zapata-Barrero 2017). In Vertovec and Wessendorf's list, protection from discrimination is incorporated within laws related to diversity. Following on from the above emphasis on multiculturalism and anti-discrimination laws, a key condition for ICD is the absence of uneven or asymmetrical power relations among groups or individuals (Elias 2017; James 1999; Zapata-Barrero 2017).

In the proposed ICDI, two components form the LPC dimension: policies on multiculturalism and anti-discrimination laws. However, internationally comparable data on legislation, policy and implementation of multiculturalism and anti-discrimination laws are not readily available. For multiculturalism, the best available data are the Multicultural Policy Index (https://www.queensu.ca/mcp/; Banting and Kymlicka 2013), and the Migration Integration Policy Index (Huddleston et al. 2015), which compare the state of multicultural and anti-discrimination policies in OECD countries. The ICDI uses some of these data along with manually collected data from national constitutions for most other countries. Similarly, in the absence of internationally comparable anti-discrimination data, the ICDI compiles a composite measure for this indicator, based on constitutional affirmation, explicit national policies, and data from Huddleston et al. (2015). This dimension, made up of the multiculturalism and anti-discrimination components, is based on the absence or presence of related acts, legislations, and policies at the national level.



3.2 Structural Foundations Dimension

The second dimension in the proposed ICDI consists of five components that cover the institutional and structural conditions for ICD within a particular society. One of the key indicators for this dimension is the possibility and opportunity for intergroup contact, which is a key input component of ICD and one that can lead to improved intercultural understanding and reduced prejudice (Pettigrew and Tropp 2006). In the absence of global intergroup contact data, this index employs in-bound tourism, cultural participation, and the number of immigrant and indigenous languages as proxy variables. The working assumption here is that more tourist arrivals, more heritage sites and increased presence of migrant and indigenous languages could lead to more exposure and contact between groups. Studies show that exposure and familiarity with outgroup members can reduce uncertainty, while cultural participation has correlation with inclusiveness (Pettigrew and Tropp 2006; Anheier et al. 2017). However, contact may not always lead to positive outcomes, unless certain conditions are met (Graf et al. 2014). Thus, this dimension includes three versions of fractionalization – ethnic, lingual, and religious – to account for potential negative effects of diversity.

Equality is another important structural condition for genuine and effective ICD (James 1999; Zapata-Barrero 2017; Wiater 2010). The Council of Europe argues that 'no dialogue can take place in the absence of respect for the equal dignity of all human beings, human rights, the rule of law and democratic principles' (Council of Europe 2016, 19). The phrase *equal dignity* is also mentioned as the key ingredient of genuine interaction in UNESCO's definition of ICD. This is captured in the ICDI by the inclusion of socio-economic (in) equality, which consists of three key indicators – economic (in)equality, intergenerational social mobility, and educational attainment. Equality is an important value to consider in the facilitation of intergroup contact, while access to media and communication is vital for information and knowledge dissemination. While media can amplify intergroup tensions through distortion and propaganda, it can also serve as a space for robust debate and dialogue (Paluck 2009). For this dimension of the ICDI, we use the number of available newspapers, mobile telephone and internet subscriptions to capture the role of media and access to modern communication.

Since its inception, ICD has been flagged as an instrument for fostering social cohesion and peaceful coexistence, and for contributing to conflict prevention (Council of Europe 2008). These aims are captured using three indicators, one of which is intergroup cohesion, an output indicator measuring cooperation and respect among groups in a society. The other two output indicators indicate the level of state fragility, measured using two alternative approaches developed by the Center for Systemic Peace and Fund for Peace. Overall, the SF dimension incorporates five components measuring the conditions necessary for intercultural relations to develop.

3.3 Intercultural Opportunities Dimension

The third dimension of the ICDI – *intercultural opportunities* – incorporates three output components that affect an individual's capacity to engage in intergroup interactions. For example, high levels of racism and intolerance towards *outgroups* (e.g., racial minorities, migrants, indigenous groups) are likely to inhibit genuine dialogue, while the absence of dialogue altogether can deny opportunities for attitudinal and behavioural change (Dessel



and Roge 2008). We include three indicators to capture these dialectical dynamics forming the component *intercultural attitudes*. Social inclusion is another related component at the group level, included to capture the level of minority representation in a country. This component is composed of four interrelated indicators including restriction of religious freedom, intergroup relations, and inclusion of and discrimination against ethnic minorities (cf. Dovidio et al. 2003; Pettigrew and Tropp 2006). Each indicator measures intergroup dynamics with a slightly different focus and, in combination, provides a nuanced overall variance. Finally, another component, *freedom and rights*, is introduced to reflect some of the democratic ideals that ICD espouses. In the Council of Europe articulation of ICD, human rights are considered an 'essential framework for the practice of intercultural dialogue,' and fundamental freedoms, such as freedom of expression, are seen as vital for fostering understanding and awareness (Council of Europe 2008, 26). The index captures this in three measures indicating press freedom and freedom of movement.

4 Data and Methodology

4.1 Approach

The development of the proposed ICDI was driven by the idea that an environment that is conducive to cross-cultural relationships is essential for positive intercultural engagement that fosters peaceful coexistence in multicultural societies. A global index is one way to assess how different countries are tracking in relation to this overall aim, taking into account local specificities and different histories. Thus, the purpose of the index is to provide a holistic and transparent analysis of a country's state of intercultural relations through a robust assessment of specific indicators across different dimensions related to ICD. The indicators underpinning the ICDI focus mainly on social, cultural and political factors, integrating both input and output indicators to provide tools for improvement at the country level.

The ICDI integrates the key indicators, factors, and processes that affect ICD, focusing on its underlying theoretical underpinnings including intergroup relations (intergroup contact theory), interculturalism (contact, exchange and transformative change) and cosmopolitanism (values associated with outward openness and an acceptance of difference).

Potentially, an index can be constructed using *input measures*, which assess policy and legislation, and/or *output measures*, which directly assess the intended policy outcomes. For example, an input measure could assess the existence and quality of policies to include intercultural education in a national school curriculum. A corresponding outcome measure could be the number of schools that adopted this curriculum, and the level of intercultural understanding in the schools. The proposed ICDI here includes key institutional indicators and thus differs from other indices that exclusively rely on outcome measures (e.g., the Social Progress Index). Exploiting the wealth of data on indices of social development (Foa and Tanner 2012), we include various intergroup variables and input measures (e.g., policies and legislative rights) designed to manage diversity and achieve intercultural harmony. Given that managing diversity requires the long-term commitment of states, and given the importance of assessing a state's readiness to accommodate minorities, we argue that an ICD index should incorporate both inputs and outputs. However, we acknowledge that there might be discrepancies between intended policy inputs and the actual outputs and associated outcomes. Policies with good intent might have unintended consequences



Table 1 Macro variables associated with intercultural dialogu	ıe
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Variable	Expected direction of association	Remark
Conflict	Negative	Bi-directional association with ICD
Corruption	Negative	Corruption can indicate less ICD taking place
Crime, violence	Negative	Crime and violence can indicate less ICD taking place
Democratic representation	Positive	Bi-directional association with ICD
Economic growth	Positive	By promoting peace ICD expected to stimulate growth
Peace	Positive	ICD expected to foster peaceful coexistence
Political stability	Positive	Bi-directional association with ICD
Rate of minority incarceration	Negative	Minority incarceration can indicate less ICD taking place
Well-being	Positive	By promoting peace ICD expected to stimulate better community well-being
Violent extremism	Negative	Violent extremism can indicate less ICD taking place

Note. These are macro indicators that can have potential relationship with intercultural relations.

that undermine the intended positive impact. The input and output measures in the ICDI balance such discrepancies, while regular updates of the input variables will be needed to incorporate legislative and policy changes.

4.2 Conceptual Background

The diverse mix of socioeconomic, cultural, psychological and political indicators used in this index are based on the theoretical framework outlined above (section 3). Adding indicators that assess the prevailing policy climate for ICD provides completeness and fills specific gaps in this area. Conceptually, the index assesses whether ICD is taking place in a country and to what extent it is reflected through indicators across the three main dimensions. As with many other social indicators, the ICDI does not measure ICD per se, in absolute terms (it does not tell how much ICD there is in a given country). Rather, it is a relative measure that should be understood contextually. Yet, the analysis and data reported with the ICDI can be used to analyse, make sense, and even predict a range of socio-political outcomes, including intergroup conflict, racial strife, discrimination, social cohesion, and so on (cf. Foa and Tanner 2012). For example, Table 1 provides a provisional list of outcomes that we hypothesise to be associated with the index, along with the expected direction of association.²

The index is designed ultimately to generate benchmark data on the degree of cultural, social and political interconnectedness in a country among its ethnic, racial and cultural constituents. The ICDI can also be useful as a general predictive tool to identify areas needing policy intervention, giving policymakers the opportunity to consider measures that can prevent or at least minimise the chances of intercultural conflict. Though the index is at present designed for a country level analysis, its methodology can, nevertheless, be extended for implementation at sub-national levels.

² In this study we report the association of ICDI and five variables where data is available across the included countries.



