

Recruitment Opacity and Immigrant Labour-Market Vulnerability in Canada: An Integrated Statistical, Scholarly, and Regulatory Analysis

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Abstract

Access to employment is shaped by recruitment processes, yet applicants face significant opacity regarding vacancy existence, filtering criteria, decision timelines, AI usage, and competition status. The author terms this "recruitment opacity" and investigates its potential to exacerbate immigrant labour market disadvantage in Canada. Employing a convergent secondary evidence design, the study analyzes Statistics Canada Labour Force Survey data (working-age adults 25–54), a focused review of 41 peer-reviewed articles, and targeted federal and provincial (Ontario/BC) regulatory instruments. Labour force data offer contextual distributional patterns, not direct opacity or causality measures. The recent immigrant employment penalty was 14.2 and 6.9 percentage points in 2019 and 2025, respectively, while the unemployment penalty remained relatively stable at 4.5–4.6%. In 2025, recent immigrant women recorded a 69.5% employment rate and 11.8% unemployment, compared to 83.5% and 4.1% for Canadian-born women. Ontario's regulatory duties exceed British Columbia's in wages, Canadian experience, vacancy status, AI transparency, post-interview communication, record-keeping, and fraud reporting, with only equality reporting shared. To operationalize these dynamics, the authors introduce the Recruitment Opacity-Vulnerability Framework (ROVF), linking access, allocation, psychosocial, and institutional vulnerabilities to four opacity types: information asymmetry, procedural injustice, reciprocal violation, and identity threat. The central hypothesis posits that recruitment opacity functions as a multiplier, not a direct cause, of recent immigrant disadvantage.

1. Introduction

In the conventional human resources management function, recruitment is considered a value exchange between an employer who is searching for talent through job advertisements and applicants who show interest by submitting their resumes. They proceed through competency screening until a final decision is made. However, the modern field of recruitment research now recognizes recruitment as a multi-layered phenomenon wherein the interactions of signalling by firms, interpretation by applicants, technology, the labour market alternatives for job applicants, and institutional norms result in complex processes (Acikgoz, 2019; Dineen et al., 2023). Most times, candidates are unable to decipher whether the vacant position is new or existing, the total reward package, the hiring process, whether AI would be involved or otherwise,

the lead time to get recruiter's feedback, and when the recruitment process is completed. All these steps remain opaque to job candidates.

In this research, these cumulatively missing gaps and ambiguous or untimely process-related information is referred to as recruitment opacity. Although opacity includes unexplained communication shutdowns or ghosting, the term goes beyond this by referring to uncertain posting information, unknown screening criteria, elusive timelines, opacity in the use of AI, inaccessible rationale, and limited opportunities for recourse. While there have been recent studies on job ghosting and the role of firms in maintaining effective feedback loops in the recruitment cycle (Lyons et al., 2024; de Haan, 2025), Company hiring opacity evaluations are still done in silos within applicant responses, pay transparency, brand employer, hiring immigrants and automated hiring accountability which ignores the tendency of diverse information failures are building up across hiring process.

The study of opaqueness is critical because recruitment procedures represent hiring organisational values, the traits and qualities of who gets employed. The applicant reaction research connects procedural justice with other acquisition factors such as how firms attract talent, recommendation, litigation intent, offer and acceptance and the result of performance evaluation (Bauer et al., 2001; Hausknecht et al., 2004; McCarthy et al., 2017). Similarly, signalling studies suggest that vague information causes candidates to assume underlying attributes of an organisation (Cable & Turban, 2003; Connelly et al., 2011). The benefits of the digital hiring process could include cost savings on hiring outreach, a faster and smoother recruitment process, and autonomous decisions from hiring managers, using classified data and extending historical advantages (Bujold et al., 2024; Kelan, 2024; Kchling & Wehner, 2020). So transparency is not employers' branding campaigns or polite culture, but the firm's architecture to establish transparent labour market exploration

The effects of opacity are uneven among different candidate groups. For example, recent immigrants are deficient in local intelligence, unfamiliar with employment practices and ethics, have low professional networks, and have low recognition of credentials and work experience by employers. Correspondence studies reveal callback differences subject to candidate names or international experience despite the equivalence value of credentials or work experience listed in their resumes (Banerjee et al., 2018; Oreopoulos, 2011). In addition, studies in Canada show that recent immigrants may experience underemployment, competence mismatch, and jobs with low quality (Banerjee et al., 2024; Ferrer & Dhatt, 2025; Lamb & Banerjee, 2025). Black immigrant women also describe the interaction between their race, gender, immigration status, education, and caregiving as factors that influence marginalization in their professional lives (Amoako et al., 2024). In a less transparent hiring process, it is hard for candidates to decipher inconsistencies in screening, biased hiring procedures, automation glitches, or a fraudulent vacancy.

