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# Discrimination and Civic Engagement of Immigrants in Western Societies. A Systematic Scoping Review

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## Abstract

Research has highlighted the barriers that immigrants face due to discrimination in their everyday lives. At the same time, it has been shown that immigrants get civically engaged to counteract discrimination and to work for structural change. To contribute to ongoing research on how discrimination affects attitudes, behaviour, and eventually life opportunities of immigrants, we investigate in a scoping review conceptualisations and measurements of discrimination and civic engagement used in empirical quantitative studies. We take systematic stock of publications that examine the link between discrimination—perceived and experienced—and the civic engagement of immigrants in Western societies. Using three of the leading databases for the social sciences, we systematically search for literature on discrimination and civic engagement over the past 50 years. On the basis of the retrieved publications, we assess how studies conceptualise and measure discrimination and civic engagement and investigate how scholars represent the link between discrimination and civic engagement in their statistical models. We introduce an analytical framework for discrimination that leads to more analytical clarity and may serve as a tool to investigate the link between discrimination and civic engagement more precisely. From our review, we derive recommendations as to how studies from different disciplines can learn and benefit from each other in order to gather knowledge on the mechanisms that underlie the link between discrimination and civic engagement.

**Keywords** Discrimination · Civic engagement · Participation · Immigrants · Muslim

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**Statement** The scoping review protocol has been registered as preprint at <https://osf.io/preprints/socarxiv/rkht4>

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## Introduction

Immigrants, especially Muslims, are targets of discriminatory acts and practices in the European and North American countries they live in (Thijssen et al., 2022; Riach & Rich, 2002). Various studies highlight the negative impact of discrimination on the lives of those affected. Among the negative consequences are physical and mental health problems, a reduction of life satisfaction and quality of life, and a withdrawal from social and political life (Bertrand & Duflo, 2017).

At the same time, research shows that discriminatory experiences can motivate people to work on the provision of the collective good. They work on social change to lessen discriminatory circumstances and to improve living conditions for all immigrants in their societies. A key instrument to tackle this is civic engagement (Agostini & van Zomeren, 2021).

Given these contrary outcomes, we revisit this strand of the academic literature and take systematic stock of it. Our goal is to identify potential sources for the heterogeneity of the results. First, we make an inventory of the study characteristics to get an idea of the theoretical, methodological, and empirical scope of this research body. Second, we investigate how researchers conceptualise and measure discrimination and civic engagement, and whether they take different forms of both into account. Third, we assess how scholars represent the link between discrimination and civic engagement in their statistical analyses.

The topic is, in general, paramount for democracy. Discrimination violates the democratic principle of equal worth of all persons. But the democratic interest goes even further: Civic engagement is considered to be a pre-requisite for a vivid, functioning, and responsive democracy; it is fruitful to promote structural change. But public engagement, when aggressive, is also a challenge to the system. Disadvantaged people have the biggest need to have their interests included in political outcomes, but are seldom loud and often overlooked in the decision-making process (Schlozman et al., 2012). Thus, it is important to know how far discrimination depresses civic engagement and under what circumstances discriminated people get active to establish equal opportunities for everyone. Our scoping review could also be valuable for internal academic reasons. Research on discrimination and related concepts, such as racism, is booming. One reason is that discrimination is key for understanding social inequality, a major concern in all the social sciences. Another reason is that discrimination has lately become subject to (government-sponsored) research funding. For example, the German government spent more than 10 million euros in the past years to better understand the many facets of discrimination and racism immigrants and other population groups are facing, including hostility towards Islam and Muslims.<sup>1</sup> The public and political interest in this topic is similarly high in other European

<sup>1</sup> Examples for monitoring and analysing discrimination are the set-up of the Independent Expert Group on Anti-Muslim Sentiment (UEM: [www.bmi.bund.de/SharedDocs/kurzmeldungen/DE/2023/06/dik-uem.html](http://www.bmi.bund.de/SharedDocs/kurzmeldungen/DE/2023/06/dik-uem.html)) and the National Monitor of Discrimination and Racism (NaDiRa: [www.dezim-institut.de/en/institute/national-monitoring-of-discrimination-and-racism-nadira/](http://www.dezim-institut.de/en/institute/national-monitoring-of-discrimination-and-racism-nadira/)), both accessed 4 April 2024.

countries.<sup>2</sup> Thus, opportunities for doing research on discrimination, its causes and consequences, are high.

At least two developments since the 2000s have contributed to the burgeoning of this ongoing research trend, from two directions. First, the terror attacks of 9/11 in the USA and later examples occurring in several European countries, carried out by Muslim immigrants to Europe, raised interest in the causes and correlations that led to such activities, albeit extremist ones. One of the factors taken into consideration has been perceptions of, and experiences with, discrimination (e.g. Wiktorowicz, 2005; McCauly and Moskalenko, 2008). Second, the exponential rise of openly displayed anti-immigrant sentiment and racism in the USA and Europe in the past ten years has proved that there are real disadvantages and barriers in the everyday lives of non-white people. This led academia to take an interest in the consequences of discrimination, in particular to the question as to how aggrieved persons react to protect themselves or to work for structural change.

This is where our scoping review steps in. We offer an overview of the scholarly, peer-reviewed journal literature on this topic, based on a systematic search in academic databases to provide a map of the field. Moreover, our assessment of the concepts and measures of discrimination and civic engagement, our concept proposal for discrimination, and our look on the analyses that link both statistically might assist academics working in this field in designing their own studies.

We begin with the definition and conceptualisation of the two key concepts: discrimination and civic engagement (Conceptual Frameworks for Discrimination and Civic Engagement). It is followed by the description of our method that we used to yield studies on this topic systematically (Method: Systematic Scoping Review). The centrepiece of this paper is the systematic scoping review of these retrieved studies (Results of the Scoping Review). Within this, we start with a description of the main characteristics of the studies (Characteristics of Studies), followed by an examination of the conceptual and theoretical issues regarding discrimination and civic engagement in these studies (Assessing the Reporting of Definitions, Concepts, and Instruments for Discrimination and Civic Engagement), and then proceed with an assessment of the measurement of these two key concepts (Taking Stock of Discrimination Types and Forms of Civic Engagement Addressed in Studies). We finish this section with a close look at the specification of the empirical models in the studies (Assessing the Statistical Models on Discrimination and Civic Engagement). We close the article with a discussion of the yielded studies, and a critical look on our own approach (Discussion of Study Results), and conclude with an outlook on future research (Conclusions).

## Conceptual Frameworks for Discrimination and Civic Engagement

So as to delimit the field for our scoping review, we present the definitions and concepts of discrimination and civic engagement that we use as guidelines for our systematic search. Moreover, we propose a conceptualisation of discrimination that

<sup>2</sup> Examples are the European Union Agency for Fundamental Rights (FRA) for countries in the European Union, or the Anti-Muslim Hatred Working Group of the UK government.

may serve as an analytical tool for a precise assessment of the link to civic engagement and its various forms.

We use a definition for discrimination offered by Bertrand and Duflo (2017, p. 310) who define discrimination as “the differential (less favourable) treatment of members of a minority group (here: immigrants) compared to members of a majority group (here: non-immigrants) with otherwise identical characteristics in similar circumstances”.

To specify discriminatory forms, we differentiate between the source and target of discrimination. Regarding the target of discrimination, this is the well-known distinction between personal discrimination and group-level grievance. Klandermans et al. (2008, p. 994) pointed to early social psychological research on deprivation that made this distinction (e.g. Runciman, 1966), and to studies that found group grievances more important for civic engagement than personal deprivation (e.g. Martin, 1986; Major, 1994). Studies from a political sciences’ perspective, however, found that individual-level discrimination was more mobilising than group-level discrimination; however, this was dependent on the group identity someone adopted (Schildkraut, 2005). These results, albeit contradictory, suggest that there is something in the distinction between individual-level and group-level discrimination.

Regarding the source of discrimination, we differentiate between interpersonal and institutional discrimination, and discriminatory culture (see, for a similar typology, Krieger, 1999, p. 301).<sup>3</sup> The first takes place in personal encounters in everyday life; the second is conducted by state and non-state institutions through law, regulations, or practices, or by one of its representatives; the third refers to the “totality of ways in which societies foster discrimination” (Krieger, 1999, p. 301). This distinction of sources and targets of discrimination results in a 2 × 3 table, with six possible types of discrimination (Table 1).

We define civic engagement broadly as “action by ordinary persons directed toward some societal outcome (structural change or preservation to the advantage of one’s group)”, borrowing from the classic definition of political participation by Brady (1999, p. 737), subsuming under this term political and non-political participation. Political activities aim to influence political decision-making and can be electoral (i.e. voting) or non-electoral activities that go beyond this. These latter activities are very heterogeneous and range from donating or working for a political party to demonstrating or signing a petition. Non-political activities are all activities that contribute to social life beyond politics, be it supportive of the status quo or aiming at structural change. Examples of such activities are working for a neighbourhood council or being active in a religious community. With this broad approach to civic engagement, we cover a vast range of activities that people use to influence the political decision-making process, improve their social situation, and work for structural change. Although not quite conforming to the common understanding of *civic* engagement, our review also takes studies into account that deal with aggressive activities, such as threats or violence.

<sup>3</sup> Krieger (1999, p. 301) uses the expression “structural discrimination” for what we call discriminatory culture.

**Table 1** Analytical types of discrimination

Source		Interpersonal discrimination	Institutional discrimination	Discriminatory culture
Target	Personal level	Discrimination by a private person, personally perceived or experienced.	Discrimination by an institution or by one of its representatives, personally perceived or experienced.	Discriminatory culture, personally perceived or experienced.
	Group level	Group grievance due to discrimination by a private person.	Group grievance due to discrimination by an institution or by one of its representatives.	Group grievance due to discriminatory culture.

Source: Own compilation

## Method: Systematic Scoping Review

A scoping review is a sub-type of systematic literature reviews. Munn et al. (2018, p. 2) define it as a “tool to determine the scope or coverage of a body of literature on a given topic and give clear indication of the volume of literature and studies available as well as an overview (broad or detailed) of its focus”. Compared to traditional literature reviews, systematic reviews are more transparent and easier to reproduce (Daigneault et al., 2014, p. 268), because they use “systematic and explicit methods to identify, select, and critically appraise relevant research” (Moher et al., 2009, p. 264). They consist of four phases, namely, identification, screening, eligibility, and inclusion (Moher et al., 2009, p. 267).