4.3 Methods

The ICDI was conceptualised on the basis of established methods for index-development, such as those suggested in the OECD's Handbook on Constructing Composite Indicators (OECD 2008). These data selection and analytical tools have been widely utilised in other well-known indices, including the Doing Business Indicators (World Bank 2019a, b, c), Global Peace Index (Institute for Economics and Peace 2017) and the Social Progress Index (Porter et al. 2014). The OECD guideline suggests at least 10 key steps as a checklist for index construction. Each of the recommendations have been used in constructing the ICDI. One of these relates to theoretical framework, providing justification for inclusion of indicators. Table 2 outlines the conceptual architecture of the ICDI, with three levels of analysis. First, the 31 indicators, listed in column 3, were selected and generated from available indices and reliable public data sources. They all represent relevant measures that relate to the core ICD dimensions (see section 3). Second, the ten components (column 2) were generated by weighting, transforming and combining the relevant indicators. Each component has between two and four indicators. A component represents a unique but interrelated input, tool, support structure, and social outcome, and combines with the rest to make up a dimension. The dimensions (column 1) represent the primary elements that combine to measure a country's readiness for intercultural interaction. The components are the broad conceptual categories that we argue affect the possibility of ICD in a country. A country's dimension score is calculated as the average of the component in that dimension.

The other nine methodological suggestions in the OECD guideline relate to selection, completion, optimal incorporation, and analysis of the underlying data. Below is a list of these nine steps along with the corresponding section in the current article, detailing their application.

- Data should be selected based on 'analytical soundness, measurability, country coverage and relevance' (OECD 2008, p. 19; See Sections 4.3.1–4.3.3),
 - The index construction should incorporate:
- 2. Applying imputation to complete the dataset (Section 4.4.2),
- 3. Applying multivariate analysis to examine the structure of the datasets (Section 4.5, step 1),
- 4. Applying normalisation of variables for comparability (Section 4.5, step 2),
- 5. Weighting and aggregation based on underlying theory (Section 4.5, step 1),
- 6. Conducting robustness test (section 4.6),
- 7. Reflecting on the overall performance of the index (Section 5),
- 8. Linking the index to other indicators through statistical models (Section 4.6),
- 9. Applying visualisation of the results (Fig. 2 and Appendix, Fig. 8).

Each of these methodological guidelines ensure that the index is consistently measured for all countries, can be replicated, and is fairly transparent in terms of the analysis and the results.

4.3.1 Indicator Selection Criteria

The indicators for the ICDI were selected on the basis of three main criteria that are commonly used in the literature (OECD 2008):



- 1. Relevance to intercultural and diversity issues. (Does the indicator have direct relevance to ICD? If so, how is it related? Does it enhance/sustain or prevent ICD from taking place?)
- Data quality and availability. (Are there sufficient, reliable and accessible data for the indicator? Is it available for a sufficient number of countries?)
- 3. Data comparability and measurability. (Are the data comparable across countries? Can they be measured consistently?)

4.3.2 Selection of Countsries

Countries were selected based on availability of reliable data. In some cases, countries did not have values for certain indicators for at least two reasons: data were not reported to international organizations; or a source did not include certain countries. A country was excluded if more than one indicator value was missing for two or more components. Other indices have used less strict criteria for missing values (See for example, Porter et al. 2014). For the included countries, an indicator's missing value was filled with an estimated value based on regressions run at the component level. For countries with estimated values exceeding/below a reasonable limit, the theoretical maximum/minimum based on available recorded data for the indicator was used instead of the estimated value. For example, dual citizenship is a dichotomous variable with yes/no options. If the estimated value was calculated to be a negative value, 0 was used instead. For retention of maximum variance, missing data were replaced before excluding countries with significant number of missing values. This enabled us to generate complete data for countries that were included.

4.3.3 Data Sources

Data for the ICDI was compiled beginning in February 2018. First, we identified data sources that could potentially be used in the construction of the ICDI based on our selection criteria. These data were assessed for relevance, data quality, and coverage in terms of time period and geographic unit before they were utilised in the calculation of the index. The main data sources were:

- 1. National constitutions, legislations, and policy documents;
- 2. National statistics;
- 3. Existing global indices;
- International databases.

The ICDI followed a consistent process for data collection to maintain overall data quality and ensure comparability across countries. Data for the index were mostly collected from web-based public sources. Where internationally comparable data and/or indices were not available for an indicator, particularly for indicators involving national legislations, we applied score rankings based on available legislations and constitutions. For example, in the case of multicultural acts, we determined the existence or absence of such legislation (e.g., the Multicultural Act in Canada and the Australian Multicultural Policy). For the structural foundation and intercultural opportunities dimensions, data were sourced from peer-reviewed publications and available international indices (e.g., State Fragility Index, Fractionalization Index). Where standardised indices were not available, raw data were used (e.g., number of immigrants' living languages, UNESCO Educational



Attainment database). For some relevant indicators (e.g., intercultural or inter-ethnic/interracial attitudes, racism), data and measures were usually available at individual-level from local or national surveys. However, most of these are not comparable globally, therefore, we used available measures from existing global surveys (e.g., the PEW Global Attitude survey, the World Values Survey). However, for most indicators, we used global indices or international databases.

The interrelated set of components, dimensions and indicators constituting the ICDI are reported in Table 2. A complete list of the data sources for all indicators is provided in Appendix, Table 7.³

4.4 Computation of the Index

After the selection of indicators and collection of the relevant data, we pursued the following four steps to statistically compute the ICDI:

- 1. First, each component was calculated by summing the weighted indicator scores.
- These component scores were then transformed to comparable scores.
- Dimension scores for each dimension were calculated as averages of the respective components.
- 4. Finally, the overall ICDI was calculated as the average score of the three dimensions.

Step 1 Component calculation

First, component scores were computed as the weighted sum of a country's indicator scores on each of the three dimensions. Various indicator-weighting methods have been used in the literature (Foa and Tanner 2012). Some indices use equal weights across indicators where each indicator is given the same weight, regardless of statistical association (e.g., the Human Development Index, HDI). Another method is the use of regression to generate weights (e.g., Quality of Life Index). In this case, coefficient estimates from a regression of a latent variable on the indicators are used as weights. A third method is principal component analysis (PCA; e.g., Doing Business Indicators, the Social Progress Index). Factor loadings from PCA were used in these indices as the indicator weights. For the ICDI, we used the third approach. Prior to the aggregation of component scores, we weighted the indicators based on relative weights generated using PCA. Complete data generated by filling missing values across indicators allowed us to apply PCA to reduce potential redundancy between indicators while maintaining the maximum amount of variance (Porter et al. 2014). We also obtained a mean Kaiser-Meyer-Olkin score of 0.75, which is above the minimum required score of 0.5 for considering PCA (Kaiser 1974). The Bartlett test for sphericity was 182.9 (P < 0.01), indicating that PCA was appropriate. We performed PCA on each component, and the first component loadings (PC-1), which account for much of the variance were used as weights (Benigni et al. 1994; Porter et al. 2014). After the computation of the indicator weights, we scaled them to a range of (0, 1). The computed weights are reported in Appendix, Table 8.

Then, component score C for country j was calculated using the formula:

³ A clean version of the analytical data is available from the authors upon request.



Table 2 Dimensions, components and indicators used for assessing intercultural dialogue

Dimensions	Components	Indicators
Legislative & policy context (LPC)	Multiculturalism	Multicultural/diversity: act or policy
		Measures on integration of migrants
		Dual citizenship
	Anti-discrimination	Anti-discrimination: act or policy
		Ratification of international anti- discrimination convention
Structural foundations (SFs)	Platform for social contact	Tourism arrivals
		Cultural participation
		Number of living indigenous languages
		Number of living immigrant languages
	Fractionalization	Ethnic Fractionalization index
		Linguistic Fractionalization index
		Religious Fractionalization index
	Socio-economic inequality	Gini coefficient
		Intergenerational social mobility
		Level of educational attainment
	Access to communication	Newspapers published
		Mobile telephone subscription
		Internet users
	Cohesion and stability	Intergroup cohesion
		State Fragility Index
		Fragile States Index
Intercultural opportunities (ICO)	Intercultural attitudes and competence	Racism (Attitudes towards other groups)
		Global social tolerance index (tolerance)
		Global tolerance index (intolerance)
	Minority representation	Religious Restriction Index
		Inclusion for Minorities Index
		Intergroup relations (ethnic exclusion)
		Discrimination of ethnic minorities
	Freedom and rights	Press Freedom Index
		Freedom of domestic movement
		Freedom of foreign movement and travel

Note. This table provides a list of dimensions, components and indicators for ICDI. Overall, 31 indicators have been identified and assembled reflecting the 10 components and three dimensions of the index.



$$C_j = \sum_{i=1}^n w_i x_{ij} (n = 1, 2, \dots, N)$$

where X_{ij} is a matrix of indicators, showing the i^{th} indicator for country j; w_i is a vector of indicator weights, and is given by:

$$w_i = [w_1, w_2, \dots, w_i]$$

Step 2 Component transformation

To allow for transparency and relative comparison of components across countries and among components, we transformed the weighted component scores using theoretical best and worst cases estimated using the available data across all countries (See Appendix, Table 9 for the best and worst indicator scores). Porter et al. (2014) used a similar approach in the calculation of the Social Progress Index, and such transformation enables the standardization of indicator scores in the 0–1 or 0–100 range. The formula used to transform the components was:

$$C_{ij}^t = \frac{x_{ij} - x^w}{x^b - x^w}$$

where C_{ij}^t is the transformed component i for country j; x^b and x^w are the best and worst relative country scores available for component i. The transformed component summary statistics for all countries are provided in Table 3. All components except *intercultural attitudes* have at least 140 observations, with the latter being the main constraint for the global coverage of the ICDI.