Canada is a good case study: The result is different across factors like how recent an immigrant landed, gender, region or province. Hiring transparency varies; Ontario started its regulation in January 2026, prohibiting the use of Canadian experience as a screening factor, excluding compensation from job advertisements, and non-declaring AI use in the hiring process, exiting vacancy, candidate post-interview decision notification, applicant data retention, reporting of ghost job posting or fraudulent hiring (Ontario, 2000, 2024; Ontario Legislative Assembly, 2024a, 2024b, 2025). For instance, British Columbia mandates that pay information must be added to job advertisements and forbids the use of previous salary history to determine a candidate's compensation (British Columbia, 2023). Despite the similarities in the Canadian Human Rights Act, Employment Equity Act, and Pay Equity Act across the coasts, they do not balance national minimum wage, vacancy standard, AI disclosure, and applicant closure (Canada, 1985, 1995, 2018).

There are four contributions this study offers. 1. It considers recruitment opacity as a concept that integrates information, procedure, decision and algorithmic opacity and separates it from confidentiality, holistic uncertainty, and point-driven disclosure reports. 2. It combines applicant reaction theory with immigrants' position in the labour market to elucidate the different costs emanating from uniform communication. 3. We use public data from the labour market as a perspective of distribution instead of a measurement result to show the differences from observed mechanisms. 4. We develop the framework called the Recruitment Opacity-Vulnerability Framework (ROVF) and testable propositions in subsequent surveys, field experience, platform or natural studies.

2. Literature Review and Theoretical Development

2.1 Recruitment Opacity as a Distinct Process Construct

The term opaque should not be confused with privacy. Certain data, such as personal information of the applicant, evaluation responses/outcomes, reasoning to the offer/rejection, and proprietary information for the firm, are appropriate due to reasons of Privacy and Proprietary info. "Recruiting opacity refers to: the "absence, inscrutability, contradictoriness, or ill timeliness of relevant, a priori necessary information that applicant needs to understand opportunity, process, outcome, challenge outcome. "This is a relationship construct: in-group could consider process transparent, while in-group, unfamiliar with in-group norms, experiences that process as opaque". It is often cumulative- a job opening gap might

cause just some minor opacity on its own, but this fact is compounded by missing salary info, lack of details in the job description, Unknown software stack, Unclear deadlines, Lack of closure of outcomes, etc., which makes the opportunity hard to critically assess in the first place.

Recruitment opacity is related to, but distinct from, information asymmetry, procedural injustice, ghosting, and algorithmic opacity. Information asymmetry refers to one reason why an advantage held by one party is significant. A conclusion about procedural injustice is something an applicant can conclude if the application system's operations were inconsistent, unintelligible or treated them impolitely. Ghosting describes at least one such interaction that may break down. Algorithmic opacity describes one class of technology-determined decision-making mechanisms. In contrast, recruitment opacity describes the circumstances of opportunity, process, decision, and technology that give rise to or magnify such mechanisms. Such a process approach takes up the plea for studying recruitment longitudinally throughout applicants' journey, rather than studying applicants' attractions, selections or withdrawals in isolation (Dineen et al. 2023).

Table 1. Dimensions of recruitment opacity and their conceptual boundaries

Dimension	Core applicant question	Illustrative indicators	Prin
Information opacity	What opportunity is being offered?	Missing pay range; vague essential criteria; uncertain vacancy; hidden work conditions	Sign
Procedural opacity	How will the process unfold?	Unclear stages, timelines, contact points, assessment rules, accommodation, or data use	Proc
Decision opacity	What happened, and is the process complete?	No status, closure, reason category, review route, or cancellation notice	Reci
Algorithmic opacity	How does technology influence screening?	Undisclosed AI; unknown inputs; inaccessible explanations; absent human review	Algc

Note. Authors' synthesis based on Gilliland (1993), Bauer et al. (2001), Connelly et al. (2011), McCarthy et al. (2017), Köchling and Wehner (2020), Dineen et al. (2023), and the regulatory coding reported below.