The first phase is to identify potentially relevant literature. For this, we defined inclusion and exclusion criteria (Table 2); among the most important is a time frame of more than 50 years, the cut-off date being 15 March 2024. The literature search covers the USA, Canada, Australia, New Zealand, and all European countries, focusing on contributions in English as the *lingua franca* in science. To ensure the quality of the retrieved studies, only peer-reviewed journal articles are included. Although there are a vast number of valuable studies using qualitative approaches that examine our research question, we decided to focus on articles using quantitative individual-level data, as we are concerned with the statistical relationships between discrimination and civic engagement. Included articles had to focus on immigrants and their descendants, and not on other disadvantaged groups of a society.

To come up with suitable search terms for the three key concepts of discrimination, civic engagement, and immigrant, we considered different terminology, as well as terms for related concepts. On this basis, we generated search strings with the selected keywords and their combinations, using Boolean operators, truncation, wild card, and field code functions (Table 6 in the Appendix) with the aim of achieving a balance between sensitivity and specificity, to ensure that the search results are exhaustive and the articles are relevant (Siddaway et al., 2019, p. 757).

We conducted the search within three leading databases of the Social Sciences, namely the International Bibliography of the Social Sciences, Scopus, and Web of Science, resulting in 7002 articles. After removing duplicates, 4208 articles remained.

After this initial identification, each article (title, keywords, and abstract) was manually screened in order to assess whether its content matches the study’s objective, as defined by the inclusion and exclusion criteria laid out in Table 2. The process of screening resulted in 363 articles that we deemed to be substantially relevant and were used for the third process: eligibility. In this process, we read the full article and ensured that each article fitted the inclusion and exclusion criteria (Table 2). This led us to exclude 334 articles due to their focus on qualitative data, or because they were not focusing on immigrants, or a lack of a statistical model that includes discrimination or civic engagement. This selection process left us with 29 articles for review. Figure 1 in the Appendix presents a PRISMA flow diagram as suggested by Moher et al. (2009, p. 267) to summarise the literature searching process. It provides information on the number of studies included and excluded at each stage of the process.

**Table 2** Inclusion and exclusion criteria to identify and screen publications for eligibility and inclusion

	Criteria	
	Inclusion	Exclusion
Study design	Original research with quantitative study design.	Theoretical or conceptual works, qualitative study designs.
Level of analysis	Individual-level data.	Aggregate-level data, macro data.
Population group	Focus on immigrants and their descendants, or groups that are mainly immigrants in a country (e.g. Muslims).	Other minorities/disadvantaged groups, e.g. women, handicapped people, non-immigrant ethnic or religious minorities of a country, LGBT+, etc.
Concept specification I	Civic engagement: <i>action by ordinary persons directed toward some societal outcome.</i>	Non-activities, such as attitudes or membership of an organisation.
Concept specification II	Discrimination: <i>members of a minority group (here: immigrants) are treated differentially (less favourably) than members of a majority group (here: non-immigrants) with otherwise identical characteristics in similar circumstances.</i>	Other forms of maltreatment. Attitudes, such as prejudice.
Role of discrimination	Discrimination must be a central part of the empirical analyses in the main paper.	No variable on discrimination in statistical model. Discrimination is a control variable in the model without explicit reason. A proxy is used that measures a different concept. Only mentioned in the supplement part/appendix of the paper.
Role of civic engagement	Civic engagement must be the outcome variable of the empirical analyses in the main paper.	A proxy is used that measures a different concept. Only mentioned in the supplement part/appendix of the paper.
Language	English.	Other languages.
Quality assurance	Peer-reviewed articles in scientific journals only.	Other types of publications, e.g. non-peer-reviewed article, chapters in book, book series, book, conference proceeding.
Regions	USA, Canada, Europe, Australia, and New Zealand only.	Other countries or regions.
Timeline	1970–2024.	Articles published outside this period.
Source: Own compilation		



## Results of the Scoping Review

In order to describe these studies in a systematic, transparent, and replicable fashion, we imported the data of the selected studies to the statistics software Stata by hand-coding, resulting in information on 68 characteristics of the studies. The following sections rely on analyses of parts of these characteristics. To assess, review, and critically appraise the selected studies, we mainly used narrative means that we backed up by frequency counts using Stata.

### Characteristics of Studies

The 29 reviewed articles were published between 2008 and 2024. Their authors, mostly coming from political science ( $n=14$ ) or psychology ( $n=13$ ), used 31 studies to investigate the link between discrimination and civic engagement. Some studies relied on the same data: Oskooii (2020) and Martin (2017) both used the Ethnic Minority British Election Study 2010 (EMBES, 2010), and Bilodeau et al. (2020, 2023) relied on the Provincial Diversity Project 2014 (PDP, 2014). Most of the research was conducted in the USA ( $n=13$ ), followed by research in the UK ( $n=5$ ), Canada ( $n=5$ ), and the Netherlands ( $n=4$ ). As a result, Asian Americans ( $n=7$ ) and Hispanic Americans ( $n=4$ ) are two of the most often investigated immigrant groups. The group most focused on are immigrants from Muslim majority countries ( $n=13$ ); in studies from the European continent, it is those mostly of Turkish or North African/Maghrebi descent, and in studies from the UK, it is those mostly of Pakistani or Bangladeshi background (Table 3).

Recruiting participants nationwide has been the most popular way among the studies we looked at ( $n=11$ ), using random sampling procedures ( $n=6$ ) or relying on randomly recruited or opt-in online panels ( $n=4$ ); for one study operating at the national level, the sampling strategy was unclear. The five studies aiming at representative samples on the sub-national ( $n=3$ ) or communal level ( $n=2$ ) used either random offline or online procedures ( $n=4$ ); for one of these studies, the sampling strategy remains unclear. Nine studies used the infrastructure of their communities of interest. To recruit participants, the researcher relied mostly on convenience sampling by visiting community places, such as centres and religious sites, or by emailing them ( $n=7$ ); one study used an unspecified snowballing technique to communities, and for another study, the sampling strategy is unclear. Five studies used places of learning such as universities or schools as recruiting sites, all but one in a non-probabilistic convenient way. One study used targeted advertisement on Facebook to recruit participants (Table 3).

Due to the various sampling and recruitment strategies, the sample sizes varied greatly, from studies with roughly 100 participants to studies with more than 30,000 participants. Overall, the studies relied on samples with a decent size. Only one study relied on samples with less than 100 observations for analyses; 10 studies used samples with 100 to 400 participants; 10 studies had 401 to 999 participants; and nine studies relied on samples with more than 1,000 participants. For one study, the number of participants with an immigrant background was not clearly reported

**Table 3** Study characteristics

First author	Year	n	Country	Group	Discipline	Setting	Sample	Design	Survey name
Albanesi	2016	a <sup>1</sup>	Italy	Unclear	Psychology	Places of learning, community	Convenience	Cross-section	
Albarracín	2011	156	USA	Mexican	Political Science	Community	Convenience	Cross-section	
Azab	2024	484	European countries	Muslim, various	Political Science	National	Random	Cross-section	ESS 2018
Bilodeau	2017	445	Canada	Visible minority	Political Science	Communal	Unclear	Cross-section	QES 2012
Bilodeau	2020	1,031	Canada	Visible minority	Political Science	Sub-national	Online panel, randomly sampled	Cross-section	PDP 2014
Bilodeau	2023	1,468	Canada	Visible minority	Political Science	Sub-national	Online panel, randomly sampled	Cross-section	PDP 2014
Chan	2022	2,808	USA	Asian American	Political Science	National	Unclear	Cross-section	CMPS 2020
Grant	2008	180	Canada	Unclear	Psychology	Community	Convenience	Cross-section	
Grant	2015	106	Canada	Mostly Asian, African	Psychology	Community	Convenience	Longitudinal	
Hayward	2018	170	USA	Hispanic American	Psychology	Community	Unclear	Cross-section	
Klandermans	2008	279	NL, USA	Turkish, Moroccan	Psychology	Community	Convenience	Cross-section	
Lee	2022	400	USA	Asian American	Communication	National	Online panel, opt-in	Cross-section	
Martin	2017	906	UK	Muslim, various	Political Science	National	Random	Cross-section	EMBS 2010
Martinovic	2014	641	NL, D	Muslim, Turkish	Psychology	Community	Snowballing	Cross-section	
Oskooii	2016	920	USA	Muslim, various	Political Science	Community	Convenience	Cross-section	MAPOS 2007/8
Oskooii	2016	742	USA	Muslim, various	Political Science	National sample	Random	Cross-section	Pew Survey of Muslims 2007
Oskooii	2020	1,980	UK	Various	Political Science	National sample	Random	Cross-section	EMBS 2010
Özdemir	2024	368	NL	Antillean, Chinese, Surinamese	Psychology	National	Unclear	Cross-section	
Pilati	2018	7,655	European cities	various	Political Science	Communal	Random	Cross-section	LOCALMULTI-DEM 2013
Rim	2009	686	USA	Asian American	Political Science	National	Random	Cross-section	PNAAPS 2001/2

**Table 3** (continued)

First author	Year	n	Country	Group	Discipline	Setting	Sample	Design	Survey name
Shanaah	2022	3,115	UK	Muslim, various	Political Science	National	Random	Cross-section	UK CS 2010/11
Shanaah	2022	917	UK	Muslim, various	Political Science	National	Online panel, opt-in	RCT	
Sirin	2011	59	USA	Muslim, various	Psychology	Place of learning	Convenience	Cross-section	
Spaiser	2012	626	Germany	Muslim, Turk, Arab	Political Science	Place of learning	Convenience	Cross-section	
Tausch	2011	466	UK	Muslim, various	Psychology	Facebook	Targeted advertisement	Cross-section	
Tran	2017	179	USA	Asian American	Psychology	Community mailings, social media	Convenience	Cross-section	
Tran	2024	3,962	USA	Asian	Political Science	Sub-national	Random	Cross-section	CHIS 2021
Troian	2019	110	France	Maghrebi	Psychology	Community	Convenience	Cross-section	
Van Bergen	2015	398	NL	Turkish, Moroccan	Education	Place of learning	Convenience	Cross-section	Young and Drivers 2011
Wiley	2021	1,501	USA	Latino	Psychology	National	Online panel, randomly recruited	Cross-section	Pew LNS 2018
Yi	2022	37,692	USA	Asian American	Psychology	Place of learning	Random	Cross-section	MISL 2015

Source: Results of systematic literature search in IBSS, WoS, and Scopus

*ATP* American Trends Panel, *CHIS* California Health Interview Survey, *CMPS* Collaborative Multiracial Post-Election Survey, *EMBE*s Ethnic Minority British Election Survey, *ESS* European Social Survey, *LNS* Latino National Survey, *MAPOS* Muslim American Public Opinion Survey, *MISL* Multi-Institutional Study of Leadership, *PNAAPS* Pilot National Asian American Political Survey, *QES* Quebec Election Survey, *UK CS* UK Citizenship Survey

<sup>1</sup><sub>a</sub> not clearly reported

(Table 3). As regards the study designs, 29 of 31 studies used data from cross-sectional designs. One study had an experimental design, and one study used data from a longitudinal design (Table 3).