Table 3 Summary statistics for components across countries

Dimension	Component	Obs.	Mean	Standard Devia- tion	Min	Max
Legislative & policy context (LPC)	Multiculturalism	150	0.50	0.15	0.23	1.03
	Anti-discrimination	234	0.42	0.30	0	1
Structural foundations (SFs)	Platform for social contact	195	0.06	0.10	0	0.76
	Fractionalization	210	0.55	0.23	0.05	0.99
	Socio-economic inequality	161	0.32	0.36	-0.28	1.12
	Access to communication	202	0.26	0.17	0	0.81
	Social cohesion and stability	170	0.48	0.21	0.07	0.88
Intercultural opportunities (ICO)	Intercultural attitudes	53	0.62	0.21	0.20	0.98
	Minority representation	140	0.60	0.17	0.13	0.95
	Freedom of press	194	0.65	0.20	-0.02	1

Note. Values are estimated for countries with complete data available at the component level.



Table 4 Correlation coefficients, means and standard deviations of the Intercultural Dialogue Index (ICDI) and the three dimensions of the ICDI

Description	[1]	[2]	[3]	[4]	Obs.	Mean	Std. Dev.
1. LPC	1				150	0.53	0.17
2. SFs	0.47	1			147	0.33	0.16
3. ICO	0.54	0.51	1		53	0.63	0.15
4. ICDI	0.86	0.75	0.83	1	51	0.55	0.12

Note. The correlation coefficient is estimated for 51 countries.

Step 3 Dimension calculation

Dimension scores (D_j) were computed by averaging the component scores using the formula:

$$D_j = 1/k \sum_{c} C_j$$

where k indicates the number of components in the respective dimension and varies across the dimensions.

Step 4 Calculation of index scores

Finally, the overall index, ICDI, was calculated as the average of dimension scores, using the formula:

$$ICDI_j = 1/3 \sum_D D_j$$

Table 4 provides summary statistics (correlation coefficients, means and standard deviations) for the three dimension scores. The ICDI score is positively correlated with the three dimensions, with the LPC and ICO dimensions showing the highest correlations (r > 0.8, p < 0.01). This is plausible and consistent with the theoretical basis of the index, in that intercultural attitudes and multicultural policies have stronger relevance to the ICD framework. Intercultural dialogue is more likely to occur in countries with strong multicultural policy environment and positive attitudes towards ethno-cultural diversity (Stokke and Lybaek 2018).

The final ICDI score for each country (N = 51) is reported in Table 5 and Figure 2. Columns 1–3 report the dimension scores for those countries with enough data at the dimension level, although the available data is not enough to compute the index. The LPC and SF dimensions have M=0.53, SD=0.17 and M=0.33, SD=0.16 respectively, while the ICO dimension, which includes mainly middle- and high-income countries, has M=0.63, SD=0.15. Theoretically, the ICDI ranges from 0 to 1, however the scores generated in this study had a smaller range. The country with the highest ICDI score was Sweden (ICDI = 0.814); Iran had the lowest score (ICDI = 0.342). The mean and standard deviation for the overall scores are 0.55 and 0.11. As can be seen in Table 5 and Fig. 2, developed countries including Sweden, Canada, Australia, Finland and United Kingdom (in this order) have the highest ICDI score. Other developed countries such as Germany, United States, New Zealand, and France have high scores in some components but fell short in the overall score compared to the former countries. Countries with the lowest ICDI include Iran, Malaysia, and China, with scores ranging from 0.33 to 0.36. In these countries, the three dimensions comparably contribute to their low index scores.



 Table 5
 Cross country results of the Intercultural Dialogue Index (ICDI)

		Dimension			ICDI Score
Country	Abbreviation	(1) legisla- tive & policy context	(2) structural foundations	(3) intercultural opportunities	
Afghanistan	AFG	0.327	0.114		
Angola	AGO	0.532	0.079		
Albania	ALB	0.680	0.382		
Argentina	ARG	0.641	0.448	0.729	0.606
Armenia	ARM	0.692	0.479		
Antigua and Barbuda	ATG	0.357			
Australia	AUS	0.961	0.579	0.820	0.787
Austria	AUT	0.657	0.549		
Azerbaijan	AZE	0.465	0.451		
Burundi	BDI	0.641	0.134		
Belgium	BEL	0.743	0.448		
Benin	BEN	0.394	0.177		
Burkina Faso	BFA	0.394	0.098		
Bangladesh	BGD	0.386	0.294		
Bulgaria	BGR	0.791	0.456	0.563	0.603
Bahrain	BHR	0.327			
Bosnia and Herzegovina	BIH		0.294		
Belarus	BLR	0.612	0.441	0.486	0.513
Bolivia	BOL	0.779	0.338		
Brazil	BRA	0.532	0.387	0.679	0.533
Bhutan	BTN		0.163		
Botswana	BWA	0.386	0.349		
Central African Republic	CAF	0.327	0.074		
Canada	CAN	1.013	0.503	0.866	0.794
Switzerland	CHE	0.808	0.565		
Chile	CHL	0.445	0.476	0.701	0.541
China	CHN	0.386	0.379	0.332	0.366
Cote d'Ivoire	CIV	0.446	0.119		
Cameroon	CMR	0.625	0.145		
Congo, Dem. Rep. (Zaire)	COD	0.386	0.077		
Congo	COG	0.454	0.116		
Colombia	COL	0.859	0.393	0.638	0.630
Comoros	COM		0.257		
Cape Verde	CPV	0.357	0.350		
Costa Rica	CRI	0.692	0.443		
Cuba	CUB	0.446			
Cyprus	CYP	0.775	0.442	0.700	0.639
Czech Republic	CZE	0.644	0.522		
Germany	DEU	0.740	0.594	0.689	0.674
Djibouti	DJI		0.181		
Denmark	DNK	0.561	0.580		
Dominican Republic	DOM	0.454	0.352		



Table 5 (continued)

		Dimension			ICDI Score
Country	Abbreviation	(1) legisla- tive & policy context	(2) structural foundations	(3) intercultural opportunities	
Algeria	DZA	0.465	0.269	0.481	0.405
Ecuador	ECU	0.481	0.339		
Egypt	EGY	0.447	0.327	0.461	0.411
Spain	ESP	0.625	0.410	0.798	0.611
Estonia	EST	0.625	0.493	0.614	0.577
Ethiopia	ETH	0.327	0.081		
Finland	FIN	0.961	0.560	0.833	0.785
Fiji	FJI	0.524	0.315		
France	FRA	0.808	0.537	0.755	0.700
Gabon	GAB	0.607	0.234		
United Kingdom	GBR	0.808	0.594	0.738	0.713
Georgia	GEO	0.612	0.316	0.582	0.503
Ghana	GHA	0.394	0.229	0.700	0.441
Guinea	GIN	0.327	0.082		
Gambia, The	GMB	0.394	0.124		
Guinea-Bissau	GNB		0.092		
Greece	GRC	0.724	0.481		
Grenada	GRD	0.524			
Guatemala	GTM	0.394	0.231		
Guyana	GUY	0.386			
Honduras	HND	0.394	0.322		
Croatia	HRV	0.708	0.477		
Haiti	HTI		0.245		
Hungary	HUN	0.859	0.522		
Indonesia	IDN	0.545	0.357	0.510	0.471
India	IND	0.470	0.329	0.459	0.419
Ireland	IRL	0.692	0.557		
Iran	IRN	0.327	0.320	0.382	0.343
Iraq	IRQ	0.612	0.212		
Iceland	ISL	0.445	0.586		
Israel	ISR	0.561	0.459		
Italy	ITA	0.558	0.474	0.748	0.593
Jamaica	JAM		0.397		
Jordan	JOR	0.561	0.358	0.428	0.449
Japan	JPN	0.327	0.649	0.580	0.518
Kazakhstan	KAZ	0.298	0.456		
Kenya	KEN	0.394	0.124		
Kyrgyzstan	KGZ	0.365	0.365	0.566	0.432
Cambodia	KHM		0.243		
Korea, South	KOR	0.612	0.586	0.658	0.619
Lao People's Dem. Rep.	LAO	0.446	0.162		
Lebanon	LBN	0.532	0.303		



Table 5 (continued)

		Dimension			ICDI Score
Country	Abbreviation	(1) legisla- tive & policy context	(2) structural foundations	(3) intercultural opportunities	
Liberia	LBR	0.386	0.093		
Libya	LBY	0.394			
Liechtenstein	LIE	0.283			
Sri Lanka	LKA	0.621	0.256		
Lesotho	LSO	0.327	0.251		
Lithuania	LTU	0.545	0.505		
Luxembourg	LUX	0.775	0.476		
Latvia	LVA	0.417	0.416		
Morocco	MAR	0.641	0.268	0.509	0.473
Monaco	MCO	0.283			
Moldova	MDA	0.692	0.384		
Madagascar	MDG	0.493	0.198		
Mexico	MEX	0.779	0.415	0.548	0.581
Macedonia (former Yug. Rep.)	MKD	0.621	0.333		
Mali	MLI	0.454	0.102		
Malta	MLT	0.690	0.434		
Myanmar (Burma)	MMR	0.279	0.199		
Mongolia	MNG	0.458	0.419		
Mozambique	MOZ	0.454	0.108		
Mauritania	MRT	0.553	0.167		
Mauritius	MUS	0.523	0.389		
Malawi	MWI	0.327	0.114		
Malaysia	MYS	0.160	0.404	0.496	0.353
Namibia	NAM	0.532	0.236		
Niger	NER	0.386	0.094		
Nigeria	NGA	0.532	0.251	0.564	0.449
Nicaragua	NIC	0.454	0.298		
Netherlands	NLD	0.527	0.513	0.865	0.635
Norway	NOR	0.740	0.644		
Nepal	NPL	0.446	0.176		
New Zealand	NZL	0.779	0.458	0.859	0.699
Oman	OMN	0.532			
Pakistan	PAK	0.327	0.158		
Panama	PAN	0.612	0.417		
Peru	PER	0.532	0.385	0.637	0.518
Philippines	PHL	0.532	0.337	0.615	0.495
Papua New Guinea	PNG	0.454	0.333		
Poland	POL	0.545	0.563	0.677	0.595
Portugal	PRT	0.859	0.434		
Paraguay	PRY	0.532	0.331		
Qatar	QAT	0.386			