2.2 Applicant Reactions, Justice, Signalling, and Reciprocity

Opacity is examined through the lens of organizational justice, which directly accounts for applicant reactions to opacity. Gilliland's (1993) model specifies procedural rules and lists parameters such as consistency, job-relatedness, opportunity to perform, reconsideration, explanation, interpersonal treatment, and two-way communication. Bauer and colleagues (2001) empirically defined and isolated procedural rules by running meta-analyses detailing relations between applicant reactions and attraction, recommendations, offer acceptance, and change intentions (Hausknecht et al., 2004; McCarthy et al., 2017). In terms of procedural rules, opacity removes items and parameters related to the transparency of decision-making by not specifying selection criteria, by excluding timelines that would allow applicants to prepare, and, of course, by failing to speak with applicants altogether.

Signalling theory indicates that refused applicants interpret characteristics of an organization based on the recruitment process (Backhaus & Tikoo, 2004; Cable & Turban, 2003; Connelly et al., 2011). Digitised recruitment is only an indication of innovativeness, which diminishes with seemingly detached or unfair treatment (Folger et al., 2022). Employers are valued when the process is transparent, and distrusted when it is opaque.

Social exchange introduces a relational aspect. Candidates sacrifice effort, information, and feelings, at least desiring a sympathetic response and termination. Silent termination is asymmetrical; perceived wrongness is a failure of exchange (Blau 1964, Cropanzano & Mitchell, 2005). Instead of contract, information produces psychological-contract anticipations; shortfalls impact trust, reactions as after-entry breach (Rousseau 1995, Turnley & Feldman 2000).

2.3 Immigrant Screening, Labour-Market Position, and Intersectional Vulnerability

Immigrant labour-market disadvantage can be understood as operating via several causal routes-credential recognition, language, occupation, place, caring responsibilities, social capital, discrimination, macroeconomic demand-though recruitment remains an important allocation window. Oreopoulos (2011) showed callback differences by name and foreign experience in a Canadian field experiment. Later work demonstrates employer characteristics inhibit differential treatment (Banerjee et al., 2018) and organisational literature drills into screening policies (Almeida et al., 2012). Meta-analyses show racial discrimination in hiring persists (Quillian et al., 2017).

New Canadian work suggests that entry-level work does not terminate the problem. Immigrants experience underuse, de-skilling, and work quality gaps, which differ by gender of immigrant, region of origin, and the likelihood of automation (Banerjee, Ferrer, & Lamb, 2024; Ferrer & Dhatt, 2025; Lamb & Banerjee, 2025). Intersectionality matters because social identities are not additive (Crenshaw, 1999).

Recent research applies the concept to the experiences of Black African immigrant women in Ontario, where it documents three-way interactions of race, gender, migrant status, education, and care obligations (Amoako et al., 2024). Nazari (2024) also finds evident ways in which race, gender, and religion affect high-skilled integration. The current study relies on tabulations of subgroup experiences to promote the detection of differentiated effects without implying that aggregate disparities can serve alone as an intersectional causal methodology.

The cost of opacity is likely to be particularly high where the applicant applies through considerable formal channels. Locally established applicants have informal access to information about timeframes or recruiter expectations through other groups, while recent immigrants may not. The same silence increases search costs differentially even when it formally applies to all. Identity processes add weight to this: time in work reinforcing occupational continuity, identity recognition, familial security and stability, and community or national settlement. Lack of success without clear explanation can undermine identity verification for immigrants who cannot identify the decision in which they failed (Stryker & Burke, 2000).

