

In Pursuit of Inclusion: Studying the Impact of EDI Policies in the Workplace and Exploring the Challenges of Measurement

Tatiana Garakani, Stany Nzobonimpa and Marie-Andrée Mbengue-Reiver

Volume 20, Number 2, 2023

Varia

URI: <https://id.erudit.org/iderudit/1111225ar>

DOI: <https://doi.org/10.7202/1111225ar>

[See table of contents](#)

Publisher(s)

Centre d'études en gouvernance de l'Université d'Ottawa

ISSN

1912-0362 (digital)

[Explore this journal](#)

Cite this article

Garakani, T., Nzobonimpa, S. & Mbengue-Reiver, M.-A. (2023). In Pursuit of Inclusion: Studying the Impact of EDI Policies in the Workplace and Exploring the Challenges of Measurement. *Revue Gouvernance / Governance Review*, 20(2), 1–28. <https://doi.org/10.7202/1111225ar>

Article abstract

As part of this study, we developed a survey in which we focus on employees' experience of inclusion in their workplaces. We assessed the impact of equity, diversity, and inclusion (EDI) policies on the respondents' perceptions of the workplace. Our results indicated that organizations with EDI policies are more likely to be perceived as positive work environments. Moreover, we find that the perception of the workplace differs according to individuals and their identities. These results confirm, on the one hand, that the development of EDI policies is worthwhile. On the other hand, employers must pay more attention to their employees' experiences in order to better understand their realities, particularly with regard to the various identities (perceived, real or supposed) and associated stigmas and stereotypes. The narrative component of our survey provides an overview of elements that are critical to understanding the issues that we investigated, but that are often missing from traditional surveys.

© Tatiana Garakani, Stany Nzobonimpa et Marie-Andrée Mbengue-Reiver, 2023



This document is protected by copyright law. Use of the services of Érudit (including reproduction) is subject to its terms and conditions, which can be viewed online.

<https://apropos.erudit.org/en/users/policy-on-use/>

In Pursuit of Inclusion: Studying the Impact of EDI Policies in the Workplace and Exploring the Challenges of Measurement

By Tatiana Garakani¹, Stany Nzobonimpa², Marie-Andrée Mbengue-Reiver³

ABSTRACT

As part of this study, we developed a survey in which we focus on employees' experience of inclusion in their workplaces. We assessed the impact of equity, diversity, and inclusion (EDI) policies on the respondents' perceptions of the workplace. Our results indicated that organizations with EDI policies are more likely to be perceived as positive work environments. Moreover, we find that the perception of the workplace differs according to individuals and their identities. These results confirm, on the one hand, that the development of EDI policies is worthwhile. On the other hand, employers must pay more attention to their employees' experiences in order to better understand their realities, particularly with regard to the various identities (perceived, real or supposed) and associated stigmas and stereotypes. The narrative component of our survey provides an overview of elements that are critical to understanding the issues that we investigated, but that are often missing from traditional surveys.

Keywords: *equity, diversity, inclusion, identities, measurement, perception*

RÉSUMÉ

Dans le cadre de cette étude, nous avons élaboré un sondage portant sur l'expérience d'inclusion des individus en milieu de travail. Nous évaluons l'impact des politiques en matière d'équité, de diversité et d'inclusion (EDI) sur la perception qu'ont les répondants de leur milieu de travail. Nos résultats indiquent que les environnements de travail dans les organisations qui ont adopté une politique d'EDI sont plus susceptibles d'être perçus positivement par les employé.e.s. De plus, nous avons constaté que la perception du milieu de travail diffère selon les individus et leurs identités. Ces résultats confirment, d'une part, que les politiques d'EDI ne sont pas mises en œuvre en vain. D'autre part, les employeurs doivent porter plus attention à l'expérience de leurs employé.e.s afin de mieux comprendre leur réalité, notamment au regard des diverses identités (perçues, réelles ou supposées) et des

-
1. Associate professor at École nationale d'administration publique in Montreal. ORCID: 0009.0006.0173.8439
 2. Doctoral candidate at École nationale d'administration publique in Gatineau and Senior Analyst for the Federal Government of Canada. ORCID: 0000-0001-6196-950X.
 3. Doctoral candidate at École nationale d'administration publique in Montreal. ORCID: 0009-0009-9178-5723

stigmatismes et stéréotypes associés. Les éléments narratifs de notre sondage donnent un aperçu de données qui sont nécessaires à la compréhension de ces enjeux et qui, pourtant, sont absentes des sondages traditionnels.

Mots clés : *équité, diversité, inclusion, identités, mesure, perception*

Introduction

Representative bureaucracy can increase responsiveness to the needs of minorities and marginalized groups, improve policy outcomes, and enhance public trust, policy effectiveness and social equity (Holzer and Ozarow, 2016). A representation of minorities in various administrations leads to increased access to services and reduces disparities (Kim, 2018).

Over the last two decades, the notion of Equity, Diversity and Inclusion (EDI) has been introduced in public policy and discourse as a means of enhancing representative bureaucracy. Many public and private organizations have or are formulating EDI policies, establishing diversity offices, appointing EDI specialists, reviewing their recruitment practices, and implementing various initiatives to promote diversity.

The year 2020 marked the 20th anniversary of equal access to employment programs in Quebec designed to counter systemic discrimination in employment. In its triennial report of April 2020, the Commission des droits de la personne et des droits de la jeunesse (CDPDJ), a Quebec-based independent human rights commission established under the Charter of human rights and freedoms, noted that the representation of women in public organizations rose from 53.9% in 2009 to 65.3% in 2019. Women are well represented in almost all job categories except for managerial positions and traditionally male occupations.

However, between 2009 and 2019, the representation of Indigenous peoples remained stagnant at 0.3%, while the representation of ethnic minorities barely rose from 3.1% to 3.4%. The representation of visible minorities increased from 2.7% in 2009 to 6.3% in 2019, while people with disabilities represented only 1.0% of the total workforce of public organizations in Quebec. In all cases, the representation of members of targeted groups is still far below official targets: 0.9% for Indigenous peoples, 6.6% for ethnic minorities, 10.3% for visible minorities and 4.6% for people with disabilities. (CDPDJ, 2020)

Given the shortcomings of the representative bureaucracy implementation, it is no surprise that attention is still very much turned to the headcount of diversity in organizations, especially at the recruitment level, and less on inclusion, retention, and promotion. The effort to document ‘diversity’ also carries its own challenges, such as overcoming the difficulties of self-identification into arbitrary unique categorizations that vary from one organization to the other and don’t take into account intersectionality.⁴

Many scholars have studied the impact of different programs and initiatives to increase diversity in organizations (Kalev et al., 2006; Dover et al., 2020). Some work better than others, while others are sending a diversity signal rather than making a genuine effort to improve workplace inclusion (Scarborough et al., 2019). Chang (2020) and Risberg (2020) point out “diversity washing” as a way to enhance an organization’s attractiveness without making it more inclusive.