Table 5 (continued)

		Dimension	ICDI Score		
Country	Abbreviation	(1) legisla- tive & policy context	(2) structural foundations	(3) intercultural opportunities	
Romania	ROU	0.859	0.460	0.543	0.621
Russian Federation	RUS	0.612	0.522	0.529	0.554
Rwanda	RWA	0.454	0.216	0.630	0.433
Saudi Arabia	SAU	0.327			
Sudan	SDN	0.514	0.088		
Senegal	SEN	0.481	0.151		
Singapore	SGP	0.465	0.547	0.547	0.520
Sierra Leone	SLE	0.394	0.095		
El Salvador	SLV	0.394	0.335		
San Marino	SMR	0.283			
Serbia/Montenegro (Yugo-slavia)	SRB	0.621		0.601	
Slovak Republic	SVK	0.859	0.516		
Slovenia	SVN	0.676	0.538	0.721	0.645
Sweden	SWE	0.961	0.635	0.847	0.814
Swaziland	SWZ		0.282		
Syria	SYR	0.454	0.184		
Chad	TCD	0.514	0.066		
Togo	TGO	0.327	0.111		
Thailand	THA	0.465	0.310	0.461	0.412
Tajikistan	TJK	0.524	0.348		
East Timor	TLS		0.141		
Trinidad and Tobago	TTO	0.532	0.429	0.777	0.579
Tunisia	TUN	0.394	0.366		
Turkey	TUR	0.532	0.340	0.304	0.392
Taiwan	TWN			0.796	
Tanzania	TZA	0.327	0.105		
Uganda	UGA	0.394	0.062		
Ukraine	UKR	0.458	0.418	0.612	0.496
Uruguay	URY	0.532	0.418	0.847	0.599
United States	USA	0.694	0.620	0.777	0.697
Venezuela	VEN	0.692	0.369		
Vietnam	VNM	0.454	0.312	0.411	0.392
Yemen	YEM	0.327	0.208		
South Africa	ZAF	0.665	0.335	0.757	0.586
Zambia	ZMB	0.386	0.149		
Zimbabwe	ZWE	0.327	0.141		
Global Average		0.530	0.334	0.629	0.552
Global Standard Deviation		0.170	0.158	0.147	0.122

Note. This table provides indices for the three dimensions of ICDI. The last column, the ICDI benchmark index, was computed only for those with complete data across the three dimensions. Higher values indicate more prevalence or conditions for more prevalence of intercultural dialogue.



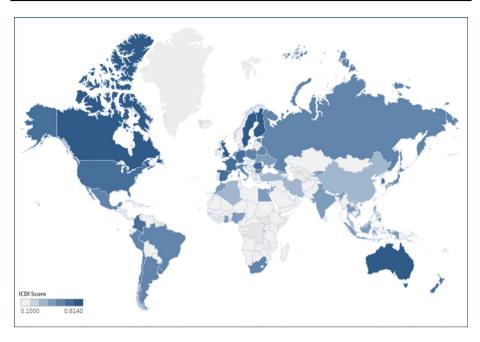


Fig. 2 The Global Intercultural Dialogue Index (ICDI), 2019 *Note*: This map reports the ICDI score for countries with complete data. Countries with a more conducive environment for ICD (i.e. higher ICDI score) are indicated in darker blue scale

Table 6 The ICDI in relation to other indices and indicators

Variable	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Democracy Index	1						
2. Corruption Perception Index	0.76	1					
3. Political Stability Index	0.65	0.75	1				
4. Global Peace Index	-0.66	-0.70	-0.91	1			
5. Log GDP per capita	0.53	0.70	0.56	-0.47	1		
6. Human Development Index	0.63	0.74	0.60	-0.51	0.93	1	
7. ICDI	0.80	0.71	0.62	-0.50	0.65	0.71	1

Note. For all variables except the Global Peace Index, higher values indicate more favourable outcome. All values are statistically significant at the 1% level.

4.5 Robustness Tests

For further robustness test, we compared the ICDI with a number of key social, political and economic indicators. Data for these indicators were sourced from various publicly available databases: per capita GDP and political stability (World Bank), corruption (Transparency International), democracy (Economist Intelligence Unit), and peace index (Institute for Economics and Peace). Table 6 reports correlation coefficients for six global measures. The coefficients have the expected signs, as hypothesised in Table 1.



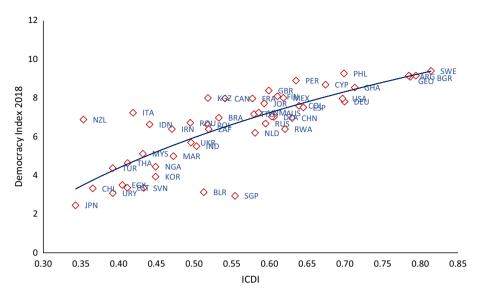


Fig. 3 Democracy and Intercultural Dialogue, 2019 *Notes:* Higher values for both variables indicate positive outcome *Source:* For Democracy Index 2018–The Economist Intelligence Unit; ICDI authors' calculation; Country abbreviations are from the International Organization for Standardization (ISO). See Table 5 for country abbreviations.

Table 6 shows that the prevalence of conflict, perception of corruption, and the absence of peace are inversely related to ICD, whereas the existence of democracy, political stability, and better socio-economic wellbeing are directly related to ICD. It is reasonable to expect more dialogue taking place in more peaceful, democratic and politically stable countries, conversely, ICD can also create conditions for these to flourish. As indicated in Table 6, the democracy, corruption perception, and HDI indices were strongly correlated (r > 0.7, p < 0.01) with the ICDI. However, the index has moderate correlation with per capita GDP, peace and political stability indices (r = 0.65, p = -0.5 and r = 0.62 respectively). A graphic visualisation of these correlations is provided in Figs. 3, 4, 5, 6 and 7.

In another robustness test, we re-computed the ICDI using alternative weights, based on equal indicator weights at the component level. Upon comparing the results, we found a slight *deviation* in ICDI across countries (*deviation*= $ICDI_{W2}$ – $ICDI_{W1}$ where W1 = PCA weights and W2 = average weights). The result, reported in Appendix (Table 10), shows an average deviation of +0.02 points (2.35%) from the score obtained using PCA weighting.



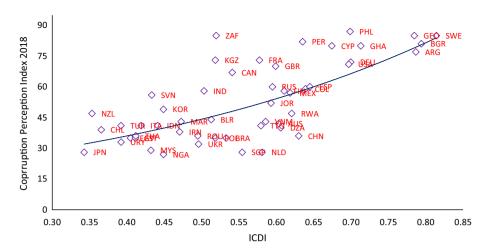


Fig. 4 Corruption and Intercultural Dialogue, 2019 *Notes:* Countries with lower CPI scores are considered those with more corruption *Source:* For Corruption Perception Index 2018–Transparency International; ICDI authors' calculation. See Table 5 for country abbreviations.

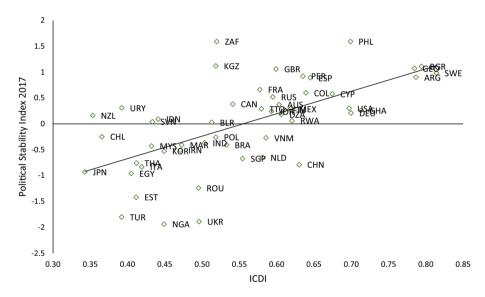


Fig. 5 Political Stability and Intercultural Dialogue, 2019 *Notes:* Higher values for both variables indicate positive outcome *Source:* For Political Stability Index 2017–World Bank; ICDI authors' calculation. See Table 5 for country abbreviations.

5 Discussion

ICD articulates an intercultural approach to addressing issues associated with cultural diversity and intercultural relations in multicultural societies. It sees cross-cultural contact and interaction as essential to reducing prejudice, which is a key contributing factor to intercultural conflict. Based on this conception, members of different groups



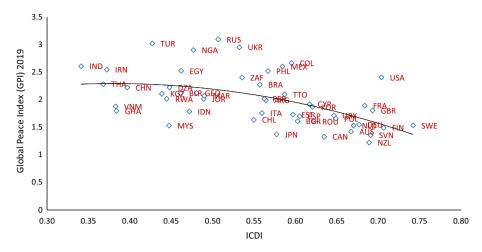


Fig. 6 Peace Index and Intercultural Dialogue, 2019 *Notes:* Countries with higher GPI scores are considered less peaceful *Source:* For Global Peace Index 2019 – Institute for Economics and Peace; ICDI authors' calculation. See Table 5 for country abbreviations

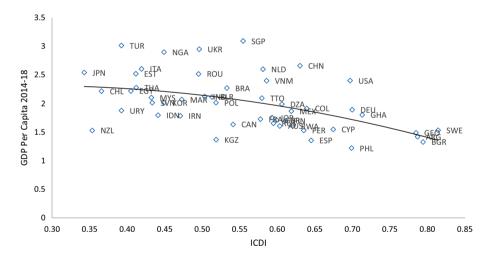


Fig. 7 Per Capita GDP and Intercultural Dialogue, 2019 *Notes*: Higher values for both variables indicate positive outcome *Source*: GDP Per Capita (PPP) 2014–2018 – World Bank; ICDI authors' calculation. See Table 5 for country abbreviations.

and communities could bridge their cross-cultural differences to create respectful understanding with dialogic contact in a conducive environment (Council of Europe 2008; Zapata-Barrero 2016). While the effectiveness of ICD as a diversity policy approach has been debated at academic and theoretical levels, it has not been empirically tested with a tool for assessing a country's overall readiness for positive intercultural relations. In this paper, we propose a global ICD index that can serve as a benchmark for assessing the state of intercultural relations across countries.