2.4 Algorithmic Recruitment, Explainability, and Human Review

Digital HRM research points to a tension between efficiency gains and relational and accountability risks of mediated work (Marler & Fisher, 2013; Stone et al., 2015) within organizations. While AI-driven recruiting can lead to gains in consistency and scalability, potential drawbacks are "propagated across training data, proxy measures, language characteristics, vendor approaches and weak constructs". Review articles indicate the risks of discrimination, lack of accountability, privacy concerns and unclear fairness of algorithm-driven processes (Bujold et al., 2024; Kchling & Wehner, 2020; Rigotti & Fosch-Villaronga, 2024; Tambe et al., 2019). Kelan (2024) argued that inclusion relies less upon technological prediction than upon the data, design and organizational decisions that are made about a technology.

Overall, applicants tend to view automated hiring negatively to the extent it lacks human interaction and an explanation (Horodyski, 2023; Lavanchy et al., 2023). The role of human interaction and anthropomorphism affects fairness perceptions (Ochmann et al., 2024). Trust degrades after a biased pre-selection process (Langer et al., 2023), while application reactions are strongly influenced by the data, the applicant's own background and social cues (Figueroa-Armijos et al., 2023; Tursunbayeva et al., 2025). Explicit communication on algorithmic transparency can generate trust and positive WOM (Xiong & Kim, 2025).

As already noted, disclosure is required but not sufficient. Disclosure does not explain what is being measured, how the measure is derived from applicant data, what corrections are necessary, how validation has been performed or the procedure for appeal for decisions made by the algorithm. Efforts to mitigate algorithmic opacity include safeguards such as: "plain language notice, Job-validation, Accessibility testing, audit trails, data minimization, adverse impact measurement, and meaningful human review as a complementary process rather than a replacement" (Rigotti & Fosch-Villaronga, 2024).

2.5 Transparency Interventions and Their Limits

Transparency efforts generally target individual recruiting steps. Pay-range transparency tackles non-application information asymmetry and can tighten the transmission of the wage gap; bans on salary history can enhance job postings and enhance pay for women and minority job candidates (Bessen et al., 2024). Honest-vacancy transparency, AI notice, and decisions notification each respond to a unique characteristic-none alone produces a totally understandable process.

More information is not always the appropriate goal. Technical disclosure can move liability prior to understanding, and standard reasons can give the appearance of justification. The design goal is decision-use-relevant, understandable, scaled to consequences, and linked to correction pathways. This is the distinction between disclosure and usable accountability.

2.6 Research Gap, Framework, and Propositions

There is some existing research that suggests that selection justice, communication, immigrant selection, and algorithmic fairness are concerns; however, there's little attempt to consider information failures in selection as cumulative phenomena or to explain why these failures might be more severe for applicants

less familiar with institutional procedures. The ROVF bridges these issues by proposing that varying opacity condition effects can be understood as relating to different mechanisms among applicants to 4 vulnerability related outcomes: access (speed to an interview/job), allocation (being mismatched or stuck in bad job), psycho-social (uncertainty, withdrawal), and institutional (insignificant recourse power).

Proposition 1. The adverse effects of cumulative opacity increase as more dimensions coincide.

Proposition 2. Opacity effects strengthen for applicants with lower local familiarity, weaker networks, foreign credentials, or constrained resources.

Proposition 3. Decision and algorithmic opacity become highly salient when applicants have little or no rationale, without human attention, or no evidence of mistake.

Proposition 4: Security Enhancements through complementary controls, including disclosure, notification, explanation, human review, audit, and enforcement, mitigate different vulnerability mechanisms, and a suite of safeguards is more effective in combination.

Research Questions

1. How did immigrants (new and longer-established) and Canadian-born adults (25–54) compare in terms of labour market engagement for the 2019–25 period in the areas of employment, unemployment and labour force participation?
2. In what ways did current research previously suggest that the problem of opacity in recruitment processes was increasing the vulnerability of immigrants in the Canadian labour market?
3. To what degree do representative elements of regulatory systems in Canada help manage informational, procedural, decision and algorithmic forms of opacity?
4. What theoretical, organizational, and policy implications emerge when the evidence streams are integrated without treating contextual labour-market disparities as causal evidence of opacity?

3. Method

3.1 Research Design and Evidentiary Boundaries

This research applied a convergent-triangulated secondary-evidence design including three separate streams: public labour-market measures; a structured literature analysis of scholarship; and a regulatory content analysis. The integration of streams was for complementary evidence and theory building, but not for causal substantiation. Data demonstrate opacity location.