Studying the experience of inclusion involves going beyond organizational documentation. Most EDI policies consider the legal aspects of inclusion and overlook its interpersonal dimensions (Koutsouris et al., 2022). Discrepancies between concepts, definitions and practices may be observed when attention is turned to the employees’ lived experiences and their perceptions of inclusion (Tamtik and Guenter, 2019). The importance of measuring inclusion, even when ‘diversity’ is represented, has been highlighted in recent literature (Wolfgruber et al., 2022; Asey, 2022).

This article delves into inclusion within the workforce of Quebec, and aims to achieve multiple objectives. Firstly, we seek to determine if implementing EDI policies can serve as a predictor for fostering a sense of inclusion. Secondly, we focus on the employees’ perceptions and experiences of inclusion in their workplaces. Lastly, we address the difficulties associated with measuring inclusion.

1. Project overview

This pilot project started with an analysis of EDI policies in Quebec’s private and public sectors. In line with other research findings, we found that diversity, with various definitions, objectives, and means was overemphasized (Garakani et al, in press). For instance, social cohesion (*le vivre-ensemble*) was often cited as one of the objectives in a number of municipal EDI policies, implying that diversity would automatically result in inclusion. In reality, there is little documentation on how and under which conditions people from diverse groups feel included in Quebec’s workplaces.

4. This specific challenge is discussed in a separate article (Mbengue-Reiver et al, 2023).

Surveys have been carried out to measure workplace climate and job satisfaction and even, in some cases, to document experiences of discrimination and harassment. For instance, at the federal level, the Public Service Employee Survey (PSES), a comprehensive government-wide survey conducted by the Office of the Chief Human Resources Officer at the Treasury Board of Canada Secretariat, measures employees' perceptions of diversity and inclusion, engagement, and workplace satisfaction. Municipalities like the City of Montreal have also conducted similar studies (see Soares, 2021 and Saba, 2021).

We decided to launch a pilot survey through social media without singling out a specific organization or sector of activity due to the need to protect confidentiality in organizations with a low level of diversity. Our goal was to document the lived experiences of individuals in different professions and in various sectors in Quebec.

The following section provides an overview of the research on inclusion in the workplace that informed our survey instrument and analysis.

2. Measuring inclusion: frameworks that informed the survey design

Jansen et al. (2014) describe being included in groups as essential to humans. But experiencing inclusion is not a given. Inclusion carries a degree of ambivalence and ambiguity, so how do we measure it?

We started with a key reference, the model of Shore et al. (2011), which defines inclusion as a crossover between belonging and authenticity/uniqueness. For Shore et al. (2011), people are included in a group if they receive a sense of belonging from the group and are valued for their particular unique characteristics. Jansen et al. (2014) drew inspiration from optimal distinctiveness and self-determination theories to further conceptualize valuing the uniqueness component of inclusion. They propose to replace “perceived uniqueness” with “perceived authenticity” as a critical component of inclusion. They define perceived authenticity as “the extent to which a group member perceives that he or she is allowed and encouraged by the group to remain true to oneself and consists of two subcomponents: room for authenticity and value in authenticity” (p. 372). “Room for authenticity” captures the extent to which the group allows individual group members to feel and act in accordance with their true selves. In contrast, the “value in the authenticity” component captures the degree to which the group actively encourages group members to be themselves within the group.

Jansen et al. (2014) extended the description of belonging to group membership and group affection. Group membership reflects the perceived strength of the bond between an individual and group affection indicates the perceived positive valence of that bond. Jansen et al. highlight that belonging and value in authenticity are distinct, but interrelated. They also provide examples of situations in which group members receive a strong sense of belonging from the group without being able to be themselves (assimilation experience). In contrast, group members may also perceive that the group considers them as peripheral group members, but simultaneously perceive that they are allowed and encouraged to be themselves (differentiation) (p. 372).

Inclusion is determined by the signals the individual receives from the group concerning his/her position within the group. Jansen et al. (2014) remind us that people constantly monitor their social environments for cues or signals that pertain to their inclusionary status.

To measure inclusion, Jansen et al. (2014) recommend that questions 1) should pertain to the relationship between the group and the individual, 2) should capture an individual's perception of how the group sees and treats him/her, 3) should refer to the group as a whole, rather than to individuals with specific roles (such as coworkers or supervisors) to ensure that the instrument can be used throughout various contexts, which may or may not consist of these specific group members.

Van Laar et al.'s (2019) research addresses stigma management and coping strategies in the workplace. The authors define diversity climate as one that signals accepting, respecting, and valuing various social groups. To understand workplace inequality, it is essential to understand how various groups are affected by stigma. They invite us to turn our attention to threats, coping, support, and potential hidden costs in order to understand why various diversity efforts are not always successful in increasing or maintaining members of underrepresented groups in organizations.

Table 1 summarizes the proxy indicators that were used to assess the respondents' experiences of inclusion, work climate, and coping strategies:

Table 1. Summary of proxy indicators to measure inclusion

Well-being in the workplace	Overall, I'm satisfied with my job. I often think of leaving my job.
Safe work environment	I feel like I am treated with less respect than others I feel threatened
Authenticity	I behave according to my values and beliefs at work At work, I have to hide what I really feel inside
Inclusion	I feel valued and I'm able to express opinions and disagreements I'm staying outside of the politics I prefer not to speak up
Stereotypes	I fear I might get judged based on the groups to which I belong rather than based on my skills People act like they are all the better than me People act like I'm unreliable

Source: Authors

We were careful not to duplicate the Canadian Federal Government's Public Service Employee Survey (PSES). While the PSES has themes on diversity and inclusion as well as anti-racism, the questions are rather general in nature and fail to reach the respondents' personal, lived experiences. Most of these questions inquire about how diverse and inclusive a workplace is as opposed to asking about the very experience of respondents. For example, in its 2020 iteration, question 20 of the PSES was formulated as follows: "In my work unit, every individual is accepted as an equal member of the team." Unlike these employer-sponsored questionnaires, our survey focused on the personal, individual level with questions such as "I feel like I am treated with less respect than others".

3. Data collection

SurveyMonkey was used to design an online survey in both Canadian official languages (French and English). The surveys were tested with the target audience to verify length, wording, acceptability and ease of use, and to identify any biases. Some questions had to be eliminated to manage the length of the survey. The survey included 23 questions organized in 5 sections: 1) the organization's profile and status with EDI policy, 2) the nature of the work (profession, type of contract, etc.), 3) workplace experience and work climate, 4) coping strategies, and 5) socio-demographic data.

The survey was launched in November 2021 on social media, LinkedIn, and Facebook profiles of the research team members. Their respective personal and professional networks then shared it with other individuals and organizations. The survey was closed in January 2022.

Two hundred sixty-seven individuals responded to the survey, split nearly equally between French and English surveys. The total number of respondents for each question is provided when presenting various data since not all questions were answered by all respondents.

Out of all the respondents, 58% were professionals, 78% had permanent full-time contracts, 32% had between 1 and 3 years of experience in their organization, and 30% had more than 10 years of experience in their organization. There were no significant differences between answers provided by French and English survey respondents.

A total of 65% of respondents reported having learned French as a first language as a child, 9% had learned English as a first language, and 25% had a different first language. However, 75% of respondents used English and French at work, while 25% used only French. Another 54% (n=193) of respondents were born outside Canada, and 87.5% were cisgender.