### **Assessing the Reporting of Definitions, Concepts, and Instruments for Discrimination and Civic Engagement**

In systematic reviews, especially in meta-analyses, the assessment of study quality is an important part of the statistical analysis itself, because study results are weighted on its basis. That is to acknowledge that some results, i.e. parameter estimations, are less biased than others. Also, for scoping reviews, it is common practice to assess the quality of the studies, although this is more narrative in nature. We will join this practice of narrative assessment, focussing in this section on the reporting quality regarding the definition, concepts, and measurement for discrimination and civic engagement.<sup>4</sup>

Only a few studies provided a definition, a conceptualisation, or a specification of discrimination ( $n=7$ ) or civic engagement ( $n=8$ ), or gave reasons for analytical distinctions, in order to make clear which phenomena they wish to investigate. Most study authors reported the instruments they used to measure discrimination ( $n=26$ ) or civic engagement ( $n=29$ ), either in the main paper or elsewhere (Table 4).<sup>5</sup>

We now take a closer look into those studies that specified their key concepts, starting with discrimination: either experienced or perceived. Klandermans et al. (2008) understand discrimination as “grievances (...) defined as a sense of indignation about the way authorities are treating a social or political problem” (p. 994, with reference to Klandermans, 1997). Oskooii (2016) defines discrimination as an “act of treating a person as a second-class citizen or inferior, distrustful, or undeserving of equality” (p. 615). Among our selected studies, he is the first to analytically divide institutional (calling it “political discrimination”) and interpersonal discrimination (calling it “societal discrimination”) (both p. 616). He uses this distinction in his later study as well, but omits a general definition of discrimination (Oskooii, 2020, p. 869). Building on Oskooii’s contribution, Bilodeau et al. (2023) differentiate between public sphere discrimination “as experiences of discrimination that take place in relation to agents of the state such as police officers, judges or any representative of the state” and private sphere discrimination “as experiences of discrimination that take

<sup>4</sup> Reporting quality is one component of appraising the quality of a study, the other being its methodological quality. This differentiation is built on the classic idea that transparency is one of the three criteria for scientific quality—the other two being validity and reliability—because it enables inter-subjectivity and the replication of a study. For randomised trials in medicine, Huwiler-Müntener et al. (2002) showed in a review that reporting and methodological quality are highly correlated.

<sup>5</sup> If the studies grouped several forms of discrimination ( $n=19$ ) or civic engagement ( $n=16$ ) in one index, quite a few did check the reliability of these constructions ( $n=14$  for discrimination;  $n=10$  for civic engagement), all with Cronbach’s alpha (range 0.68–0.95). But Hayward et al. (2018) used an exploratory factor analysis and a categorical principal component analysis, accounting for the non-metric nature of their variables.

**Table 4** Reporting quality of studies (x = yes)

First author	Year	Definition discrimination	Definition civic engagement	Instrument description discrimination	Instrument description civic engagement
Albanesi	2016		x	x	x
Albarracin	2011			x	x
Azabar	2024			x	x
Bilodeau	2017			x	x
Bilodeau	2020			x	x
Bilodeau	2023	x	x	x	x
Chan	2022			x	x
Grant	2008			x	x
Grant	2015			x	x
Hayward	2018			x	
Klandermans	2008	x	x	x	x
Lee	2022			x	x
Martin	2017			x	x
Martinovic	2014			x	x
Oskooii	2016	x		x	x
Oskooii	2016	x		x	x
Oskooii	2020	x		x	x
Özdemir	2024		x	x	x
Pilati	2018			x	x
Rim	2009		x		x
Shanaah	2022			x	x
Shanaah	2022			x	x
Sirin	2011		x	x	x
Spaiser	2012			x	x
Tausch	2011			x	x
Tran	2017				
Tran	2024		x	x	x
Troian	2019				x
Van Bergen	2015	x			x
Wiley	2021			x	x
Yi	2022				x

Source: Results of systematic literature search in IBSS, WoS, and Scopus

place in relation to private citizens, such as in restaurants, in looking for work or housing or in relations with neighbors” (both p. 630). Van Bergen et al. (2015) investigate collective relative deprivation, that we see as a variant of perceived discrimination. They define it as “judgement that one’s in-group is at disadvantage compared to other groups (whether in cultural, political, religious or socio-economic terms), a position which is deemed unfair” (p. 91).

As regards definitions and conceptualisations of civic engagement, Albanesi et al. (2016, p. 179) distinguish between non-political and political participation. For the former they use the definition of Barrett and Zani (2015, p. 5) who define it as activities “focused either on helping others within a community or working on behalf of a community, solving a community problem or participating in the life of a community”. When defining political participation, they rely on the classic definition of Brady (1999), referring to activities intended to influence actual political outcomes by targeting relevant political or social elites (Albanesi et al., 2016, p. 180). Azabar and van Aelst (2024, p. 418) refer to Van Deth’s (2016, p. 3) definition of citizen participation as “any voluntary, nonprofessional activity concerning government, politics, or the state”. Moreover, to account for the heterogeneity of possible activities falling under this broad definition, they differentiate between institutionalised and noninstitutionalised forms of participation, focussing on the latter. They understand noninstitutionalised as non-electoral participation covering “all forms that are noninstitutionalized including former ‘unconventional’ forms (e.g., demonstrations), but excluding illegal acts of civil disobedience or political violence (e.g., occupying a building or damaging property)” (Azabar & van Aelst, 2024, p. 418). Klandermans et al. (2008 p. 992) and Özdemir et al. (2024, p. 5) both specify civic engagement as collective action using similar definitions. The first defines it as an activity that takes place “any time people are acting as a representative of the group and the action is directed at improving the conditions of the entire group”, referring to the definition of Wright et al. (1990, p. 995). The latter refers to van Zomeren et al. (2018) who define collective actions as “any action that individuals undertake as group members to pursue group goals such as social change” (p. 122).

Tran et al. (2024, p. 4) understand civic engagement in the same sense, defining it according to Adler and Goggin (2005, p. 236) as “the ways in which citizens participate in the life of a community in order to improve conditions for others or to help shape the community’s future”. Sirin and Katsiaficas (2011, p. 1350) take a definition of the Search Institute that defines non-political participation as an active role in solving social problems and serving one’s community. Bilodeau et al. (2023) and Rim (2009) do not provide a definition in the narrower sense. However, Bilodeau et al. (2023, p. 628) make clear that they focus on protest activities. Rim (2009) substantiates why she makes a difference between voting and non-electoral participation (p. 575). We acknowledge both to be a conceptual approach.

### **Taking Stock of Discrimination Types and Forms of Civic Engagement Addressed in Studies**

We tried to match the measures and scales on discrimination and civic engagement in the studies with the forms of discrimination we suggested in Table 1, and with the forms of civic engagement that we specified in the introduction. Five studies each deal with institutional discrimination and interpersonal discrimination (Table 7 in Appendix). The five studies that investigate institutional discrimination cover several

important facets of it. Bilodeau et al. (2023) construe their indicator for public sphere discrimination by asking how often the respondent has experienced discrimination by the police or a government official. Klandermans et al. (2008) address the general perceptions of governmental fairness of the respondents. When discussing their measures for it, they differentiate between procedural and distributive fairness, only using the first in their analyses (Klandermans et al., 2008, p. 998). Tausch et al. (2011) investigate perceptions of foreign policies affecting Muslims in the Middle East; Oskooii (2016) does this regarding perceptions and experiences with domestic policies. A checklist for discriminatory experiences with several institutions is also used (Oskooii, 2020) (Table 5).

As one of the five studies addressing interpersonal discrimination, Oskooii (2020) uses checklists of social non-institutional contexts where a respondent experienced discrimination. Three other studies dealing with interpersonal discrimination use adaptations of the Everyday Discrimination Scale (EDS) by Williams et al. (1997) (Lee et al., 2022; Oskooii, 2016; Tran & Curtin, 2017) (Table 5). These two ways to address interpersonal discrimination have different conceptual approaches. The EDS and its modifications emphasise and differentiate actions that degrade others to cover a wide spectrum of discriminatory experiences, at the same time being vague about the day-to-day context. The checklist approach focusses on situations and contexts where discrimination happened, leaving it to the imagination of the respondent as to what form. The measure of interpersonal discrimination used by Özdemir et al. (2024) applies a similar conceptual logic like the EDS. It stays vague about the actual context in which discrimination happened, but makes clear that it had been in an interpersonal encounter.

Two studies referred to what we call *discriminatory culture* toward migrant minorities. Item wordings typically consist of a reference toward the living conditions and general opportunities for immigrants in a country (Table 5).

Twenty-two studies use unclear measures, either being unspecific about the source ( $n=12$ ),<sup>6</sup> mixing up different kinds of sources in one index ( $n=9$ ), or not reporting the measure in full ( $n=4$ ).

Regarding the target of discrimination, our two analytical categories both matched most of the data. Studies address personal experiences of discrimination more often ( $n=21$ ) than group grievances ( $n=13$ ). Three studies mixed up personal experiences with experiences of someone else, e.g. a family member or a member of their in-group, in the item wording (Table 7 in the Appendix).