The development of a global social index is constrained by a number of obstacles at many levels. Perhaps the most notable obstacle relates to the (lack of) availability of robust, comparable global data. As discussed in this paper, this was the case in the context of measuring various indicators and dimensions of ICD as it remains difficult to locate and access reliable, global data on intercultural relations, which raises a number of methodological challenges and consequent limitations (See section 5.2). Despite such empirical challenges, the ICDI reports important findings about the way different countries are tracking in relation to particular dimensions of ICD and more generally in relation the overall diversity agenda. The significance of such analysis is that it can highlight areas where improvements are still needed in ways that can prevent emerging tensions and future conflicts in the countries in question.

Overall, the index generated solid performance cards for most of the countries included. For example, the ICDI indicates that countries that are historically considered to have well-established multicultural policies and adopt inclusive and pro-diversity policies (e.g., Canada, Sweden, and Australia) achieved higher scores. On the contrary, countries that lacked explicit pro-diversity policies in particular around multiculturalism, scored lower ICDI scores. The overall results around all dimensions have generated similarly consistent results across most countries. But the reliance on existing quantitative data can sometimes generate certain anomalies when the available datasets can mask deeper problems. This was the case for example in relation to France, which achieved a relatively high score of 0.7 in ICDI. The anomaly relates specifically to the fact that though France does not have an explicit pro-diversity multicultural policy, it nevertheless achieved a high score on measures of migrant integration as reported in UN databases we used for this index (United Nations 2017), thus leading to a skewed score in the LPD dimension. But looking at this differently, this supposed anomaly could also be interpreted as an indication that there is no uniform policy pathway for supporting migrant integration and overall intercultural relations.

These data-related challenges aside, the computed ICDI scores currently indicate strong correlation with six key global measures, indicating the index's robustness as a social indicator. Given its correlation with its constituent dimensions, and particularly the strong correlation with the LPC and ICO dimensions, the index satisfies the relevance criteria as well as maintaining theoretical consistency. The ICDI indicates that countries that have performed better in accommodating cultural diversity or have more conducive multicultural policy environment tend to score higher, whereas countries without such environment, or that lack well-developed structural foundations scored lower.

Finally, indices should be developed for the right reasons, both at the conceptual-methodological and political-ideological levels. As such, the ICDI was conceptually driven by and attached to the ideals of interculturalism, namely meaningful contact, respect for difference and cross-cultural conviviality. To this end, the ICDI is an attempt to understand how societies can pursue a cosmopolitan agenda within three key domains to create the positive conditions understood to be conducive to the desired outcomes of ICD. In terms of the political and ideological aspect of such an index, it is critical that the index is not used instrumentally for political purposes by comparing countries in decontextualized ways that do not allow for conditions of socio-economic development, colonial histories and legacies of enduring political regimes to be taken into account when making sense of overall scores or outcomes related to ICD-specific dimensions. Far from it, the aim of this index is to gauge where different countries are along the intercultural journey and how a deeper, more nuanced understanding of specific indicators can support the further progress of the ICD



agenda, thus avoiding unnecessary social fissures, and acting as an effective and sustainable prejudice-reduction mechanism.

5.1 Theoretical and Practical Implications

ICD, as highlighted in this study, incorporates multiple dimensions conducive to creating intercultural understanding across difference requiring both an acceptance of cultural diversity (or super-diversity) and a commitment to cross-cultural contact and dialogue. Multicultural policies have for decades sought to achieve the first with varying degrees of success across countries. However, achieving mutual understanding and social cohesion while maintaining the recognition of diversity calls for an intercultural approach. The findings reported in relation to the proposed ICDI have some key theoretical and practical implications.

First, the ICDI contributes to intercultural theory by providing researchers with an analytical instrument for measuring intercultural relations. Previously comparative assessment of pro-diversity conditions has been limited by the lack of benchmark data with comparable characteristics. In future, the ICDI and improved versions of the index will enable clearer measurement of ICD at the national level.

Second, the ICDI is expected to have more practical implications in policy circles. The index will provide policymakers with a tool to assess the state of intercultural relations in their jurisdictions. This means, regularly generated ICDI data will serve as an indicator for examining the effects of more policy interventions and pro-diversity strategies. If a country introduces a diversity or multicultural policy, anti-discrimination policy, or improves its position in other indicators, it will achieve better standing in ICDI.

Third, the ICDI may stimulate more discussions and debates around the intercultural agenda, in both academic and policy circles. In the absence of international data on ICD, quantifying and visualising an intercultural approach as a distinct social policy framework has not always been easy. This index may allow researchers and policymakers to better articulate ICD as a concept and policy framework.

6 Limitations

The main limitation of this study was the non-availability of internationally comparable data across all countries. For three indicators included in the ICDI, complete data was found for all of the 234 countries. For most of the other indicators, the coverage of data varied between 117 and 214 countries. However, available indicators for racism and tolerance/intolerance were limited to 50–60 countries. The paucity of critical racism and tolerance data precluded the extension of the index beyond the 51 countries that are reported in this paper. Potentially, this index could be improved and expanded with the availability of more data on race relations and on cultural participation, such as proposed in Morrone (2006) and UNESCO (2009).

Regarding the availability of specific data and country-specific information, a major challenge was related to the LPC dimension. Comparable data on multiculturalism and anti-discrimination legislations are not readily available at the international level. The Migrant Integration Policy Index developed by Huddleston et al. (2015), which provides



data for OECD countries, is the best that can be found for anti-discrimination policies. For multicultural legislation, this index used four indicators that are adapted from the Multiculturalism Policy Index (Kymlicka and Banting 2013; Tolley 2016). Kymlicka and colleagues use eight indicators, including constitutional or legislative affirmation, and government provisions for school curriculum, ethnic representation, exemption from dress code, dual citizenship, funding of ethnic organizations, bilingual education, and affirmative action. However, these data are only available for OECD countries, meaning that for this index it was possible to compile comparable data for only two of these indicators: dual citizenship and legislative or policy affirmation for multiculturalism. The ICDI could, therefore, potentially be improved and expanded when more complete data across the world, such as that of the MPI, becomes available.

Indeed, the inclusion and representation of more countries across all indicators would add vigour and robustness to the overall analysis of the state of diversity and multiculturalism. This would especially help in relation to the need for more comparative perspectives, where similar diversity or migration policy objectives are pursued through different policy options and enabling strategies. The example of migrant integration policies in relation to language support across countries as diverse as Australia, New Zealand and France is a good case in point. Although this is provided free of charge in Australia, it is limited to skilled migrants in France and attracts substantial fees in the case of New Zealand, meaning that the overall assessment and rating need to be more nuanced, reflecting these specificities. Yet, and despite some of these empirical and methodological limitations, the proposed index remains a very useful tool for gaining an overall insight into how particular countries are tracking overall in the ICD and diversity agenda and, more specifically, in relation to some of its key dimensions. Such analysis can be critically significant for policymakers when considering targeted policies aimed at enhancing social cohesion and the prevention of possible social fissures.

7 Conclusion

This paper discussed and presented the conceptual, empirical and data-specific issues that shaped the development of the ICDI, a composite index for assessing overall structural conditions for positive intercultural relations within individual countries. Using established methods of index construction, and following an overall conceptual approach based on different theoretical approaches to interculturalism (Elias and Mansouri 2020), the ICDI was constructed based on three inter-connected domains containing 31 relevant indicators. The key assumption here is that positive structural conditions within any given society are needed if the overall situation is to be conducive to positive ICD, that is both supportive of the diversity agenda and capable of circumventing potential social fissures and intercultural tensions. During a period of heightened global tensions, related to rising levels of hate speech, entrenched socio-economic inequalities and persistent forms of discrimination, the proposed index has the potential to offer up-to-date, nuanced reports on how different countries are placed in relation to the diversity agenda, particularly from the perspective of ICD. The key purpose here is to explain in specific empirical terms, and on the basis of robust, comparable data, the critical importance of ICD in the pursuit of broad anti-racism and pro-social cohesion agendas. At a time when social connectivity is changing because of tectonic changes around digital technologies and as a result of current global crises, a



data-driven understanding of intra-community and inter-community relations is essential for increased solidarity and collaboration across national, cultural and religious lines.

Preliminary analyses indicate that key findings of ICDI perform comparatively well relative to other established indices. This reflects the robustness of overall data sources used and collated for the index, as they address its main dimensions and the various indicators. Global indices need to tackle the twin challenges of conveying insights into broad thematic issues – in the case of the ICDI, pertaining to dialogue and diversity, while also being attentive to local specificities that affect the manifestations of particular indicators – and how these might be weighted, scored and ultimately reported comparatively in the global landscape. This precise tension between robust data that can be used comparatively and across different countries and the diverse set of local settings that presents one of the main challenges for the ICDI project. In this context, we envisage that additional work will be undertaken to expand and improve the data sources for the ICDI, to establish a more complete and meaningful global picture of how countries are pursuing the key conditions for intercultural relations and diversity governance.