There is a tendency to create specific categories to simplify socio-demographic data collection. Our reviews of various surveys revealed a wide range of labels to “categorize” individuals, with no consistency from one study to the other.

We opted for an open-ended question to mitigate the essentialist pitfalls associated with “predetermined unique categorizations,” which employees of diverse backgrounds struggle with. We not only decided to leave it to individuals to define how they see themselves, but we also asked them how they think others perceive them. Hence, we introduced a question: I was born ____, I identify as ____, but I’m often perceived as ____.

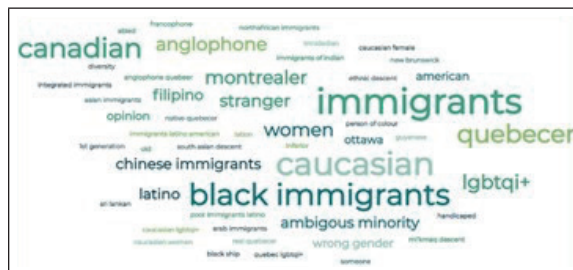
Most respondents described themselves as Canadians first, followed by another origin or ethnic group. In contrast, they often described being perceived first as an immigrant, regardless of how many decades they have been in the country and whether they were born in Canada.

Figure 1. Self-identification (n=190)



Source: Authors

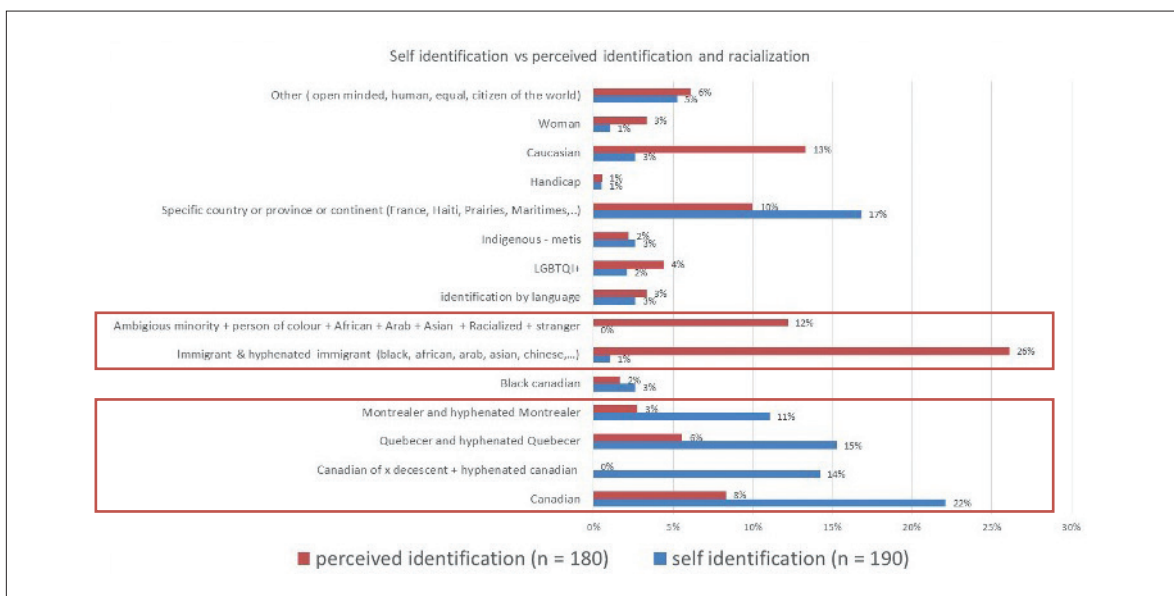
Figure 2. Perceived identification/ racialization (n=180)



Source: Authors

We compared terms and categories used by participants to self-identify versus how they feel they are perceived. Our analysis indicates that when it came to self-identification, 62% of respondents were part of a group who identified either as Canadian (22%), hyphenated Canadian (14%), Quebecer or hyphenated Quebecer (14%), and Montrealer or hyphenated Montrealer (11%). However, the perceived identity drops significantly to only 9% (Montrealer and Quebecer, including hyphenated Montrealer or Quebecer). In contrast, we see a significant gap in the immigrant/hyphenated immigrant category, with 1% as self-identification and 26% as perceived identity and the racialized/othering category, with 0% as self-identification and 12% as perceived identity. The gap is much narrower in other categories, except for the Caucasian category with a gap between self-identification (3%) and perceived identity (13%).

Figure 3. Comparisons between self-identification and perceived identities per categories



Source: Authors

Of course, it is reasonable to question whether “perception,” with all its subjectivity, is appropriate to document participants’ identities.

To address this legitimate criticism, we turned to the work of Van Laar et al. (2019) on coping with stigma in the workplace. The authors cite the work of several researchers (e.g. Murphy et al., 2007 and Steele et al., 2002) to explain that the devaluation of social identity often happens through subtle environmental cues that lead to the members of a negatively stereotyped group to initiate a vigilance process. They call attention to the fact that “for stereotype threat to occur, others around do not need to hold a negative stereotype of the group; one only needs to believe that they do.”(p.5) This led us to focus on how the participants believe they are being perceived in order to better understand the strategies that the participants have developed to cope with stigma-related threats.

4. Results

We present the results in two sections. The first section analyzes EDI policies’ impact on the participants’ perceptions of inclusion in the workplace. In the second section, we focus on a subset of our results, emphasizing more specifically the experiences of inclusion as reported by Canadian federal government employees.

4.1 Section 1: Perceptions of the workplace and the impact of EDI policies

Most respondents were federal government workers in professional positions with permanent full-time contracts. Not surprisingly, 60% reported that their organization had an EDI policy, 72% had received some training on EDI, and 69% said that there were accommodation measures in their organization.

As for programs supporting EDI, 46% (n=242) reported having received some mentoring, although most were informal. A proportion of 63% said they had attended conferences or workshops as part of their staff development and training, while 35% were able to pursue continuing education.

We used a logistic regression model to study the impact of EDI policies on respondents’ perception of their workplace environment. The choice of a logistic regression model was especially useful in our context. On the one hand, the probabilistic nature of the model allowed us to evaluate how employees perceived their workplace environment

and estimate the (probabilistic) effect of (self-) identification on this perception. On the other hand, we used the model to analyze the probabilistic impact of policies targeting EDI on the employee perception of the workplace environment.