Two combinations of source and target do not occur in the reviewed studies: interpersonal discrimination aimed at the group-level and discriminatory culture perceived at the personal level (Table 7 in the Appendix).

The scales used for the measurement of discrimination were diverse. Ten studies used a yes/no format, dichotomising the experience or perception of discrimination. Twelve studies asked for the frequency of discriminatory events or counted the

<sup>6</sup> Oskooii (2020, p. 877) refers to those as indicators for “broad discrimination”. However, there are boundary cases regarding the wording that might as well be classified as interpersonal discrimination (e.g. Wiley et al., 2021).

**Table 5** Types of discrimination, their measurements, and outcomes on civic engagement

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Albanesi	2016	Not clearly reported	Culture	Group	“Do you believe there are instances of discrimination against any minority groups in the country where you live?” 1 “not at all” to 5 “very much”	Continuous	Path	Index “intent for non-political activity” 5-point Likert scale direct/total effect $\phi$ Discrimination mediated via anger + via shame + via hope + Index “intent for non-electoral activities” (mix-up with expression of opinions) 5-point Likert scale direct/total effect $\phi$ Discrimination mediated via anger $\phi$ via shame $\phi$ via hope +
Albarracín	2011	156	Unspecific	Mix-up	“In the past 5 years, have you or a family member experienced discrimination?” yes/no	Dichotomous	Regression	Contacted politician (yes/no) direct/total effect $\phi$ Worked for party politician (yes/no) direct/total effect $\phi$ Protested (yes/no) direct/total effect +
Azabir	2024	484	Unspecific	Group	“On what grounds is your group discriminated against?” “religion” yes/no	Dichotomous	Regression	Model 1: Index “non-electoral activities (mix-up)” (yes/no) direct/total effect $\phi$ Model 2: Index “non-electoral activities (mix-up)” (yes/no) Discrimination moderated by gender $\phi$



Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Blodeau	2017	451	Unspecific	Self	“Have you experienced discrimination in the last 5 years because of your ethnicity or religion?” yes/no “If yes, how often?” “never” (ref. cat.), “occasional”, “frequent”	Categorical	Regression	Model 1: Voted (yes/no) direct/total effect ( <i>n</i> = 445): occasional ∅, frequent – Contacted politician (yes/no) direct/total effect ( <i>n</i> = 449): occasional ∅, frequent + Boycotted (yes/no) direct/total effect ( <i>n</i> = 447): occasional +, frequent ∅ Protested (yes/no) direct/total effect ( <i>n</i> = 451): occasional +, frequent ∅ Signed petition (yes/no) direct/total effect ( <i>n</i> = 447): occasional +, frequent ∅ Model 2: Discrimination moderated by immi- grant generation on vote, contact, boycott, demo, and petition: all ∅
Blodeau	2020	1041	Not fully reported	Self	Index of “perceived discrimination in five contexts (work, housing, police, government, neighbours)” Frequency: 0–10	Continuous	Regression	Voted in federal election (yes/no) direct/total effect ( <i>n</i> = 1031) + Voted in provincial election (yes/no) direct/total effect ( <i>n</i> = 1041) ∅

**Table 5** (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Blodeau	2023	1647	Mix-up	Self	Index of "experienced discrimination because of race, ethnicity, or religion in five contexts (landlords, co-workers/bosses, neighbours, government employees, police)" Frequency: "never", "isolated incidents", several incidents"	Continuous	Regression	Model 1: Boycotted (yes/no) Direct/total effect ( $n = 1432$ ) + Signed petition (yes/no) Direct/total effect ( $n = 1434$ ) + Attended demonstration (yes/no) Direct/total effect ( $n = 1468$ ) + Index "non-electoral activities (mix-up)" (yes/no) Direct/total effect ( $n = 1458$ ) +
Blodeau	2023	1647	Mix-up	Self	Private-Sphere-Index of "experienced discrimination because of race, ethnicity, or religion in three contexts (landlords, co-workers/bosses, neighbours)" Frequency: "never", "isolated incidents", several incidents"	Continuous	Regression	Model 2: Boycotted (yes/no) Direct/total effect ( $n = 1408$ ) + Signed petition (yes/no) Direct/total effect ( $n = 1410$ ) $\phi$ Attended demonstration (yes/no) Direct/total effect ( $n = 1442$ ) + Index "non-electoral activities (mix-up)" (yes/no) Direct/total effect ( $n = 1432$ ) +
			Institutional	Self	Public-Sphere-Index of "experienced discrimination because of race, ethnicity, or religion in two contexts (landlords, co-workers/bosses, neighbours)" Frequency: "never", "isolated incidents", several incidents"			Boycotted (yes/no) Direct/total effect ( $n = 1408$ ) $\phi$ Signed petition (yes/no) Direct/total effect ( $n = 1410$ ) $\phi$ Attended demonstration (yes/no) Direct/total effect ( $n = 1442$ ) + Index "non-electoral activities (mix-up)" (yes/no) Direct/total effect ( $n = 1432$ ) +

Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Blodeau	2023	1647	Institutional	Self	Index of "experienced discrimination because of race, ethnicity, or religion in five contexts (landlords, co-workers/bosses, neighbours, government employees, police)" Frequency: "never", "isolated incidents", several incidents"	Continuous	Regression	Model 3: Boycotted (yes/no) Discrimination moderated by intra-group contact ( $n = 1432$ ) + Signed petition (yes/no) Discrimination moderated by intra-group contact ( $n = 1434$ ) + Attended demonstration (yes/no) Discrimination moderated by intra-group contact ( $n = 1468$ ) $\emptyset$ Index "non-electoral activities (mix-up)" (yes/no) Discrimination moderated by intra-group contact ( $n = 1458$ ) +
Chan	2022	2808	Unspecific	Group	"How much discrimination, if any, do you think exists against Asian Americans?" 1 "none" to 4 "a lot"	Continuous	Regression	Voted (yes/no) Direct/total effect: full sample ( $n = 2808$ ) + 1st gen ( $n = 1015$ ) + 2nd gen ( $n = 1793$ ) $\emptyset$
			Unspecific	Self	"In your opinion, were you unfairly treated because of your racial background or ethnicity?" yes/no	Dichotomous		Direct/total effect: full sample ( $n = 2808$ ) + 1st gen ( $n = 1015$ ) + 2nd gen ( $n = 1793$ ) $\emptyset$

**Table 5** (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Grant	2008	180	Mix-up	Group	Index "mix-up of institutional discrimination (labour market A1-A4) and discriminatory culture (B1-B6)A1. "Canada needs to provide more government programs to help new immigrants find a job that matches their qualifications and work experience". A2. "Immigrants' education and work experience are often not recognized in Canada". A3. "In Canada, immigrants face discrimination from potential employers because they do not have Canadian experience". A4. "In Canada, immigrants face discrimination when they seek employment". B1. "In Canada, immigrants face discrimination if they cannot speak English very well". B2. "In Canada, immigrants face discrimination because of their accent". B3. "In Canada, immigrants face discrimination because of their race". B4. "In Canada, immigrants face discrimination because, when they arrive in Canada, they often have a low income". B5. "Canadians do not appreciate the cultural background and traditions of immigrants". B6. "Canadians feel that the education system in other countries is inferior". 1 "strongly disagree" to 5 "strongly agree"	Continuous	Path	Index "intent for non-political/non-electoral activities" (mix-up) 5-point rating scale Direct/total effect + Discrimination mediated Via emotions $\emptyset$ Index "past non-political/non-electoral activities" (mix-up) (yes/no) Direct/total effect + Discrimination mediated Via emotions $\emptyset$

Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Grant	2015	106	Mix-up	Group	See Grant 2008	Continuous	Path	Index "past non-political/non-electoral activities" (mix-up)(yes/no) Direct/total effect – Discrimination mediated Via emotions + Via efficacy +
Hayward	2018	170	Unspecific	Group	Index of "[Black/Hispanic] Americans often experience discrimination on the basis of their race". (Dixon et al. 2010) "[Black/Hispanic] Americans are more likely than other racial groups to be discriminated against because of their ethnicity." 1 "strongly disagree" to 7 "strongly agree"	Continuous	Path	Index "intent for civic engagement" (van Zomeren et al., 2011, not fully reported) 7-point rating scale Direct/total effect + Index "past civic engagement" (van Zomeren et al., 2011, not fully reported)yes/no Direct/total effect $\phi$
Klandermans	2008	279	Institutional	Self	"Government treats me in a fair way", 1 "very fair" to 5 "very unfair"	Continuous	Regression	Count variable of 10 activities (mix-up of past non-electoral, non-political, and aggressive activities), 0–10 Direct/total effect + Discrimination moderated by social ties +Dual identity +Political cynicism + Direct/total effect + Direct/total effect (partial sample, $n = 54$ ) $\phi$

Table 5 (continued)

First author	Year	n	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Lee	2022	400	Interpersonal	Self	<p>"During the COVID-19 outbreak, ... because I am an Asian/Asian American".</p> <p>Index of "I have been treated with less courtesy than other people".</p> <p>"I have been treated with less respect than other people".</p> <p>"I have received poorer service than other people at restaurants or stores".</p> <p>"People have acted as if they are afraid of me".</p> <p>"People have acted as if they think I am dishonest".</p> <p>"People have acted as if they are better than I am".</p> <p>"I have been called names or insulted".</p> <p>"I have been threatened or harassed".</p> <p>"I have been made fun of and picked on".</p> <p>"I have been followed around in stores".</p> <p>(Thomas et al., 2020; Krieger et al., 2005; Landrine et al., 2006)</p> <p>1 "strongly disagree" to 7 "strongly agree"</p>	Continuous	Path	<p>Index "intent for offline non-electoral and non-political activities" (van Zomeren et al., 2004; mix-up) 7-point Likert scale</p> <p>Discrimination as mediator <math>\emptyset</math></p> <p>Discrimination mediated</p> <p>Via situational motivation <math>\emptyset</math></p> <p>Discrimination mediated</p> <p>Via situational motivation and online activity +</p>

Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Martin	2017	906	Unspecific	Self	"Respondent has, in the past five years, experienced discrimination or been treated unfairly by others in the UK because of [their] ethnicity, race, skin colour, language, accent, religion, age, gender, sexuality or disability?" yes/no	Dichotomous	Regression	Voted (yes/no) Direct/total effect ( <i>n</i> = 906) $\emptyset$ Protested (yes/no) Direct/total effect ( <i>n</i> = 904) + Signed petition (yes/no) Direct/total effect ( <i>n</i> = 903) + Boycotted (yes/no) Direct/total effect ( <i>n</i> = 903) + Voted (yes/no) direct/total effect ( <i>n</i> = 629) $\emptyset$ Index "past non-electoral activity" (mix-up with non-political activity) (yes/no) Direct/total effect ( <i>n</i> = 629) +
Martinovic	2014	641	Mix-up	Group	Index of "Muslims are often discriminated against when looking for a job or internship"; "Muslims are often discriminated against in cafes and clubs"; "Muslims are often discriminated against in daily life"; "Over the years discrimination of Muslims has increased". (Verkuyten and Yildiz, 2007) 1 "disagree strongly" to 7 "agree strongly"	Continuous	Regression	Index "intent for non-electoral activity" 5-point Likert scale Direct/total effect: full sample ( <i>n</i> = 641) $\emptyset$ Netherlands ( <i>n</i> = 346) $\emptyset$ Germany ( <i>n</i> = 295) $\emptyset$
Oskooii	2016	1256	Institutional	Group	"Do you think the new security measures at U.S. airports are targeted at Muslims or at all Americans equally?" (Muslim American Public Opinion Survey, 2007-2008, MAPOS) yes/no	Dichotomous	Regression	Voted (yes/no) Direct/total effect ( <i>n</i> = 920) + Protested (yes/no) Direct/total effect ( <i>n</i> = 1256) + Participated in meeting (yes/no) Direct/total effect ( <i>n</i> = 1256) + Contacted politician (yes/no) direct/total effect ( <i>n</i> = 1256) +

Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Oskooi	2020	2103	Institutional	Self	"Have you been singled out by airport security because you are Muslim". (Pew Research Center Study of American Muslims 2007, PEW) yes/no	Dichotomous		Voted (yes/no) direct/total effect ( <i>n</i> = 742) +
			Interpersonal	Self	Index of "Have people acted as if they are suspicious of you because you are Muslim?"; "Have you been called offensive names because you are a Muslim?"; "Have you been physically threatened or attacked because you are a Muslim?" (Pew Research Center Study of American Muslims 2007, PEW) 0 "event" to 3 "events"	Continuous		Voted (yes/no) direct/total effect ( <i>n</i> = 742) –
			Unspecific	Self	"Experienced discrimination or been treated unfairly by others in the UK because of their ethnicity, race or skin color in the past 5 years". yes/no 0 "never" to 3 "often"	Dichotomous	Regression	Voted in local election (yes/no) Direct/total effect ( <i>n</i> = 1980) $\phi$ Voted in general election (yes/no) Direct/total effect ( <i>n</i> = 2103) $\phi$
						Continuous	Regression	Voted in local election (yes/no) Direct/total effect ( <i>n</i> = 1979) $\phi$ Voted in general election (yes/no) Direct/total effect ( <i>n</i> = 2101) $\phi$
			Interpersonal	Self	"Experienced unfair treatment (1) on the street, (2) in a shop, bank, restaurant or bar, or (3) at social gatherings". (index) 0 "no discrimination" to 9 "a great deal of discrimination"	Continuous	Regression	Voted in local election (yes/no) Direct/total effect ( <i>n</i> = 1979) – Voted in general election (yes/no) Direct/total effect ( <i>n</i> = 2102) –



Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Özdemir	2024	368	Institutional	Self	“Encountered discrimination (1) when dealing with immigration or other government offices or officials, (2) when dealing with the police or courts, or (3) in domains such as colleges or universities or (4) when applying for a job or promotion”; 0 “no discrimination” to 12 “great deal of discrimination”	Continuous	Path	Voted in local election (yes/no) Direct/total effect ( <i>n</i> = 1979) + Voted in general election (yes/no) Direct/total effect ( <i>n</i> = 2102) +
			Interpersonal	Mix-up	“How often in the past year have you or fellow [ethnic group] people (for example family, friends, community members) experienced discrimination by native Dutch people” (based on Van Doorn et al., 2013) 1 “never” (ref. cat.) to 5 “always”	Continuous	Path	Intent for non-electoral activities 5-point rating scale (based on Tausch et al., 2011) Direct/total effect +
Pilati	2018	7655	Culture	Self	“Has personally felt discriminated because of her origin in the past 12 months”. yes/no	Dichotomous	Regression	Demonstrated (yes/no) Direct/total effect +
Rim	2009	1024	Not fully reported	Self	Index of “Have you ever personally experienced discrimination in the United States?” “In your opinion, was it because of your . . . ethnic background?/ accent, regardless of whether or not you have an accent?” 0 “no reason”, 1 “reason”, 2 “both reasons”	Continuous	Regression	Voted (yes/no) Direct/total effect ( <i>n</i> = 686) $\emptyset$ Index “non-electoral/non-political activities” (mix-up) (yes/no) Direct/total effect ( <i>n</i> = 1024) + Discrimination moderated by context ( <i>n</i> = 1024) +

Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Shanaah	2022	3115	Mix-up	Self	Index of “In the last five years, do you think you have been discriminated against when you have been refused or turned down for a job?”“Thinking about anything that has happened in this local area, have you personally experienced harassment because of your skin color, ethnic origin, or religion in the last two years in any of the ways listed on the card?”“In the last five years, do you think you have been discriminated against at work with regard to promotion or a move to a better position?”“Please could you look at this card and tell me if you think that any of the organizations on the card have ever discriminated against you because of your religion?” A local doctor’s surgery, a local school, a council housing department or housing association, a local council (apart from the housing department), a private landlord or letting agent, the courts (Magistrates Courts and Crown Court), the Crown Prosecution Service, the police, the Prison Service, and the Probation Service. 0 “mentions” (ref. cat.) to 4 “mentions”	Categorical	Regression	Count variable of 5 past non-political activities, 0–5 Direct/total effect: One mention + Two mentions + Three mentions + Four mentions +

Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
		917	Mix-up	Group	Treatment: "confronted with statistics on physical abuse, job discrimination, and online hostility against Muslims, and with an anti-Muslim image in a political campaign".	Dichotomous		Index "intent for non-political activity I" ("Counter-extremism intentions 1") 7-point Likert scale Direct/total effect: $\emptyset$ Index "intent for non-political activity II" (Counter-extremism intentions 2") 7-point Likert scale Direct/total effect $\emptyset$
Shanaah	2022	917	Unspecific	Self	"Have you personally ever experienced discrimination, been prevented from doing something, or been hassled because of your skin color, ethnic origin, or religion?" 1 "never" (ref. cat.) to 4 "four or more times"	Categorical	Regression	Index "intent for non-political activity I" Direct/total effect ( $n = 917$ ): Once $\emptyset$ Two or three times + Four or more times $\emptyset$ Direct/total effect ( $n = 462$ ): Once + Two or three times + Four or more times $\emptyset$ Index "intent for non-political activity II" Direct/total effect ( $n = 917$ ): Once $\emptyset$ Two or three times + Four or more times $\emptyset$ Direct/total effect ( $n = 462$ ): Once + Two or three times + Four or more times $\emptyset$

Table 5 (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
			Culture	Group	Index of six items (adapted from Maccarne et al., 2006) "Generally speaking, Muslims are respected in the UK" (reversed), "Muslims have been treated well in British society" (reversed), "Muslims in the UK do not have the same opportunities as other people", "Discrimination against Muslims is not a problem in the UK" (reversed), "Muslims are often criticised in this country", "In the UK, the opinions of Muslims are treated as less important than those of other people", 5-point Likert scale	Continuous		Index "intent for non-political activity I" Direct/total effect ( $n = 917$ and $462$ ) $\phi$ Index "intent for non-political activity II" Direct/total effect ( $n = 917$ and $462$ ) $\phi$
Sirin	2011	75	Mix-up	Self	Index of four checklist items (modified version of Krieger and Sidney, 1996) "documenting the rate of discrimination experienced at school, while shopping, on the street, and in a public setting because they are Muslim", 1 "never" to 5 "almost daily"	Continuous	Regression	Index "intent for non-political activity" (short version of the Developmental Assets Profile (Search Institute, 2004)) 4-point Likert scale Direct/total effect ( $n = 59$ ) $\phi$ Direct/total effect ( $n = 75$ ) +
Spaiser	2012	626	Mix-up	Mix-up	Index of "You/your female family members have been treated badly because of head scarf": "Having been called a terrorist (even if it was meant to be a joke)", "Islam having been insulted in front of you", "Not getting job/internship because of you being Muslim", 1 "never" to 4 "very often"	Continuous	Path	Index "non-electoral online activities and online expression of opinion" (mix-up) 4-point Likert scale Direct/total effect + Discrimination mediated via anger +

Table 5 (continued)

First author	Year	n	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Tausch	2011	466	Institutional	Group	Index of "I feel that British foreign policy in the Middle East is illegitimate". "I feel that British foreign policy in the Middle East is immoral". "I feel that Britain's role in the invasion of Iraq in 2003 is illegitimate". "I feel that Britain's role in the invasion of Iraq in 2003 is immoral". "I feel that Britain's current campaign against the Taliban in Afghanistan is illegitimate". "I feel that Britain's current campaign against the Taliban in Afghanistan is immoral". 1 "not at all" to 7 "extremely"	Continuous	Path	Voting intention 7-point Likert scale Direct/total effect $\emptyset$ Discrimination mediated via anger $\emptyset$ Index "intent for non-electoral activity" 9-point Likert scale Direct/total effect + Discrimination mediated via anger + via contempt $\emptyset$ Index Aggressive I ("Support for violence against military targets") 10-point and 11-point Likert scale Direct/total effect $\emptyset$ Discrimination mediated via anger + via contempt + Index Aggressive II ("Support for violence against civilian targets") 10-point and 11-point Likert scale Direct/total effect $\emptyset$ Discrimination mediated via anger $\emptyset$ via contempt +
Tran	2017	179	Interpersonal	Self	Index of eleven items (modified version of the Everyday Discrimination Scale of Williams et al., 1997); e.g. "People acted as if they were not as good as they were based on race". 1 "never" to 4 "often"	Continuous	Path	Count variable of 12 past own group activities (not fully reported), 0–12 Direct/total effect + Discrimination mediated via model minority belief – via collective identity +