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Authors' contribution FM: coordinated the research, contributed to the conception and design, and wrote the manuscript. AE: contributed to research design, compiled the data, conducted the analysis, and wrote the manuscript.

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Data Availability All the data used in this research can be provided by the authors upon request

Code availability The software codes used in this research can be provided by the authors upon request

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest

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Appendix

Table 7 The Intercultural Dialogue Index (ICDI): Index structure and data sources

	Indicators	Data source	Year	Indicator value range	Indicator value range Description of variable
1	Multicultural/diversity: act or policy	Multicultural Policy Index [MPI] (2019); Various years 0–2 National constitutions	Various years	0-2	Availability of explicit multicultural act or favourable diversity policy; 0 = Least favourable, 2 = Most favourable
7	Measures on integration of migrants	United Nations (2017)	2015	0–3	Data ranks countries based on availability of: (a) Language skill training, (b) transfer of professional credentials, (c) protection against non-discrimination [Best=3; Worst=0]
8	Dual citizenship	Multicultural Policy Index [MPI] (2019); Various years National constitutions	Various years	0-1	Constitutional affirmation of dual citizenship rights; 0 = Not allowed, 1 = Allowed
4	Anti-discrimination: act or policy	Migrant Integration Policy Index [Huddleston et al (2015); Panter et al. (2017); https://www.legislationline.org	Various years 0-2	0–2	Explicit anti-discrimination act/policy. 2 = national act or policy available and concrete anti-discrimination measure taken; 1 = concrete anti-discrimination measure taken; 0 = No policy or concrete measure taken.
S	Ratification of international anti-discrim- United Nations (2019) ination convention	United Nations (2019)	Various years 0-1	0 – 1	Signatory status on the International convention on the elimination of all forms or racial discrimination. If the country made a reservation when signing the convention, we assigned a score of 0.5 instead of the full score of 1.
9	Tourism arrivals	World Bank, WDI: International tourism 2000 –2015 arrivals, population		0 and above	International tourist arrivals per total population.
7	Cultural participation	UNESCO (2019). World Heritage List Statistics	2019	0 and above	Number of UNESCO world heritage sites in a country.
∞	Number of indigenous living languages	UNESCO Report	2009	0 and above	UNESCO (2009) Investing in cultural diversity and intercultural dialogue.



(continued)	
Table 7	

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11	Indicators	Data source	Year	Indicator value range	Indicator value range Description of variable
Ž 6	Number of immigrant living languages	UNESCO Report	2009	0 and above	UNESCO (2009) Investing in cultural diversity and intercultural dialogue.
10 Et	Ethnic Fractionalization index ¹	Alesina & La Ferara	2003	0-1	0 = least fractionalized, 1= most fractionalized
11 Li	Linguistic Fractionalization index	Alesina & La Ferara	2003	0-1	0 = least fractionalized, 1= most fractionalized
12 Re	Religious Fractionalization index	Alesina & La Ferara	2003	0 – 1	0 = least fractionalized, 1= most fractionalized
13 In	Inequality for some ethnic-religious groups ²	World Development Indicators	2004–2015	0-1	The data was averaged across the years to maximize data availability.
14 In	Intergenerational social mobility	World Bank: Global Database on Intergenerational Mobility	2018	0-100	Intergenerational social mobility in education for those born in 1980-1989 (based on average parental educational attainment). Higher value indicates low relative social mobility (Intergenerational persistence).
15 Le	Level of educational attainment ³	Вагго-Lee Data	2010	0-100	Barro-Lee Educational Attainment Data (aged 15 years and older). Source: http://www.barrolee.com/data/yrsch.htm
16 Ne	Newspapers published	World Development Indicators	1997–2004	0 and above	Daily newspapers, per 1,000 people. Source: https://databank.worldbank.org/reports.aspx?source=wdi-database-archives-(beta)#
M 71	Mobile telephone	International Telecommunications Union 2016	2016	0 and above	Subscription per 100 inhabitants. International Telecommunications Union: http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx



Tab	Table 7 (continued)				
	Indicators	Data source	Year	Indicator value range	Description of variable
18	Internet users	International Telecommunications Union 2016	2016	0 – 100	Percentage of individuals using Internet service. International Telecommunications Union: http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx
19	Intergroup cohesion	Indices of Social Development	2010	0 – 1	Measuring the degree of intergroup respect/cooperation within society based on variables including inter-group disparities, perceived discrimination, and distrust of other groups. Source: http://www.indsocdev.org/data-access.html
20	State Fragility Index	Center for systemic peace	2016	0–25	Based on 14 indicators, including security, political, economic, and social legitimacy, regime type, and conflict.
21	Fragile States Index	Fund for Peace	2019	0-100	Based on 12 indicators, including group grievance, elite fractionalized, security, political stability, economic performance, demographic pressure and external intervention. Source: http://fundforpeace.org/fsi/data/
22	Racism (Attitudes towards other groups)	World Values Survey	2010–2014	0-100	Question asked: 'Would not like to have as neighbours: People of a different race.' World Values Survey: http://www.world valuessurvey.org/WVSDocumentatio nWV6.jsp
23	Global social tolerance index	Zanakis, Newburry and Taras	2016	0 - 1	0 = minimum tolerance, 1 = maximum tolerance
24	Global tolerance index (intolerance)	Das, DiRienzo and Tiemann	2008	0-100	0 = minimum intolerance, 100 = maximum intolerance



	Description of variable
	Indicator value range
	Year
	Data source
lable / (continued)	Indicators

	Indicators	Data source	Year	Indicator value range	Indicator value range Description of variable
25	Religious Restriction Index	Association of Religion Data Archives	2014	0-12	Comprising four variables: (1) Religious Regulation Index, (2) Religious Minority Discrimination Index, (3) State Funding of Religions, and (4) Societal Discrimination of Minority Religions
26	Inclusion for minorities index	Indices of Social Development	2010	0-1	Level of discrimination against vulnerable groups (migrants, refugees, indigenous or lower castes). Values: 1 = fewer groups excluded, 0 = more groups excluded. http://www.IndSocDev.org/
27	Intergroup relations (ethnic exclusion)	Ethnic Power Relations, since 2000 [latest year available]	2018	0-1	Share of excluded ethnic groups if they are 'politically powerless', 'discriminated', or 'self-excluded'. Ethnic Power Relations (EPR) Dataset Family 2018. Vogt et al (2015). https://icr.ethz.ch/data/epr/#ed
28	Discrimination of ethnic minorities	Minorities at Risk Database	2004 –2006	0–14	A composite measure of four variables: political, economic, religious and lingual based: 0 = no discrimination, 14 = exclusion/repressive policy, 2006. Source: http://www.mar.umd.edu/
29	Press Freedom Index	Reporters Without Borders	2019	0-100	2019 World Freedom of Press Index, 0 = the most free, 100 = least free. Data of press freedom ranking 2019, https://rsf.org/en/ranking_table
30	Freedom of domestic movement	Cingranelli and Richards Human Rights Data Project	2011	0-2	Ease of human mobility (in bound); higher value means more freedom. CIRI Human Rights Data Project. http://www.humanrightsdata.com/p/data-documentation.html

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Indicators		Data source	Year	Indicator value range	Indicator value range Description of variable
31 Freedom of foreign movement	ment and travel	and travel Cingranelli and Richards	2011	0-2	Ease of human mobility (out bound); higher value means more freedom. CIRI Human Rights Data Project. http://www.humanrightsdata.com/p/data-documentation.html

based on data from Encyclopaedia Britannica. (2) Inequality: For New Zealand (2014), Singapore (2011), and Trinidad & Tobago (1992), data are for the latest available year from the WIID3.4 database (2017). (3) Educational attainment data for Ethiopia, (2011), Burkina Faso (2014), and Lebanon (2007) are for those aged 25 years and over, year from the WIID3.4 database (2017). Note. Data source, coverage, and indicator value range. (1) Ethnic fractionalization: For Yemen, Gini Index (2000) was computed applying Alesina & La Ferara's method and are based on World Bank WDI. For Azerbaijan and Belarus (2011), Georgia and Macedonia (2009), Guinea (2016), and Nigeria (2010), the same data are from United Nations Statistics Division (2019).