4.1.1 Model specification

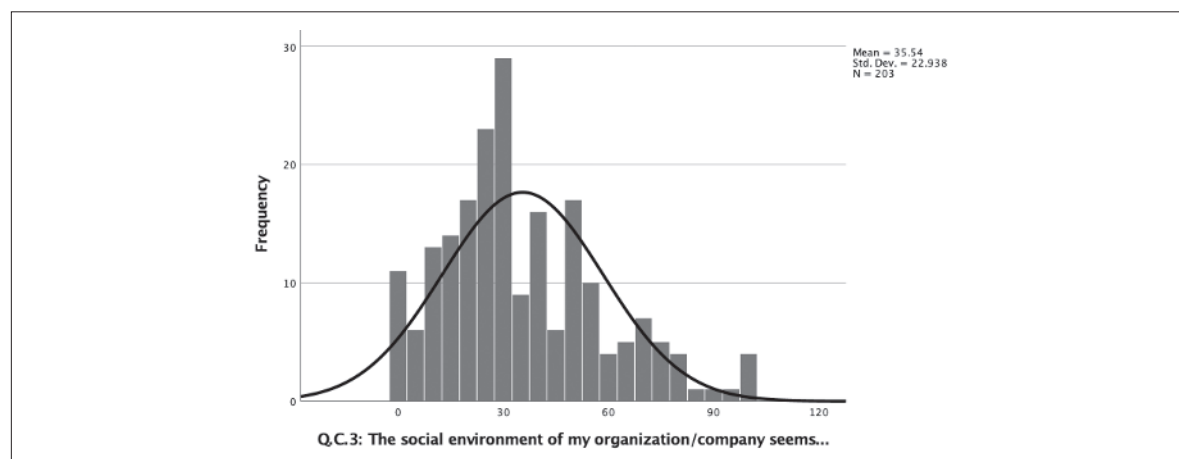
We analyzed a model with the respondents' reported perception of the workplace environment as our dependent variable. Table 2 and Figure 4 below summarize the dependent variable's specifications before transformations.

Table 2. Summary of the perception of the workplace social environment before transformation

The social environment of my organization/company seems...		
N	Valid	203
	Missing	64
Mean		35.54
Median		30.00
Std. Deviation		22.938
Minimum		0
Maximum		100

Source: Authors

Figure 4. Distribution of responses on the perception of the workplace social environment before transformation



Source: Authors

The variable on the perception of the workplace environment comes from responses to the following survey question: “The social environment in my organization/company seems...” for which respondents had three choices: extremely welcoming, neither welcoming nor unwelcoming, extremely unwelcoming. The response values for this survey question varied between 0 and 100, where 0 indicated an “extremely welcoming” work environment and 100, an “extremely unwelcoming” workplace. A value of 50 indicated that the respondent saw their workplace environment as neither welcoming nor unwelcoming, i.e. “neutral.” Therefore, the question referred to two extremes on a 0-to-100 axis of multiple, continuous values. When responding to the question, participants could move their computer mouse towards either one of the two extremes from a neutral position. Instead of proposing Likert scales-like choices, such as adding “somewhat welcoming” or “somewhat unwelcoming” options, we allowed respondents to move their computer mouse on the axis and expected them to iterate between choices, effectively allowing them to stop where they felt was appropriate. In order to apply a binary logistic regression model to study the two extreme points, we dichotomized these responses as follows: values 0 to 49 indicated a welcoming workplace environment, and values 51 to 100 suggested an unwelcoming environment. The neutral responses (exact value of 50) were not taken into account for this analysis. Since respondents had a clear indication that returned “neither welcoming nor unwelcoming” at value 50 when moving their computer mouse along the response axis, this strategy ensured our results reflected a clear-cut distinction between the two groups. Our sample had a total of 10 neutral responses, taking our valid responses from 203 to 193 in a total sample of 267 responses, as can be seen on the summary Table 3 and distribution Figure 5 below. This new variable is binary and expressed as “ $y=1$ ” if the workplace is welcoming or “ $y=0$ ” otherwise. By using this dichotomy as a dependent variable, we sought to estimate the probability that $y=1$, i.e. the likelihood that a workplace environment will be perceived as welcoming by a respondent in our sample.

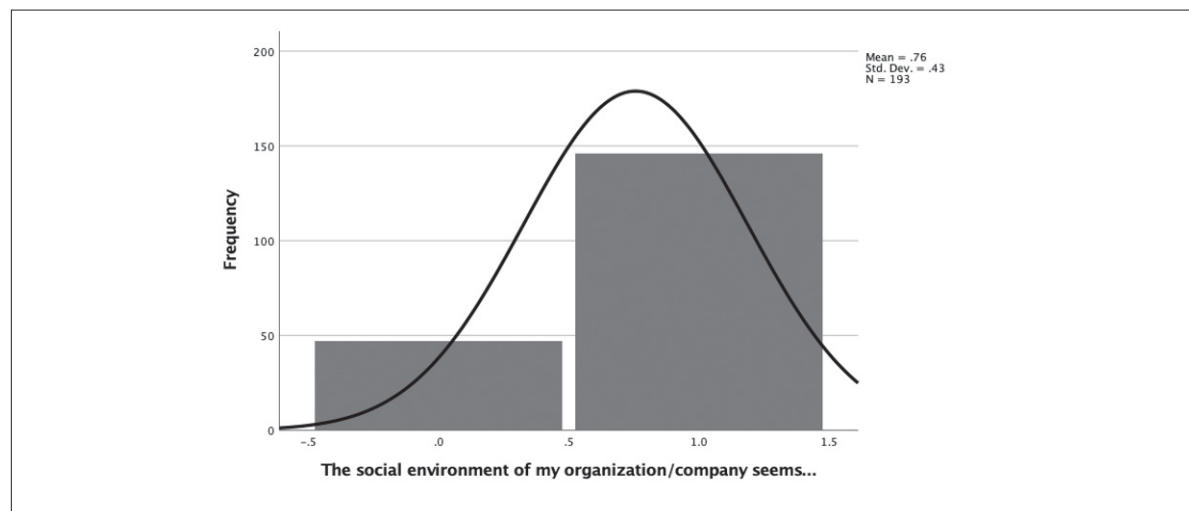
Table 3. Summary of the perception of the workplace social environment after transformation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 (the workplace is perceived as unwelcoming)	47	17.6	24.4	24.4
	1 (the workplace is perceived as welcoming)	146	54.7	75.6	100.0
	Total	193	72.3	100.0	
Missing	System	74	27.7		
Total		267	100.0		

Source: Authors

Figure 5 below shows the distribution of the dependent variable, i. e., the respondents' perception of the workplace social environment after the transformations discussed above. The distribution of responses is expectedly not affected by the transformation, as evidenced by the unchanged distribution curve (compared with the original distribution in Figure 4).

Figure 5. Summary of the perception of the workplace social environment after transformation



Source: Authors

Our model is expressed as follows:

$$\Pr(y = 1 | x)_{\text{Logit}} = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_{5*} + \epsilon$$

Where:

- The expression on the left-hand side is the logistic model to be estimated. This corresponds to the probability for a workplace environment to be perceived as welcoming by a respondent, given a vector of Xs.
- X_1 : this dichotomous variable indicates the respondents' employment sector. Its value is 1 if the respondent is a public sector employee, or 0 if not.
- X_2 : this dichotomous variable indicates the existence of a policy on equity, diversity, and inclusion within the respondents' organization. Where such a policy exists, the variable has the value of 1, or 0 if not.
- X_3 : indicates whether the respondents identify as having a disability. If so, its value is 1, or 0 if not.
- X_4 : indicates the respondents' age scale
- X_5 : indicates immigration status (iteration 1) and self-reported racial identity (iteration two)*.
- Epsilon: indicates the error term.