Table 5 (continued)

First author	Year	n	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Tran	2024	3962	Unspecific	Self	Respondent had been "treated unfairly because of [their] race/ethnicity" "because of the Coronavirus or COVID-19 outbreak".	Dichotomous	Regression	Asian: Non-electoral activity (yes/no) Direct/total effect + Non-political activity (yes/no) Direct/total effect $\phi$
					Respondent had been "treated or judged unfairly because of their race or ethnic group before [they] were 18 years of age"	Dichotomous	Regression	Non-electoral activity (yes/no) Direct/total effect + Non-political activity (yes/no) Direct/total effect +
					Respondent had been "treated unfairly because of [their] race/ethnicity" "because of the Coronavirus or COVID-19 outbreak".	Dichotomous	Regression	Hispanic: Non-electoral activity (yes/no) Direct/total effect + Non-political activity (yes/no) Direct/total effect +
					Respondent had been "treated or judged unfairly because of their race or ethnic group before [they] were 18 years of age"	Dichotomous	Regression	Non-electoral activity (yes/no) Direct/total effect + Non-political activity (yes/no) Direct/total effect +
Troian	2019	110	Not fully reported	Group	Modified version of the Perceived Islamophobia Scale (Kunst et al., 2012) 1 "totally disagree" to 7 "totally agree"	Continuous	Path	Index of "support for aggressive activities" 7-point Likert scale Direct/total effect $\phi$ Discrimination mediated via anomia +

**Table 5** (continued)

First author	Year	n	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Van Bergen	2015	398	Not fully reported	Group	Index of three items (Doosje et al., 2013): e.g. "I think people of my ethnic background or religion do not get as many chances as other groups in the Netherlands". "It makes me angry how people of my ethnicity or religion are treated compared to other groups in the Netherlands". 1 "totally disagree" to 5 "totally agree"	Continuous	Path	Support for aggressive activities (adapted from Doosje et al., 2012, 2013) 3-point Likert scale Direct/total effect: full sample ( $n = 398$ ) + Turkish-Dutch ( $n = 166$ ) + Moroccan-Dutch ( $n = 232$ ) + Discrimination mediated via in-group superiority: full sample ( $n = 398$ ) + Turkish-Dutch ( $n = 166$ ) $\emptyset$ Moroccan-Dutch ( $n = 232$ ) + Discrimination mediated via in-group superiority and attitudes towards violent in-group defence: full sample ( $n = 398$ ) + Turkish-Dutch ( $n = 166$ ) $\emptyset$ Moroccan-Dutch ( $n = 232$ ) + Discrimination mediated via attitudes towards violent in-group defence: full sample ( $n = 398$ ) + Turkish-Dutch ( $n = 166$ ) $\emptyset$ Moroccan-Dutch ( $n = 232$ ) $\emptyset$

**Table 5** (continued)

First author	Year	<i>n</i>	Discriminatory source	Discriminatory Target	Scale	Coded	Model	Outcome
Wiley	2021	1501	Unspecific	Self	Index of: "Have you been called offensive names because you are (Hispanic/Latino), or not?" "Has someone made a remark that you should go back to your home country, or not?" "Have you personally experienced discrimination or been treated unfairly because of your (Hispanic/Latino) background, or not?" 0 "experience" (ref. cat.) – 3 "experiences"	Categorical	Path	Protested (yes/no) Direct/total effect: One experience + Two experiences + Three experiences + Discrimination mediated via host identity: One experience $\emptyset$ Two experiences – Three experiences – Discrimination mediated via ethnic identity: One experience $\emptyset$ Two experiences $\emptyset$ Three experiences $\emptyset$
Yi	2022	37,692	Mix-up	Self	Index of six items on discriminatory campus climate (Dugan, 2015); e.g. "I have encountered discrimination while attending this institution"; "I feel there is a general atmosphere of prejudice among students"; 1 "strongly disagree" to 5 "strongly agree"	Continuous	Regression	Index "past non-electoral and non-political activities" (mix-up; Dugan 2015) 4-point Likert scale Direct/total effect –

Source: Results of systematic literature search in IBSS, WoS, and Scopus. Notes: in the last column we report the correlation of discrimination with the outcome variable (civic engagement). In case of stepwise regressions, we report only the correlation between both in the full model



occasions. In the models, four of those split the variable up into categories; nine used it as a continuous variable; 13 studies used 5- or 7-point rating scales, all continuous, in the models (Table 5).

As regards civic engagement, nine studies deal with voting, and eleven with non-electoral participation, such as signing a petition, contacting a politician, working for a political party or politician, and taking part in demonstrations. Relationships between discrimination and non-political activities were addressed by nine studies. This category comprises very heterogeneous activities, from the boycott of products to a willingness to take part in counter-terrorism measures. Three studies address aggressive activities; eleven studies based their analyses on measures that mix up different forms of civic engagement, or include attitudes. Two studies did not report in full what items they used to measure civic engagement, neither in the main paper nor elsewhere (Table 8 in the Appendix).

Fifteen studies dichotomise the outcome variable (yes/no), mostly for retrospective activities; 14 studies use a rating-scale format, mostly for intent to act. Two use count variables for the number of activities someone has used; three studies assess how frequently specific activities have been used (Table 5).

## Assessing the Statistical Models on Discrimination and Civic Engagement

We have already addressed aspects of non-reporting, conceptual gaps, and weaknesses regarding the analytical handling of discrimination and civic engagement, as well as the high diversity in measuring both. All of this contributes to the statistical incomparability of the studies and the uncertainty regarding their results. For this reason, we refrain from vote counting, i.e. counting the positive, negative, and insignificant coefficients. Neither of them should be taken for granted, and insignificant results should not be interpreted as the absence of a correlation. Instead, we take a closer look at the specification of the statistical models, as it is an additional source for bias. We address under- and overspecification of the models, as well as differential impacts of discrimination on civic engagement that might be overlooked in linear-additive models.

A statistical model is underspecified and can lead to biased correlations, if it misses one or more factors that are important to explain the phenomenon under research, here: civic engagement. Although discrimination has a long-standing tradition in explaining differences in civic engagement between majority and minority groups, three other factors build the standard model for explaining civic engagement, as Verba et al. (1995) showed with their Civic Voluntarism Model: resources, motivation, and recruitment. People need resources (time, money, and civic skills), motivation (attitudes, such as political interest, efficacy, concerns), and recruitment by others (through networks) for civic engagement. Only six studies, five of them from political science, considered all three standard factors in their models in addition to discrimination and controls, such as age and gender. Five studies did not use or did not report the use of any of them; 23 controlled for resources, mostly represented by education. Fifteen took attitudes into account, and nine studies include an indicator for recruitment, mostly some measure for membership in networks, organisations, or

clubs (Table 9 in Appendix). The omission of the standard explanatory factors in the statistical model and the ignorance of their interplay with discrimination may lead to the under- or overestimation of the discrimination coefficient.

Overspecification may lead to a biased discrimination coefficient, too. A statistical model is overspecified if it contains one or more redundant explanatory variables. As we have pointed out earlier, most authors neglected to define or specify discrimination. This obscures that discrimination comes in different guises and may have various facets or dimensions. This favours the overlooking of the fact that some items measure a facet of discrimination, even though authors use them as indicators of entirely different concepts. Examples of measures that compete with discrimination are the intergroup contact measure of Hayward et al. (2018); the structural awareness measure of Tran and Curtin (2017); the belonging measure of Bilodeau et al. (2020); the perceived illegitimacy/instability measure of Grant (2008); the cognitive relative deprivation measure of Grant et al. (2015); the linked fate measure of Chan et al. (2022); the misrecognition measure of Özdemir et al. (2024); and the anti-Muslim prejudice measure of Martin (2017) and Shanaah (2022). These redundant predictors may lead to an imprecise estimation of the designated discrimination effect, and to an underestimation of its marginal contribution in explaining civic engagement, which in turn affects the conclusions about its relation to civic engagement.

It can be imagined that the relationship between two variables, such as discrimination and civic engagement, is not linear, that is, for example, the more discrimination a person experiences the likelier they are to get civically engaged. The relation might be u-shaped, meaning that people without discriminatory experiences and those with frequent experiences are more active than persons with occasional experiences. Few scholars take non-linearity in their statistical models into account, but without substantiating why theoretically (Bilodeau, 2017; Shanaah, 2022; Wiley et al., 2021).

Discrimination may motivate some kinds of people and demotivate others to get civically active. It may also work indirectly through other characteristics. To get a better understanding of the mechanisms that link discrimination to civic engagement, researchers—mostly from psychology—include mediation and moderator relationships in their models. Those decompose the differential effects of discrimination. Fifteen of the 31 studies address theoretical ideas regarding how discrimination works on civic engagement. The concepts that authors have tested for their moderating or mediating role between the two are emotions ( $n=6$ ), identity ( $n=3$ ), attitudes ( $n=5$ ), and facets of social ties ( $n=4$ ).

Users of mediator models assume that the direct effect of discrimination on civic engagement is limited, but that discrimination works through other factors. A popular mediator assumption is based on the social identity theory of Henri Tajfel and John C. Turner (Tajfel, 1978; Tajfel & Turner, 1979, 1986): discrimination strengthens the ethnic (or in-group) identity of a person, which in turn makes her want to work for structural change to the benefit of all who belong to this group. Two studies among our selection investigated the mediating link between discrimination and different kinds of identities (e.g. host, ethnic) with more or less convincing reasoning and gave inconclusive results as to whether and how these matter for civic engagement (Tran & Curtin, 2017; Wiley et al., 2021) (Table 5).