Table 8 Indicator Weights from Principal Component Analysis	l Component Analysis			
Dimension	Component	Indicator Name	Raw Weight	Scaled Weight
Legislative & Policy Context (LPC)	Multiculturalism	Multicultural/diversity: act or policy	69.0	0.41
		Migrant Integration measures	0.55	0.32
		Dual citizenship	0.46	0.27
	Anti-discrimination	Anti-discrimination: act or policy	0.71	0.50
		Ratification of UN anti-discrimination convention	0.71	0.50
Structural Foundations (SFs)	Platform for social contact	Tourism arrivals per population	0.28	0.14
		Cultural participation	0.64	0.39
		Number of indigenous living languages	0.44	0.22
		Number of immigrant living languages	0.57	0.30
	Fractionalization	Ethnic Fractionalization index	99.0	0.39
		Linguistic Fractionalization index	89.0	0.41
		Religious Fractionalization index	0.33	0.20
	Socio-economic inequality	GINI coefficient	0.43	0.25
		Intergenerational social mobility	09.0	0.35
		Level of educational attainment	89.0	0.40
	Access to communication	Newspapers published	0.59	0.34
		Mobile telephone	0.52	0.30
		Internet users	0.62	0.36
	Cohesion and stability	Intergroup cohesion	0.52	0.30
		State Fragility Index	0.60	0.35
		Fragile States Index	0.61	0.35



0.31 0.24 0.31 0.35

Intergroup relations (ethnic exclusion)

Discrimination of ethnic minorities

Freedom of domestic movement

Press Freedom Index

Freedom and rights

0.61

0.53

Scaled Weight 0.33 0.32 0.34 0.14 0.31 Raw Weight 0.58 0.56 0.59 0.26 0.59 Racist attitudes towards other groups Global tolerance index (intolerance) Inclusion for minorities index Global social tolerance index Religious Restriction Index Indicator Name Minority representation Intercultural attitudes Component Intercultural Opportunities (ICO) Table 8 (continued) Dimension

Note. The row weights are PCA loadings for the first component. The second column reports normalized weights scaled between 0 and 1.

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Table 9 Best and worst cases of indicator values	r values				
Dimension	Component	Indicator name	Obs.	Best score	Worst score
Legislative & policy context (LPC)	Multiculturalism	Multicultural/diversity: act or policy	138	1	0
		Measures on integration of migrants	190	3	0
		Dual citizenship	197	1	0
	Anti-discrimination	Anti-discrimination: act or policy	234	2	0
		Ratification of international anti-discrimination	234	1	0
Structural foundations (SFs)	Platform for cultural contact	Tourism arrivals per population	200	32.757	0
		Cultural participation	234	55	0
		Number of living indigenous languages	201	820	1
		Number of living immigrant languages	164	149	1
	Fractionalization	Ethnic Fractionalization index	190	0	0.930
		Linguistic Fractionalization index	202	0	0.923
		Religious Fractionalization index	214	0.002	0.860
	Socio-economic inequality	Gini coefficient	158	24.95	63.55
		Intergenerational social mobility	163	0.17	1.16
		Level of educational attainment	177	92.51	2.75
	Access to communication	Newspapers published	129	563.34	60.0
		Mobile telephone subscription	203	332.1	0
		Internet users	208	66	0
	Cohesion and stability	Intergroup cohesion	159	0.79	0.18
		State Fragility Index	168	0	24
		Fragile States Index	178	0	120



85.44

7.82

13

Worst score 58.1 Best score Obs. 99 Global social tolerance index (tolerance) Racist attitudes towards other groups Indicator name Intercultural attitude Component Intercultural opportunities (ICO) Table 9 (continued) Dimension

54.53

5.42

55

Social tolerance index (intolerance)

12

176 129 173 117 117 187

0.28

0.65

Intergroup relations (ethnic exclusion)

Discrimination of minorities

Press Freedom Index

Freedoms and rights

Inclusion for Minorities Index

Religious Restriction Index

Minority representation

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putation of the ICDI (n=234).

Freedom of domestic movement



Table 10 Robustness check: difference in ICDI scores, PCA weighting vs. equal weighting

Country	Abbreviation	Difference	e in scores
		absolute	Percentage
Algeria	DZA	0.03	2.76
Argentina	ARG	0.01	1.48
Australia	AUS	0.03	2.82
Belarus	BLR	0.04	3.62
Brazil	BRA	0.01	1.01
Bulgaria	BGR	0.04	3.94
Canada	CAN	0.03	2.59
Chile	CHL	0.02	1.53
China	CHN	0.04	3.96
Colombia	COL	0.01	0.72
Cyprus	CYP	0.02	2.20
Egypt	EGY	0.04	3.57
Estonia	EST	0.02	2.15
Finland	FIN	0.02	2.39
France	FRA	0.02	2.47
Georgia	GEO	0.03	2.79
Germany	DEU	0.04	4.14
Ghana	GHA	0.00	0.40
India	IND	0.03	2.96
Indonesia	IDN	0.02	2.44
Iran	IRN	0.03	3.37
Italy	ITA	0.01	1.39
Japan	JPN	0.02	2.14
Jordan	JOR	0.02	2.35
Korea, South	KOR	0.02	1.59
Kyrgyzstan	KGZ	0.03	2.60
Malaysia	MYS	0.03	3.17
Mexico	MEX	0.02	1.69
Morocco	MAR	0.02	1.55
Netherlands	NLD	0.02	2.10
New Zealand	NZL	0.01	1.37
Nigeria	NGA	0.02	1.61
Peru	PER	0.01	1.39
Philippines	PHL	0.01	1.20
Poland	POL	0.03	3.24
Romania	ROU	0.03	3.02
Russian Federation	RUS	0.04	3.82
Rwanda	RWA	0.01	0.66
Singapore	SGP	0.03	2.86
Slovenia	SVN	0.03	2.98
South Africa	ZAF	0.00	0.40
Spain	ESP	0.02	2.22
Sweden	SWE	0.04	3.67
Thailand	THA	0.02	2.36



Table	10	(continued)
Iabic	10	(Commuca)

Country	Abbreviation	Difference	e in scores
		absolute	Percentage
Trinidad and Tobago	TTO	0.02	1.76
Turkey	TUR	0.03	2.68
Ukraine	UKR	0.04	3.57
United Kingdom	GBR	0.03	3.12
United States	USA	0.03	2.95
Uruguay	URY	0.00	0.22
Vietnam	VNM	0.02	2.23
Global Average	0.02	2.35	
Global Standard Deviation	0.00	-0.03	

Note. Values are computed using the formula $Difference = ICDI_{W2} - ICDI_{W1}$ where W1=PCA weights and W2=Average weights. As indicated ICDI based on the average weights is slightly higher than ICDI based on PCA weights.

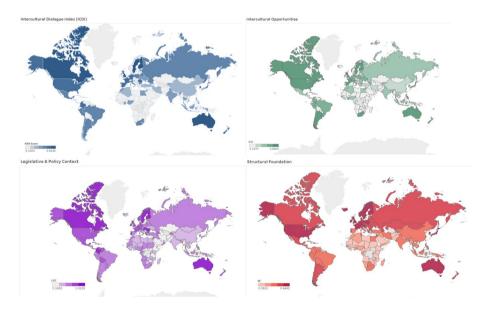


Fig. 8 The Intercultural Dialogue Index (ICDI): Dimensions

References

Abdallah-Pretceille, M. (2006). Interculturalism as a paradigm for thinking about diversity. *Intercultural Education*, 17(5), 475–483.

Alba, R., & Nee, V. (1997). Rethinking assimilation theory for a new era of immigration. *International Migration Review*, 31(4), 826–874.



- Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., & Wacziarg, R. (2003). Fractionalization. *Journal of Economic Growth*, 8(2), 155–194.
- Alizadeh, S., & Chavan, M. (2016). Cultural competence dimensions and outcomes: A systematic review of the literature. *Health and Social Care in the Community*, 24(6), e117–e130.
- Anheier, H. K., List, R. L., Kononykhina, O., & Cohen, J. L. (2017). Cultural participation and inclusive societies. A thematic report based on the indicator framework on culture and democracy. Strasbourg Cedex: Council of Europe.
- Banting, K., & Kymlicka, W. (2013). Is there really a retreat from multiculturalism policies? New evidence from the multiculturalism policy index. *Comparative European Politics*, 11(5), 577–598.
- Barrett, M. (2013). *Interculturalism and multiculturalism: similarities and differences*. Strasbourg Cedex: Council of Europe.
- Bello, V. (2017). Interculturalism as a new framework to reduce prejudice in times of crisis in European countries. *International Migration*, 55(2), 23–38.
- Benigni, R., & Giuliani, A. (1994). Quantitative modeling and biology: the multivariate approach. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 266(5), R1697–R1704.
- Besley, T., & Peters, M. A. (2011). Interculturalism, ethnocentrism and dialogue. *Policy Futures in Education*, 9(1), 1–12.
- Bouchard, G. & Taylor, C., (2008). Building the Future: A Time for Reconciliation. In: T. Das Gupta, C.E. James, C. Andersen, G. Galabuzi, and R.C.A. Maaka, eds. *Race and Racialization, 2E: Essential Readings*. Toronto: Canadian Scholars.
- Cantle, T. (2012). Interculturalism: The new era of cohesion and diversity. London: Palgrave Macmillan. Cantle, T. (2015). Implementing intercultural policies. In R. Zapata-Barrero (Ed.), Interculturalism in cities: Concept, policy and implementation (pp. 76–95). Cheltenham: Edward Elgar Publishing.
- Chen, G. M. (2010). The impact of intercultural sensitivity on ethnocentrism and intercultural communication apprehension. *Intercultural Communication Studies*, 19(1), 1–9.
- Cingranelli, D. L., & Richards, D. L. (2011). Cingranelli-Richards Human Rights Data Project. http://www.humanrightsdata.com/p/data-documentation.html
- Council of Europe. (2008). White Paper on Intercultural Dialogue. Strasbourg Cedex: Council of Europe. Retrieved from August 9 2017 www.coe.int/dialogue.
- Council of Europe. (2016). Intercultural Cities Annual Report: sharing our Cities, sharing our Future. Retrieved from August Accessed 9 2017 https://rm.coe.int/16806c9674.
- Das, J., DiRienzo, C., & Tiemann, T. (2008). A global tolerance index. Competitiveness Review: An International Business Journal, 18(3), 192–205.
- Dessel, A., & Rogge, M. E. (2008). Evaluation of intergroup dialogue: A review of the empirical literature. *Conflict Resolution Quarterly*, 26(2), 199–238.
- Dovidio, J. F., Gaertner, S. L., & Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes and Intergroup Relations*, 6(1), 5-21.
- Elias, A. (2017). Racism, anti-racism and intercultural dialogue. In F. Mansouri (ed) *Interculturalism at the Crossroads: Comparative perspectives on concepts, policies and practices.* Paris: UNESCO Publishing.
- Elias, A., & Mansouri, F. (2020). A systematic review of studies on interculturalism and intercultural dialogue. *Journal of Intercultural Studies*, 41(4), 490–523.
- Fearon, J. D., & Laitin, D. D. (2003). Ethnicity, insurgency, and civil war. *American Political Science Review*, 97(01), 75–90.
- Foa, R., & Tanner, J. C. (2012). Methodology of indices of social development. Working Paper, No. 2012–04. The Hague: International Institute of Social Studies of Erasmus University Rotterdam.
- Fund for Peace. (2019). Fragile States Index. Retrieved from November 16, 2019. http://fundforpeace.org/fsi/data/.
- Graf, S., Paolini, S., & Rubin, M. (2014). Negative intergroup contact is more influential, but positive intergroup contact is more common: Assessing contact prominence and contact prevalence in five Central European countries. *European Journal of Social Psychology*, 44(6), 536–547.
- Hammer, M. R. (2005). The intercultural conflict style inventory: A conceptual framework and measure of intercultural conflict resolution approaches. *International Journal of Intercultural Relations*, 29(6), 675–695.
- Huddleston T., Bilgili, O., Joki, A.L., &Vankova, Z. (2015). Migrant Integration Policy Index 2015. Brussels: Barcelona Center for International Affairs (CIDOB), Barcelona and Migration Policy Group (MPG).
- Inglehart, R., Haerpfer, C., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., et al., et al. (Eds.). (2014). World Values survey: Round Six - Country-Pooled datafile version: www.worldvaluessurvey.org/WVSDocumentationWV6.jsp. Madrid: JD Systems Institute.