We specify the model in two iterations at X_5 . In the first iteration, this variable indicates whether the respondents were born in Canada (value 1) or not (value 0). In the second iteration, this variable indicates self-reported racial identity. Its value is 1 if a respondent identifies with a racialized group, or 0 if not.

4.1.2 Sample

Throughout this analysis, we followed the *rule of thumb*, generally accepted for small sample sizes in logistic regressions. This rule suggests a sample size of at least 10 observations per category of the estimated dependent variable (Hair et al., 2014; Hosmer et

al., 2013)).⁵ Three techniques allowed us to ensure that our results were valid despite the sample size. First, we performed two predictive accuracy tests, the Pearson χ^2 and the Hosmer-Lemeshow tests. Then, we compared several tested models to analyze the results consistency. Finally, as Heckmann et al. (2013, p. 2735) proposed, we limited the number of explanatory variables to the minimum, which helped to avoid an over-fitting bias and to ensure parsimony. Hair et al. (2014, p. 324) point out that the proper use of these tests requires a sample size of at least 50 cases to ensure that each class has at least 5 observations, which is the case for our sample.

4.1.3 Predictive accuracy

Table 4 provides results for Pearson's χ^2 and Hosmer-Lemeshow tests for predictive accuracy.

Table 4. Pearson's χ^2 and Hosmer-Lemeshow tests

	Model: perception of the work environment	
	χ^2 Pearson	Hosmer-Lemeshow
# of observations	143	# of observations 143
Covariate patterns	22	Number of groups 8
χ^2 (17)	20.17	χ^2 (6) 9.46
prob. > χ^2	0.2654	prob. > χ^2 0.1493

Source: Authors

We used the *estat gof* and *estat gof (group)* commands of the Stata program to perform the Pearson χ^2 and the Hosmer-Lemeshow tests, respectively.⁶

For the two tests used in Table 4, the null hypothesis is that the distributions happened by chance or resulted from a sampling error. This null hypothesis is accepted when the

5. It is worth noting that the discussion on the overall (minimum) sample size for logistic regression analysis is not unanimous. For example, Hosmer et al. (2013) suggest a minimum sample size of 400 observations while Bujang et al. (2018) recommend 500 observations. Acknowledging that 500 observations would be ideal where possible, Long (1997, p. 54) only cautions against sample sizes smaller than 100.
6. The Pearson's χ^2 test examines the observed number versus the expected number of responses. Specifically, this test is applied to categorical observations to assess the probability that any observed difference between sets is the result of luck. The Hosmer-Lemeshow test improves the fit review process by creating small groups. Hosmer et al. (2013, pp. 157–160) suggest clustering data by ordering them according to predicted probabilities and forming groups of nearly equal size.

probability (prob. $> \chi^2$) is less than the critical p-value of a given interval (e. g., 0.05 for a 95% confidence interval), and it is rejected otherwise. For the Pearson test, we expected J (covariability) to significantly differ from n (observations), which was the case for our sample, as shown in Table 4. Therefore, the results of both tests (prob. $> \chi^2 = 0.2654$ and 0.1493 for Pearson and Hosmer-Lemeshow, respectively) did not allow us to accept the null hypothesis. In other words, the distributions observed in our sample were neither due to chance nor to sampling error.

4.1.4 Logistic Regression Results

In the following sections, we report the results of our two-iterations logistic regression models.

Table 5. Results of the logistic regression – first iteration

Perception of the workplace environment	LOGIT coefficient	Average marginal effects	Odds ratio
Employment sector	0.3207228	0.050386	1.378123
EDI policies	1.227875**	0.192901**	3.413966**
Disability	-1.355011***	-0.2128743 ***	0.2579444***
Age	-0.3639966	-0.0571844	0.6948935
Immigration status	-0.1953329	-0.0306871	0.8225608
Constant	1.590327**	n/a	4.905355**
Pseudo R ²	0.1210	n/a	0.1210
Classification	78.10%	n/a	n/a
Number of obs	137	n/a	n/a
Wald χ^2 (5)	18.31	n/a	n/a
p	0.0026	n/a	n/a

*** significant at the 0.01 level; **significant at the 0.05 level; *significant at level 0.1
Source: Authors

Table 6. Results of the logistic regression – second iteration

Perception of the workplace environment	LOGIT coefficient	Average marginal effects	Odds ratio
Employment sector	0.2704219	0.0424447	1.310517
EDI policies	1.201304**	0.1885536**	3.32445**
Disability	-1.298436**	-0.2037991***	0.2729585**
Age	-0.3336364	-0.0523667	0.7163142
Self-perceived racial identity	0.1963456	0.0308179	1.216947
Constant	1.385862**	n/a	3.998269**
Pseudo R ²	0.1100	n/a	0.1100
Classification	77.94%	n/a	n/a
Number of obs	136	n/a	n/a
Wald χ^2 (5)	16.32	n/a	n/a
p	0.0060	n/a	n/a

*** significant at the 0.01 level; **significant at the 0.05 level; *significant at level 0.1
Source: Authors

The second columns of tables 5 and 6 above provide non-transformed LOGIT coefficients and show us the direction of the relationship. We obtained statistically significant coefficients for the variables “EDI policies” ($p > |z| = 0.020$), “disability” ($p > |z| = 0.009$), and the constant ($p > |z| = 0.048$) and nonsignificant coefficients for variables “employment sector,” immigration status” (first iteration), “self-perceived racial identity” (second iteration) and “age.” The results indicated a positive relationship, i.e. following the same direction, between the perception of the workplace environment and the existence of an EDI policy within a respondent’s organization. This relationship was negative (opposite directions) between the perception of the workplace environment and the state of having a “disability,” as shown by the negative sign of the LOGIT coefficient of this variable. While the relationship is negative for immigration status and age, and positive for the employment sector and racial identity as seen in both tables, we do not comment further on those variables, as no statistical significance is observed.

The third column of tables 5 and 6 gives us the “average marginal effect” of the independent variables to the estimated probability.⁷ Therefore, the existence of an EDI policy within an organization in our sample increased by 19% the probability that a

7. These are the exponentiated logistic coefficients, which result from a transformation (antilog) of the original LOGIT coefficients.

respondent will perceive their work environment as welcoming (exponentiated coefficient=0.192, $p > |z| = 0.011$ in the first iteration and 0.188, $p > |z| = 0.013$ in the second iteration). Similarly, having a “disability” decreased this probability by 20% (exponentiated coefficient=-0.201, $p > |z| = 0.004$). In other words, respondents who identified themselves as having a disability were less likely (-20%) to say that their workplace environment is welcoming.

By transforming these values into odds ratios, we obtained the ratio between the probability of success, i.e. the probability that a respondent perceives their work environment as welcoming, and the probability of failure, that is, the probability that a respondent perceives their workplace as unwelcoming. As shown in the last column of the tables, respondents from organizations where EDI policies were in place were three times more likely (odds ratio=3.41, $p > |z| = 0.020$ in the first iteration and 3.32, $p > |z| = 0.020$ in the second iteration) to find that their work environment is welcoming compared to participants whose organizations did not have such policies. The odds of responding that a workplace environment is welcoming were close to zero (0.257, $p > |z| = 0.007$ and 0.272, $p > |z| = 0.010$ in the first and second iterations, respectively) for respondents who declared having a disability.