Emotions, especially negative ones, have proven in recent years to be analytically convincing and empirically powerful enough to substantiate another indirect link between discrimination and civic engagement. Five out of six studies in our review investigated the link between discrimination and anger and its consequences on civic engagement, with both positive or insignificant outcomes resulting from them (Albanesi et al., 2016; Grant, 2008; Grant et al., 2015; Spaiser, 2012; Tausch et al., 2011).<sup>7</sup> Only one study (Albanesi et al., 2016) looked at the mediating effect of a positive emotion: hope. But the theoretical reasoning as to why discrimination should promote hope is less intuitive than the one between discrimination and anger, and the authors did not try to substantiate it (Table 5).

Studies on the mediating role of attitudes address various concepts: efficacy, situational motivation,<sup>8</sup> model minority beliefs, and in-group superiority (Grant et al., 2015; Klandermans et al., 2008; Lee et al., 2022; Tran & Curtin, 2017; van Bergen et al., 2015). Efficacy, i.e. the conviction that one's actions have an impact, is an established factor for the explanation of civic engagement in political science models (e.g. Verba et al., 1995). In the models of psychologists, it has been established as a second path, next to emotions, to explain the civic engagement of disadvantaged groups. Using it as a mediator between discrimination and civic engagement, as Grant et al. (2015) do, is less straightforward. Their analytical reasoning for its mediating role leaves open the question as to why discrimination should increase the efficacy of a person. As in the case of hope, the authors do not substantiate the connection here either (Grant et al., 2015; Lee et al., 2022) (Table 5).

Five studies use discrimination as a mediator (Grant et al., 2015; Grant, 2008; Hayward et al., 2018; Lee et al., 2022; Özdemir et al., 2024). Those studies implicitly assume a different causal relationship between discrimination and civic engagement than the above examples. Whereas the former studies assume that discrimination makes a minority social identity salient, for example, which in turn motivates persons to take action for the social in-group, the latter studies assume, for example, that social identity increases awareness of discrimination, which leads to more civic engagement.

Users of moderator models and separate models for groups assume that the effect of discrimination on civic engagement differs between subpopulations or settings. Studies in our selection looked at differential effects of discrimination for men and women (Sirin & Katsiaficas, 2011; Azabar & van Aelst, 2024), for immigrants and their native-born children (Bilodeau, 2017), for immigrants with and without intra-group contact (Bilodeau et al., 2023), for people in different social contexts (Rim, 2009), for people who identify with different groups, and for people with different levels of political cynicism (Klandermans et al., 2008). Most studies made a case for the differential effect of discrimination on their comparison group, except for Azabar and van Aelst (2024) and Bilodeau (2017) (Table 5).

<sup>7</sup> Other negative emotions addressed in the studies were shame, anomia, frustration, contempt, and resentment (Albanesi et al., 2016; Grant, 2008; Tausch et al., 2011; Troian et al., 2019).

<sup>8</sup> Situational motivation for civic engagement means that a person recognises a situation as problematic, feels able to do something about it, and may have a personal connection to the problem (see Lee et al., 2022, p. 2). Verba et al. (1995) refer to this activation process as "issue engagement".

An analysis of the specification of the statistical models revealed that only a few studies specified them according to the state of the art, i.e. taking the standard factors for civic engagement in addition to discrimination into account and omitting predictors that are redundant to discrimination. Both are sources for a biased estimation of the effect that discrimination has on civic engagement. An examination of studies that include moderation and mediation relationships between discrimination and civic engagement in their models revealed that the relationship is neither general, but differs between persons with different characteristics, nor is it direct, but works through other factors, such as identity or emotions. This is not only important for the analytical understanding of the mechanisms between discrimination and civic engagement, but also shows us that effects may cancel each other out if important factors and mechanisms are not controlled for.

Thus, we assume that there might be a considerable number of biased effects among our selected studies. Although we think that it is unlikely that there was a study where the direction of effects would change completely from positive to negative or vice versa, we are convinced that the number of insignificant effects would go down markedly with correctly specified models and correctly specified relationships between discrimination and civic engagement.

## Discussion of Study Results

Our systematic search resulted in a selection of 31 studies on the discrimination of immigrants and their civic engagement. Their wide range of countries and populations, as well as forms of discrimination and civic engagement, build a versatile foundation to describe and explain how discriminatory experiences have consequences for the civic engagement of immigrants. This is an outstanding strength of this branch of research. But there are also weak points.

The share of insignificant results is striking; there are at least two possible reasons for this. Discrimination might be not at all or not as important for civic engagement as are other factors. Or, it is the way in which researchers deal conceptually and empirically with discrimination and civic engagement. The lack of care and accuracy towards the two key concepts of discrimination and civic engagement—analytically and in terms of measurement—is troublesome. On an analytical level, only a few studies made clear how they define and conceptualise discrimination, and what forms of discrimination they focus on. The same is the case for civic engagement; most authors do not address what form(s) of civic engagement they are interested in. This analytical negligence continued in the empirical measures of both discrimination and civic engagement. We observed, for example, a mix of different forms and dimensions of discrimination or civic engagement, respectively, in one index. These results are hardly interpretable, because it is unclear what form of discrimination matters for what form of activity.

Moreover, there is a statistical problem. Different forms of discriminatory experiences can have different effects on different activities: either mobilising,

demobilising, or neither. If discriminatory experiences or activities are mixed up together in one index, opposing effects may cancel each other out. Schildkraut (2005) has pointed this out already regarding the *target* of discrimination and has suggested that we should thus differentiate between interpersonal and group discrimination. In the context of our results, we suggest applying the same care to the *source* of discrimination as well as to the different forms of civic engagement. Regarding the source, our differentiation between interpersonal and institutional discrimination and discriminatory culture provides such an analytical division (Table 1). It is clear and precise, relates to the most common measures of discrimination in survey research, and is therefore easily applicable. For civic engagement, many typologies already exist. The most common one is the differentiation between electoral participation and activities that go beyond this (Brady, 1999) that we rely on, too (see Conceptual Frameworks for Discrimination and Civic Engagement). Work must not stop here. After deciding on a definition for both concepts, which has rarely been done to date (see Table 4), authors need to choose the instruments carefully that are adequate to measure these.

Meticulously specifying concepts works also as a remedy to combat the over-specification of statistical models that contain redundant or superfluous explanatory variables that many studies suffer from (see Assessing the Statistical Models on Discrimination and Civic Engagement). This is particularly the case for measures of discrimination and for competing or overlapping concepts. When all dimensions and facets of a concept are spelled out explicitly, researchers will easily detect whether an instrument they intend to use for one concept interferes with another one.

Underspecification of the models can be addressed when researchers look beyond the boundaries of their disciplines. This is particularly the case for the studies of civic engagement (see Assessing the Statistical Models on Discrimination and Civic Engagement). Only then can they get a sense of what has been established as a standard model for its explanation elsewhere and thus consider it in their theoretical frameworks and models.

Moreover, we have drawn attention to the differential impact that discrimination might have for civic engagement in different population groups. Only a few of our selected studies have taken this into account in their statistical models. Thinking about differing opportunity structures and social circumstances during the life course of different societal subgroups (as regards age, gender, skin colour, or religious attire, etc.) can give us guidance as to how these characteristics might affect exposure to discrimination and its impact on civic engagement theoretically, and how this could be adequately represented in the statistical analyses.

Our review comes with limitations, too, that might affect what we conclude from the reviewed studies. One of the main limitations of our literature review is that it only looks at journal articles. They are, today, one of the preferred outlets for presenting current research findings, but in the 1970s, when we started our search, monographs were more widespread than journal articles. In fact, unintentionally, this review only includes articles from 2008 onwards, and we did not

meet our geographical scope either. Although targeted in our search strings, we could not retrieve any studies from Australia and New Zealand, both important immigration countries. This meant that at least one important study was not part of this review, namely Schildkraut (2005), and there might be a few more.

Finally, a word on causality. We searched for studies that assume that discrimination affects civic engagement. However, the causality may also be the reverse: people who engage themselves civically are more visible and thus better targets for discrimination than inactive people. They might experience discrimination, rejection, hatred, and other issues, while being active, or because of being active. Moreover, people who are active might be more politicised and thus more sensitive towards, and aware of, discrimination, and more knowledgeable about it (e.g. Sellers and Shelton, 2003; see also *Assessing the Statistical Models on Discrimination and Civic Engagement*). Most of our reviewed studies use a cross-sectional design; they are cost- and time-efficient, but limit what we can conclude about the direction of relationships and causality. Studies are needed to establish a convincing causal identification of the link between discrimination and civic engagement. Experimental studies or longitudinal data could cater to this need.

However, experimental studies also have limits. The most important one is an ethical concern. If discrimination has expected negative effects on civic engagement, such as limiting electoral participation or promoting aggressive activities, artificially induced exposure to it is problematic. A solution could be to change perspective and put experimental interventions into focus that are qualified to reduce or remove altogether the negative impact of discrimination, or to empower discriminated and disadvantaged groups. Studies on door-to-door canvassing in order to get out the immigrant vote are an example of this (Pons et al., 2019; Michelson, 2003).

Natural experiments and evaluation studies are two more ways to study the discrimination-related impact on the civic engagement of immigrants. For natural experiments, the occurrence of discriminating/aggrieving or anti-discriminating events or policies could be exploited by using cross-sectional or longitudinal data on civic engagement that has been (occasionally) collected before and after these events. For evaluation studies, cooperation with governmental and administrative bodies could be arranged to monitor the implementation of anti-discrimination policies and to evaluate their effect on immigrants' civic engagement.

If time and money do not allow for experimental or longitudinal designs, a solution might be to think through models better and to spell out links pedantically between all the variables in the model. Authors need to argue convincingly why they think one causal relationship is more plausible than alternative ones, more so if they work with cross-sectional data. For epidemiological and criminal justice research, such strategies for causal identification have already been discussed (Krieger & Smith, 2016; Gaebler et al., 2022; Graetz et al., 2022). To import these ideas into the study of discrimination and civic engagement could be a promising endeavour.

## Conclusions

We pursued three aims with our scoping review: to take systematic stock of the literature on discrimination and civic engagement of immigrants; to assess how studies conceptualise and measure discrimination and civic engagement; and to investigate how scholars represent the link between discrimination and civic engagement in their statistical models.

According to our review, the retrieved studies touch on many ideas as to how discrimination relates to civic engagement. They cover a wide range of countries, populations, and types of civic engagement and discrimination and are thus a valuable body of research. Their impact could be strengthened in various regards though.