Institute for Economics and Peace. (2017). *Global Peace Index: Measuring peace in a complex world*. Sydney. Retrieved from November 7, 2019http://visionofhumanity.org/reports.

- James, M. R. (1999). Critical intercultural dialogue. Polity, 31(4), 587-607.
- Johnson, J., Lenartowicz, T., & Apud, S. (2006). Cross-cultural competence in international business: toward a definition and a model. *Journal of International Business Studies*, 37, 525–543. https://doi.org/10.1057/palgrave.jibs.8400205.
- Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrics, 39, 31-36.
- Levrau, F., & Loobuyck, P. (2013). Should interculturalism replace multiculturalism? Ethical Perspectives, 20(4), 605–630.
- Mansouri, F. (Ed.). (2017). Interculturalism at the Crossroads: Comparative perspectives on concepts, policies and practices. Paris: UNESCO Publishing.
- Mansouri, F., & Arber, R. (2017). Conceptualizing intercultural understanding within international contexts: Challenges and possibilities for education. In F. Mansouri (ed) *Interculturalism at the Cross-roads: Comparative perspectives on concepts, policies and practices*. Paris: UNESCO Publishing.
- Mansouri, F., & Modood, T. (2020). The complementarity of multiculturalism and interculturalism: theory backed by Australian evidence. *Ethnic and Racial Studies*. https://doi.org/10.1080/01419 870.2020.1713391.
- McConahay, J. B., Hardee, B. B., & Batts, V. (1981). Has racism declined in America? It depends on who is asking and what is asked. *Journal of Conflict Resolution*, 25(4), 563–579.
- Meer, N., & Modood, T. (2009). The multicultural state we're in: Muslims, 'multiculture' and the 'civic rebalancing of British multiculturalism. *Political studies*, 57(3), 473–497.
- Meer, N., & Modood, T. (2012). How does interculturalism contrast with multiculturalism? *Journal of Intercultural Studies*, 33(2), 175–196.
- Minorities at Risk Project. (2009). Minorities at Risk Dataset. College Park, MD: Center for International Development and Conflict Management. Retrieved from November 7, 2019 http://www.mar.umd.edu/.
- Modood, T., & Meer, N. (2012). Interculturalism, multiculturalism or both? *Political Insight*, 3(1), 30–33.
- Morrone, A. (2006). Guidelines for measuring cultural participation. Montreal: UNESCO Institute for Statistics.
- Odora-Hopper, A. (2007). *Investing in cultural diversity and intercultural dialogue*. Paris: UNESCO World Report.
- OECD (2008). Handbook on Constructing Composite Indicators: Methodology and User Guide. OECD publishing.
- Paluck, E. L. (2009). Reducing intergroup prejudice and conflict using the media: A field experiment in Rwanda. *Journal of Personality and Social Psychology*, 96(3), 574–587.
- Panter, E., Primiani, T., Hasan, T. & Pontaza, E.D. (2017). Antidiscrimination law and shared prosperity. Policy Research Working Paper, WPS7992, World Bank.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751–783.
- Phipps, A. (2014). 'They are bombing now': 'Intercultural dialogue' in times of conflict. *Language and Intercultural Communication*, 14(1), 108–24.
- Porter, M. E., Stern, S., & Green, M. (2014). Social progress index 2014. Washington DC: Social Progress Imperative.
- Reporters without Borders. (2019). World Freedom of Press Index. Data of press freedom ranking 2019. Retrieved from September 23 2019 https://rsf.org/en/ranking_table.
- Rodríguez-García, D. (2010). Beyond assimilation and multiculturalism: A critical review of the debate on managing diversity. *Journal of International Migration and Integration*, 11, 251–271.
- Sarmento, C. (2014). Interculturalism, multiculturalism, and intercultural studies: Questioning definitions and repositioning strategies. *Intercultural Pragmatics*, 11(4), 603–618.
- Stokke, C., & Lybaek, L. (2018). Combining intercultural dialogue and critical multiculturalism. Ethnicities, 18(1), 70–85.
- Taylor, C. (2012). Interculturalism or multiculturalism? *Philosophy and Social Criticism*, 38(4–5), 413–423.
 Tolley, E. (2016). *Multiculturalism policy index: Immigrant minority policies*. Kingston, Canada: Queens University. Policy Studies.
- UNESCO. (2009). Measuring cultural participation. 2009 Framework for Cultural Statistics Handbook No. 2. Montreal: UNESCO Institute for Statistics.
- UNESCO. (2017). Intercultural Dialogue. Retrieved from June 14 2017http://www.unesco.org/new/en/culture/themes/dialogue/intercultural-dialogue/.
- UNESCO. (2018). UNESCO survey on intercultural dialogue 2017. Scientific and Cultural Organization, Paris: United Nations Educational.



- United Nations. (2017). International Migration Policies: Data Booklet (ST/ESA/ SER.A/395). Department of Economic and Social Affairs, Population Division.
- United Nations Statistics Division. (2019). Population 15 years of age and over, by educational attainment, age and sex. Demographic Statistics Database. Retrieved from September 28 2019 http://data.un.org/Data.aspx?d=POP&f=tableCode%3A30.
- Vertovec, S. (2007). Super-diversity and its implications. Ethnic and Racial Studies, 30(6), 1024–1054.
- Vertovec, S., & Wessendorf, S. (Eds.). (2010). The Multiculturalism Backlash: European Discourse, Policies and Practices. London: Routledge.
- Vogt, M., Bormann, N., Ruegger, S., Cederman, L., Hunziker, P., & Girardin, L. (2015). Integrating data on ethnicity, geography, and conflict: The ethnic power relations data set family. *Journal of Conflict Resolution*, 59(7), 1327–1342.
- Walton, J., Priest, N., & Paradies, Y. (2013). Identifying and developing effective approaches to foster intercultural understanding in schools. *Intercultural Education*, 24(3), 181–194.
- Wiater, P. (2010). Intercultural dialogue in the framework of european human rights protection. Strasbourg-Cedex: Council of Europe Publishing.
- World Bank. (2019). Doing Business 2019. The World Bank Group, Washington D.C. Retrieved from November 23 2019 http://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/ English/DB2019-report_web-version.pdf.
- World Bank. (2019). Inclusion of minorities index. Indices of Social Development. Retrieved from September 24 2019 http://www.IndSocDev.org/.
- World Bank. (2019). Daily Newspapers per 1000 People. World Development Indicators, WDI Database Archives, Version July 2010. Retrieved from September 23 2019 https://databank.worldbank.org/reports.aspx?source=wdi-database-archives-(beta).
- Zanakis, S. H., Newburry, W., & Taras, V. (2016). Global Social tolerance index and multi-method country rankings sensitivity. *Journal of International Business Studies*, 47, 480–497.
- Zapata-Barrero, R. (2015). *Interculturalism in Cities: Concept, policy and implementation*. Cheltenham: Edward Elgar Publishing.
- Zapata-Barrero, R. (2017). The intercultural turn in Europe: process of policy paradigm change and formation. In F. Mansouri (Ed.), *Interculturalism at the crossroads: Comparative perspectives on concepts*, policies and practices (pp. 169–192). Paris: UNESCO Publishing.
- Zapata-Barrero, R. (2019). Intercultural citizenship in the Post-multicultural Era. London: Sage.
- Zhang X, Zhou M (2019) Interventions to promote learners' intercultural competence: A meta-analysis. Int J Intercultural Relat 71:31–47

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