The Wald χ^2 test results of 18.31 and 16.32 with p-values of 0.0026 and 0.0060 respectively tell us that our models fit significantly better than a single constant model, indicating that our probability predictors were close to the end results. Additionally, a predicted results classification test (hit ratio) shows that 78.10% (77.94% in the second iteration) of our predictions were correctly classified.

4.2 Section 2: Experience of inclusion at the workplace

Most of our respondents (70%) were public sector employees, out of which 77% were federal government workers. The over-representation of the federal government sector provided a unique opportunity to study the experience of inclusion in a work environment generally considered “favourable” to EDI with its many programs and initiatives to promote employment equity, diversity, and inclusion across various federal workplaces.

In 2021, the Public Service Employment Act was amended to include new requirements that ensure proper representation of racialized groups within the federal public service, including a commitment to a representative bureaucracy (Government of Canada, 2021a). The Centre on Diversity and Inclusion (CDI) initiative championed by the Treasury Board of Canada Secretariat seeks to examine barriers and challenges to inclusion in the federal public sector. Among other objectives, it is tasked with developing solutions for recruitment and coordinating EDI stakeholders across the public service.

Some of the centre's notable initiatives include the Mosaic Leadership Development Program, the Mentorship Plus Program, and the Federal Speakers' forum on Diversity and Inclusion (Government of Canada 2021b). Besides these whole-of-government initiatives, individual departments may implement their own measures regarding EDI in the workplace.

4.2.1 Experience in the workplace and coping strategies

The great majority of respondents were positive about their experiences in the workplace:

- 74% were satisfied with their job,
- 83% felt that they behaved according to their beliefs and values at work,
- 76% felt that their colleagues made them feel like their abilities and opinions are valued,
- 73% felt like they were perceived as reliable by their colleagues, and
- 75% never felt harassed or threatened.

However,

- 58% worried that people in their organization might not appreciate them,
- 45% felt like they were being treated with less respect than others,
- 49% felt that people act like they are better than them,
- 40% often thought about leaving their job,
- 39% believed that they had to hide what they really feel inside when at work,
- 29% feared that they would be judged more on the basis of the groups to which they belong to (origin, race, gender, sexual orientation, etc.) than their skills, and finally
- only 28% believed that they would have an opportunity to develop their full potential in the organization.

Given that our participants had a lot in common (federal government employees, professionals with permanent full-time positions), we wanted to know whether there were any shared characteristics among participants who responded more negatively about their experience in the workplace.

We traced responses to the survey questions and the participants' responses to how they identify and how they think they are perceived. In this case, we examined whether participants identified with any stigmatized identities of othering. Negative feelings about belonging and authenticity systematically increased with the perception of stigmatized identity.

Regarding coping strategies, 85% stated that they often or occasionally volunteered to be part of various committees and working groups, 94% expressed their opinion when they disagreed with a decision, and 91% said they spearheaded initiatives of change in the organization. However, 53% said they remained isolated and tried to stay out of the organization's politics. In comparison, 64% mentioned attending all meetings but not expressing their opinions, and finally, 66% mentioned that they preferred to remain silent.

4.2.2 Narrative responses

In various parts of the survey, respondents were invited to share general comments about their experiences, explain or nuance their answers if they wished, or add any other EDI-related elements that they felt were relevant.

The table below summarizes the profile of the individuals that provided comments. Respondents who identified as female, were born in Canada, and worked in organizations with EDI training felt more compelled to provide comments.

Table 7. Profiles of the participants who provided comments

Sections with comments	Comments							
	Of those expressing discomfort - number and percentage working in:							
	# of comments received	# &% that expressed discomfort	Federal gov organizations	Organizations with EDI training	Organizations with EDI Policies	Born in Canada	At the job between 0 to 3 yrs	Identify as female
A. About work (C1)	35	22 (63%)	10 (45%)	14 (64%)	12 (55%)	12 (55%)	10 (45%)	15 (68%)
A. About work environment (C2)	19	11 (58%)	8 (73%)	10 (91%)	4 (36%)	8 (73%)	5 (45%)	10 (91%)
A. General comments	42	29 (69%)	21 (72%)	23 (79%)	16(55%)	18 (62%)	10 (34%)	19 (66%)
Those who commented in A, B and C	7	5 (71%)	4 (80%)	4 (80%)	2 (40%)	4 (80%)	4 (80%)	4 (80%)

Source: Authors

What is particularly interesting is the contrast between the comments and the general survey results. Although closed questions about the work climate and experience of inclusion were generally positive, the comments expressed some discomfort and disillusionment.

Some participants echoed Ahmed's (2012) comments that diversity rhetoric has gradually come to replace the equal opportunities rhetoric:

"These three terms are typically lumped into a single acronym but have very different meanings and practicalities. **Our organization may have a "diversity in hiring" policy. Still, the reality is that the human resources processes are gender-blind rather than gender-transformative, so equity in promotion and inclusion for retention are different matters altogether. Discrimination is very hard, almost impossible, to prove. I have lost track of the number of times I have been advised "let it go, you won't win."** (*Participant 212*)

Other participants pointed out the discrepancy between policy and practice.

There is training, and there is encouragement to speak out when practices are exclusive and staff experience harassment. In reality managers resist when they are notified that they do not apply the

guidance and can retaliate... I have witnessed people with disabilities denied accommodations for so long they leave on stress leave and then often do not return. Society is just beginning to value and embrace those whose life paths/cultures and experiences are different... Yet we are not including those voices and stifling them when they state they are not included so we remain a far way from inclusion. (Participant 147)

“Overall, the organization talks a good talk and seems great but when you dive a little deeper you start noticing/hearing areas that experience inequity/racism. This organization has a long list of recommendations/items that need to be incorporated. Changes are imminent but I think it’s knowing where to start and the tools that can be utilized, if any. **We all know the various experiences people have endured over the years, but I think what is not being shared is the how. How and what are we doing with the data collected? Will people be held accountable for their actions, and if so, how? How can the organization and people fully support and protect the employees from further harm. How can we call out micro-aggressions? How do we build the courage in others to speak up and become effective allies when they witness inequity? How do we ensure that retribution won’t occur if someone does speak up, unfortunately, it still happens even today?** (Participant 161)

Others challenged the type of training offered in organizations:

“**These trainings have to go past ‘hire a more inclusive staff,’ don’t be blatantly racist/homophobic”.** Employees need to understand the systems in place and in the way of true equitable inclusion. We need to be proactive in changing our organizations’ cultures. We need to teach employees ways to understand, fight, and end discrimination—active ways (anti-racism vs. nonracist), Microaggressions, unconscious bias, and generational trauma **how** these things show up in the workplace. How we are actually all very alike despite our perceived ‘differences’. The government needs **to follow with action**, not just talk. **We can’t have a 1hr click-through training online**—there needs to be more. Give space for diverse individuals to be involved in the development and execution of these training. Allow them to share personal, relatable experiences. Put faces to the trainings.” (Participant 150)

Others expressed concerns about the grievance systems in place and fear of retaliation:

“The biggest challenge is dealing with discrimination from immediate supervisors. Fear of repercussion is pervasive in our organization. **There’s alot of talk, not alot of change.** Focus on skills of self-advocacy is needed. **Bystander intervention training is a thought, but our organization is not ready for it. Very few to no avenues to report discrimination. Levels of trust have not changed. Recruitment and advancement plans are not realistic nontransparent overall in the organization. Sponsorship by senior-level executives for equity groups should not be used as it is the same mentality as the ‘old boys network’ but overlayed onto equity groups. Not fair or transparent.**” (*Participant 159*)

McCluney and Rabelo (2019) argue that high and low dimensions of belongingness and distinctiveness interact to create conditions of visibility that can distort how marginalized groups are seen, evaluated, and treated in the workplace. They contend that conditions of visibility (precarious visibility, invisibility, hypervisibility, and partial visibility) are gendered and racialized and are reinforced through hierarchies that systematically normalize whiteness and maleness in organizations. The statement below echoes McCluney and Rabelo’s view and addresses the difficulties in managing stigma and stereotypes:

“I am a young woman of colour, quite driven, competent and hardworking. It does get recognized in the long term in every job I have ever held, my experience is that **when people first meet me they do not automatically presume competence.** In fact, I think they **expect me to not say much, contribute much, go with the flow. When I do not act as they expect, it feels like there is a reaction to that. I am not seen immediately as being capable and credible, despite what I say and do, and I have to work really hard to get my colleagues to trust me and my opinions...** I have a colleague who is a middle aged white man, and many times his opinions, even when he doesn’t justify them with facts or arguments, will be taken seriously. When he is late or doesn’t do the follow-up that he took on, and his credibility never suffers as a result”. (*Participant 127*)

5. Discussion

As previously stated, the concept of inclusion and how best to measure it is still ambiguous. Our questionnaire aimed to measure several dimensions and proxy indicators of inclusion, such as access to information (implicit and tacit), participation in the organization (involvement in committees, spearheading change), being valued as the authentic self (valued by peers, free to express dissatisfaction, opportunities for promotion), sense of belonging, informal supports and relationships (mentoring, friends), and removing barriers.

The descriptive analysis and the logistic regression confirmed that institutions with EDI policies and programs positively influence the work climate and promote a sense of belonging. While the survey results (closed questions) were overall positive, the participants' comments brought a lot more nuance and caveats to the experience of inclusion. This may be due to the design of the questionnaire or social desirability bias caused by the topic's sensitivity (Krumpal, 2013).

For example, 86 out of 151 respondents rated their environment as collaborative, saying they never felt threatened, were treated with respect, and never doubt that their colleagues do not like them. Yet the same respondents also reported situations of discrimination and feeling like they had to do more or they were being stereotyped.

Dover et al. (2020) have shown that when an organization has EDI policies, it may make it more difficult for people to voice situations of discrimination because the organization gives the image and reputation of being sensitive to the issues. Most respondents worked in environments with favourable EDI measures, which may explain the discrepancies between closed—and open-ended questions. Relying solely on closed questions may provide a positive, though incomplete, view of inclusion.

We focused on the individualistic view of inclusion as a personal experience and didn't sufficiently explore the conditions, mechanisms, and complexities of power relations in the inclusion process, which influenced the design of the survey itself, as it often does in research projects. Our study did not allow us to adequately distinguish the degrees and shades of inclusion. Some participants also brought this up:

It's a complex situation at my workplace that requires more nuance than a survey provides. (*Participant 145*)

Respondents talked about several different employment situations and did not limit themselves to their current employment context to answer all the questions. It is therefore difficult to conclude whether the answers reflect the current work context or whether the respondent reports indiscriminately on different employment situations they experienced. Some participants specifically pointed out the difficulties of measuring the operationalization of EDI at varying levels of an organization.

“Because federal government is a huge entity, there are many levels to the ‘Organization.’ The federal government has EDI policies and visions, but each department and work team implements them differently. I am currently in a department that promotes diversity and inclusion through its mandate. However, in my work team, the words «diversity and inclusion» still seem to make people jump and get defensive.” (*participant 108*)

By focusing solely on inclusion, we reproduced the dualism of inclusion vs. exclusion that Adamson et al (2021) had cautioned against. They pointed out that inclusion is a relational construction and a process rather than something static and fixed in time and place. A crucial feature of the conceptualization of inclusion by Jansen et al. (2014) is that the group is the primary actor in creating perceptions of inclusion. This directional flow underlines the responsibility power groups and organizations have in establishing perceptions of inclusion among their members. The narrative component of the survey showed that some employees do not feel included, even if they seem to be.

The analysis points out that most participants struggle with identity threats, which leads to a vigilance process. Van Laar et al. (2019) suggest that identity threats can become significant barriers to workplace equality. The subtle potential triggers of identity threat can lead members of stigmatized groups to hide, display, or distance themselves from negatively stereotyped groups. However, the diversity climate can play a supportive role in creating better work outcomes and mitigating potential hidden costs, such as cognitive and emotional depletion of members of stigmatized groups (Van Laar et al. 2019).

When faced with concerns for achievement, members of stigmatized groups may try even harder to overcome doubts surrounding their group membership or may disengage if they perceive that they cannot change others’ attitudes. When faced with concerns for belonging, they may focus on increasing their fit with others, seeking solace in their shared identity with similar others at work. (Van Laar et al., 2019)

Identity management strategies that people develop sometimes combine hiding and displaying (Fernando et al., 2020). Some individuals are pushed to conceal stigmatized identities to improve their so-called inclusion or, as Asey (2022) states, a defective form of inclusion. However, the power relations remain the same because they are not challenged nor measured by EDI strategies.

Limitations of the study

One of the critical limitations of our study is that we did not manage to reach participants working in diverse sectors and types of employment. Although the respondents had socio-demographic differences, they had a similar profile in terms of sector of activity: (public sector—federal organizations with EDI policies), type of employment (full-time permanent), and profession (primarily professionals). So, we could not account for how different responses might have been in the private provincial or municipal sectors, organizations without EDI policies, and in situations with more precarious contracts. These are some of the significant blind sights of the research.

Conclusion

For the most part, the findings in this article are in line with the conclusions of other researchers on EDI. One of the main contributions of this study is its empirical evidence of a positive correlation between organizations with EDI policies and a positively perceived workplace environment.

With most of our respondents being from the federal public sector, our findings confirm the Public Service Employee Survey (PSES) results, which have constantly shown that Canadian federal government employees are satisfied with their employers. While the survey has been improved over the years to cover topics such as diversity, inclusion, and anti-racism, few conclusions can be drawn from the results with regard to the specific experiences of the pursuit of inclusion in the workplace.

By measuring those experiences and providing respondents with ample space to self-identify and express their views on workplace experiences, our pilot exercise allowed us to tap into what is rarely covered by employer-administered surveys.

It is important to note that, despite the existence of similar legislative standards and regulatory frameworks, the diversity of the environment may vary from one ministry or agency to another. Cultural differences and the internal workings of each organization could therefore influence the conclusions of this study.