Discrimination needs to be conceptualised more rigorously. For this, we have made a construct proposal that gathers three sources and two targets of discrimination, resulting in six possible forms of discrimination. Future research might benefit by taking on the job of fine-tuning the measures of discrimination. This would add precision to the questionnaire instruments, leading to higher response rates, less biased results, and a more nuanced reflexion of the respondents' experiences. Also, results will be easier to interpret when the concepts and their measures are precise. The harmonisation and standardisation of definitions, concepts, and measures would provide comparability across countries and populations and would enable tests of external validity. For this, stronger cooperation between disciplines is needed.

Discrimination is a key concept of (social) psychology; civic engagement is key to political science. Given the paramount status of both concepts in their disciplines, their combination in research is surprisingly low, resulting in a total of only 31 studies. The importing of each other's definitions, concepts, and measures has rarely been done to date. Political scientists can certainly learn about measuring discrimination, the theoretical mechanisms linking discrimination and civic engagement, and the analytic techniques that mirror these theoretical considerations. (Social) Psychologists could benefit from political science's conceptualisations of civic engagement, and from adding standard factors of participation to their models. This would enable them to control for heterogeneity among individuals and assess the relative importance of discrimination for civic engagement compared to these standard factors.

Civic engagement is held to be the glue of democratic societies. Research shows that discrimination often leads to grief, estrangement, and negative emotions. Sometimes this translates into civic action for structural change. But, if discrimination makes immigrants feel too inefficacious, anxious, or hopeless to go to vote or to step up for their rights, democracy has a profound problem for its legitimacy. Research on how discrimination affects civic engagement needs a strong understanding of the relevant pathways and mechanisms, so as to highlight what is needed to secure equality. An important ingredient for this is comprehensively using clear concepts, precise measures, and well-thought-through models in future research.

## Appendix

**Table 6** Search strings used to identify publications in three databases

Database	Search string	Results
International Bibliography of the Social Sciences	(AB,TI,IF(discriminat* OR deprivation OR disadvantage*) AND AB,TI,IF("collective action" OR mobiliz* OR political-act* OR political part* OR volunteer* OR engag* OR politicization) AND AB,TI,IF(minorit* OR muslim\$ OR \$\$migrant\$) LA(english)PEER(yes))	2202
Scopus	TITLE-ABS-KEY(discriminat* OR deprivation OR disadvantage*) AND TITLE-ABS-KEY("collective action" OR mobiliz* OR political-act* OR political part* OR volunteer* OR engag* OR politicization) AND TITLE-ABS-KEY(minorit* OR muslim\$ OR \$\$migrant\$)LANGUAGE(english)	1714
Web of Science	TS=(discriminat* OR deprivation OR disadvantage*) AND TS=("collective action" OR mobiliz* OR political-act* OR political part* OR volunteer* OR engag* OR politicization) AND TS=(minorit* OR muslim\$ OR \$\$migrant\$) OR TI=(discriminat* OR deprivation OR disadvantage*) AND TI=("collective action" OR mobiliz* OR political-act* OR political part* OR volunteer* OR engag* OR politicization) AND TI=(minorit* OR muslim\$ OR \$\$migrant\$) OR AB=(discriminat* OR deprivation OR disadvantage*) AND AB=("collective action" OR mobiliz* OR political-act* OR political part* OR volunteer* OR engag* OR politicization) AND AB=(minorit* OR muslim\$ OR migrant\$ OR immigrant\$)	2825

Source: Own compilation. We report the results of the systematic search as of 1 January 1970 to 15 March 2024 in the last column



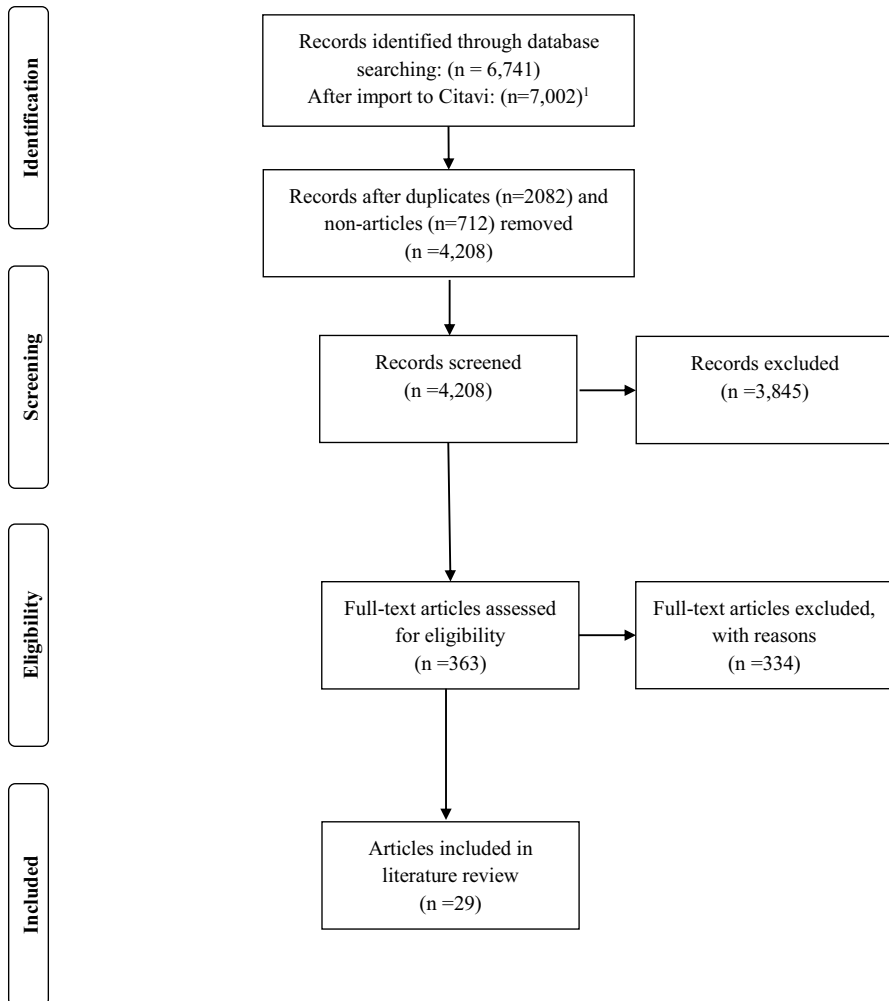


Fig. 1 PRISMA flow diagram of the selection process for publications. Adapted from: Moher et al., 2009, p. 267. Reported are the results of the systematic search as of 1 January 1970 to 15 March 2024 and the selection process. <sup>1</sup>The number of records went up after the import of the database search results of the citation software Citavi, because Citavi stores contributions to edited volumes and the edited volume itself as separate records. The numbers on the removal of duplicates and non-articles all relate to the number of records after the import to Citavi

**Table 7** Sources and targets of discrimination and their combinations addressed in studies (*n*)

Target of discrimination	Source of discrimination						Total
	Institutional discrimination	Inter-personal discrimination	Discriminatory culture	Source not specified	Mixed together	Not fully reported	
Group grievance	2	0	2	3	4	2	13
Own experience	3	4	0	8	4	2	21
Mixed together (self/family)	0	1	0	1	1	0	3
Total	5	5	2	12	9	4	37 <sup>1</sup>

Source: Results of systematic literature search in IBSS, WoS, and Scopus

<sup>1</sup>The total number of discrimination types addressed in studies (*n* = 37) is larger than the total number of studies (*n* = 31), because some studies address more than one type of discrimination

**Table 8** Frequency of various forms of civic engagement addressed in studies (*n*)

Forms of civic engagement	Number of studies
Electoral participation (voting)	9
Non-electoral participation (total)	11
Thereof <sup>1</sup>	
<i>Non-electoral index</i>	4
<i>Contact politician</i>	3
<i>Work for party/politician</i>	1
<i>Taking part in demonstration</i>	7
<i>Signing petition</i>	3
Non-political participation (total)	9
Thereof <sup>1</sup>	
<i>Non-political index</i>	4
<i>Non-political single measures, e.g. boycott</i>	5
Aggressive activities (total)	3
Thereof <sup>1</sup>	
<i>Aggressive index</i>	2
<i>Aggressive single measures</i>	1
Mixing of participation types/attitudes/activities	11
Not reported	2

Source: Results of systematic literature search in IBSS, WoS, and Scopus.<sup>1</sup>These numbers exceed the total numbers of studies that deal with non-electoral participation because some studies address more than one form of civic engagement

**Table 9** Usage of explanatory variables for civic engagement by discipline

First author	Year	Discipline	Skills	Attitudes	Recruitment	Emotions	Identity
Albanesi	2016	Psychology	x	x		x	
Albarracin	2011	Political Science	x				
Azabar	2024	Political Science	x	x			
Bilodeau	2017	Political Science	x	x			
Bilodeau	2020	Political Science	x				
Bilodeau	2023	Political Science	x	x	x		
Chan	2022	Political Science	x	x	x		
Grant	2008	Psychology				x	x
Grant	2015	Psychology		x			x
Hayward	2018	Psychology	x			x	
Klandermans	2008	Psychology	x	x	x	x	x
Lee	2022	Communication		x			x
Martin	2017	Political Science	x		x		
Martinovic	2014	Psychology	x				x
Oskooii	2016	Political Science	x	x	x		
Oskooii	2016	Political Science	x		x		
Oskooii	2020	Political Science	x	x	x		x
Özdemir	2024	Psychology					
Pilati	2018	Political Science	x	x			
Rim	2009	Political Science	x	x	x		
Shanaah	2022	Political Science	x				x
Shanaah	2022	Political Science	x				x
Sirin	2011	Psychology					
Spaiser	2012	Political Science	x	x	x	x	
Tausch	2011	Psychology	x	x		x	
Tran	2017	Psychology		x			x
Tran	2017	Political Science	x				
Troian	2019	Psychology					
Van Bergen	2015	Education	x				x
Wiley	2021	Psychology	x				x
Yi	2022	Psychology					x

Source: Results of systematic literature search in IBSS, WoS, and Scopus

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## Declarations

**Conflict of Interest** The authors declare no competing interests.

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