References

- Adamson, M., Kelan, E., Lewis, P., Śliwa, M., & Rumens, N. (2021). Introduction: Critically interrogating inclusion in organizations. *Organization*, 28(2), 211–227. <https://doi.org/10.1177/1350508420973307>
- Ahmed, S. (2012). *On being included: Racism and diversity in institutional life*. Duke University Press.
- Asey, F. (2022). Privation of inclusion: An exploration of the stealth and the strategy that sabotaged racialized public servants' career mobility in British Columbia, Canada. *Administration & Society*, 54(10), 1–34. <https://doi.org/10.1177/00953997211073742>
- Bujang, M. A., Sa'at, N., Tg Abu Bakar Sidik, T. M., and Chien Joo, L. (2018). Sample size guidelines for logistic regression from observational studies with large population: Emphasis on the accuracy between statistics and parameters based on real life clinical data. *Malaysian Journal of Medical Sciences*, 25(4), 122–130. <https://doi.org/10.21315/mjms2018.25.4.12>
- CDPDJ (2020). *Rapport triennal 2016-2019. Loi sur l'accès à l'égalité en emploi dans les organismes publics*. https://www.cdpcj.qc.ca/storage/app/media/publications/Rapport_triennal_PAE_2016_2019.pdf.
- Chang, E. H. (2020). *Diversity as impression management* [Doctoral dissertation]. University of Pennsylvania.
- Dover, T. L., Kaiser, C. R., & Major, B. (2020). Mixed signals: The unintended effects of diversity initiatives. *Social Issues and Policy Review*, 14(1), 152–181. <https://doi.org/10.1111/sipr.12059>
- Fernando, M., Reveley, J., & Learmonth, M. (2019). Identity work by a non-white immigrant business scholar: Autoethnographic vignettes of covering and accenting. *Human Relations*, 73(6), 765–788. <https://doi.org/10.1177/0018726719831070>
- Garakani, T.; Mbengue-Reiver, M-A; Rey, L. et Kouadio, S. (In press) La diversité : ses définitions et ses intentions dans les politiques municipales québécoises dans Lavoie, B.; Dabby, D. et Koussens, D. (sous presse, 2024) *L'administration publique des diversités ethnoculturelles, religieuses et autochtones. Réalités québécoises et regards canadiens*. Les Presses de l'Université Laval.
- Government of Canada (2021a). *Public Service Employment Act*. Justice Laws. <https://laws-lois.justice.gc.ca/PDF/P-33.01.pdf>
- Government of Canada (2021b). *Centre on Diversity and Inclusion*. <https://www.canada.ca/en/treasury-board-secretariat/corporate/organization/centre-diversity-inclusion.html>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Pearson Education Limited.
- Heckmann, T., Gegg, K., Gegg, A., & Becht, M. (2014). Sample size matters: Investigating the effect of sample size on a logistic regression susceptibility model for debris flows. *Natural Hazards and Earth System Sciences*, 14(2), 259–278. <https://doi.org/10.5194/nhess-14-259-2014>.
- Holzer, M., & Ozarow, D. (2016) Representative bureaucracy and policy effectiveness: Evidence from local government. *Public Administration Review*, 76(5), 712–722.
- Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied logistic regression*. John Wiley & Sons.

- Jansen, W. S., Otten, S., Van Der Zee, K. I., & Jans, L. (2014). Inclusion: Conceptualization and measurement. *European Journal of Social Psychology*, 44(4), 370-385. <https://doi.org/10.1002/ejsp.2011>
- Kalev, A., Dobbin, F., & Kelly, E. (2006). Best practices or best guesses? Diversity management and the remediation of inequality. *American Sociological Review*, 71(4), 589-617. <https://doi.org/10.1177/000312240607100404>
- Kim, M. S. (2018). Representative bureaucracy and racial inequality: Does racial representation matter for reducing health disparities? *Public Administration Review*, 78(6), 891-901.
- Koutsouris, G., Stentiford, L., & Norwich, B. (2022). A critical exploration of inclusion policies of elite U. K. universities. *British Educational Research Journal*, 48(5), 878-895. <https://doi.org/10.1002/berj.3799>
- Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality & quantity*, 47(4), 2025-2047. <https://doi.org/10.1007/s11135-011-9640-9>
- Long, J. S. (1997). *Regression models for categorical and limited dependent variables*. *Advanced Quantitative Techniques in the Social Sciences*. Sage.
- Mbengue-Reiver, M., Garakani, T., & Nzobonimpa, S. (2023). Qui suis-je? Quelle(s) case(s) cocher? Catégorisation au sein des organisations : Une recherche sur les tensions entre l'assignation de l'identité et l'invisibilisation des expériences. *Alterstice - Revue Internationale de la Recherche Interculturelle*, 11(2), 127-140. https://www.journal.psy.ulaval.ca/ojs/index.php/ARIRI/article/view/Mbengue_Alterstice11%282%29
- McCluney, C. L. & V. C. Rabelo (2019) Conditions of visibility: An intersectional examination of Black women's belongingness and distinctiveness at work. *Journal of Vocational Behavior*, 113, 143-152. <https://doi.org/10.1016/j.jvb.2018.09.008>
- Risberg, A. (2020). *Constantly trying organizations: Ambiguities, contradictions, and paradoxes in diversity work* [Paper presented at NEON 2020]. Norway.
- Saba, T. (2021). *Rapport d'expertise*. Ville de Montréal – Arrondissement de Montréal-Nord. https://portail-m4s.s3.montreal.ca/pdf/rapport_saba.pdf.
- Scarborough, W. J., Labmbouths III, D. L., & Holbrook, A. L. (2019). Support of workplace diversity policies: The role of race, gender, and beliefs about inequality. *Social Science Research*, 79, 184-201. <https://doi.org/10.1016/j.ssresearch.2019.01.002>
- Shore, L., Randel, A., Chung, B., Dean, M., Holcombe Ehrhart, K., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37(4), 1262-1289. <https://doi.org/10.1177/0149206310385943>
- Soares, A. (2021). Le racisme à l'encontre de membres cols-bleus dans l'Arrondissement de Montréal Nord. Rapport d'enquête. <https://scfp.qc.ca/wp-content/uploads/2021/05/Rapport-Racisme-Final1470-1.pdf>
- Tamtik, M. & Guenter, M. (2019). Policy analysis of Equity, Diversity and Inclusion strategies in Canadian universities—How far have we come? *Canadian Journal of Higher Education*, 49(3), 41-56. <https://doi.org/10.7202/1066634ar>

- Van Laar, C., Meeussen, L., Veldman, J., Van Grootel, S., Sterk, N., & Jacobs, C. (2019). Coping with stigma in the workplace: Understanding the role of threat regulation, supportive factors, and potential hidden costs. *Frontiers in Psychology*, 10, 1–21. <https://doi.org/10.3389/fpsyg.2019.01879>
- Wolfgruber, D., Stürmer, L., & Einwiller, S. (2022). Talking inclusion into being: Communication as a facilitator and obstructor of an inclusive work environment. *Personnel Review*, 51(7), 1841–1860. <https://doi.org/10.1108/PR-01-2021-0013>