The scholarship explains processes of opacity. The regulatory analysis identifies recognised policy dimensions. There remains a strong boundary against causal inference. There is no measured estimate of recruitment opacity in the Labour Force Survey where there is no employer/applicant link. Statistics cannot explain labour shortages in terms of opacity.

Agreement across streams is described as explanatory coherence or policy relevance, not causal corroboration.

Table 2. Evidence streams, units of analysis, and analytic purpose

Evidence stream	Materials	Unit and period	Analytic purpose
Public labour-market data	Statistics Canada Table 14-10-0472-01, Labour Force Survey	Annual estimates, 2019–2025; adults aged 25–54	Describe gaps by landing rece and province
Scholarly evidence	41 verified scholarly works; seminal and 2000–2026 scholarship	Source-level theoretical and empirical evidence	Identify mechanisms, boundary condi
Regulatory evidence	Federal statutes; Ontario ESA and regulations/amendments; B.C. Pay Transparency Act	Instruments current to July 16, 2026	Code duties addressing opaci recourse

Note. The streams were integrated through a joint display. Their different levels of analysis prevent causal triangulation.

3.2 Public Labour-Market Data and Analysis

From the LFS – a mandatory stratified multistage rotating panel survey-Statistics Canada table 14-10-0472-01 was accessed to retrieve time series data. All published estimates were weighted, rounded and therefore subject to statistical error. Microdata were not used; only public summary data are publicly available.

The analytic sample frame was Canadian adults aged 25-54 to eliminate school-to-work and retirement confounding. Immigrant categories include all immigrants (inclusive of those who are not Canadian-born), and those who landed 5, 5-10, and more than ten years prior to data collection. The 2019-2025 annual employment rates, unemployment rates, and participation rates were obtained. Gender-based analyses as well as regional and four-province analyses were performed (Statistics Canada, 2026a; Statistics Canada, 2026b). Two calculation gaps were made: the employment rate deficit and the unemployment rate disadvantage. Percentage point differences are reported. No inferences, confidence intervals, or causal models were generated.

3.3 Structured Integrative Review

This stream of the review was a structured integrative review undertaken to foster theoretical development rather than as a systematic review or meta-analysis. The searches were performed and metadata checked by July 16, 2020 using Crossref and various publisher databases, the backward chain search strategy and specific four-block concept searching: (1) recruitment/selection + transparency/ghosting, (2) immigrant/racialized hiring + Canada, (3) AI/algorithmic hiring + fair/trust, and (4) pay transparency/vacancy + applicant outcome. Suitable sources are empirical works, critical/conceptual papers, and key theoretical studies.

Trade-press sources are not included. Sources were coded for stage of recruitment, dimension of opacity, mechanism, outcome, and study design. The set comprises 41 papers for interpretation. The review doesn't pretend to adhere to PRISMA or be comprehensive.

Table 3. Structured review domains and principal insights

Domain	Representative evidence	Principal insight for the ROVF
Applicant reactions and recruitment	Gilliland (1993); Bauer et al. (2001); McCarthy et al. (2017); Dineen et al. (2023)	Timeliness, explanation, consistency, and two-way communication shape justice and attraction
Immigrant screening and integration	Oreopoulos (2011); Banerjee et al. (2018, 2024); Amoako et al. (2024)	Screening and labour-market resources are unequal; gender, race, credentials, and networks shape consequences

Domain	Representative evidence	Principal insight for the ROVF
Algorithmic recruitment	Köchling and Wehner (2020); Lavanchy et al. (2023); Bujold et al. (2024); Ochmann et al. (2024)	Fairness and trust depend on data, design, explanation, human involvement, and review
Exchange, identity, and signalling	Blau (1964); Rousseau (1995); Stryker and Burke (2000); Connelly et al. (2011)	Opacity affects reciprocity, inferences about the employer, learning, trust, and identity verification
Transparency and ghosting	Bessen et al. (2024); Lyons et al. (2024); de Haan (2025); Xiong and Kim (2025)	Different disclosures address distinct stages; communication and transparency can affect trust and behaviour

Note. Representative evidence is shown for transparency; the complete interpretive set appears in the reference list.

3.4 Regulatory Content Analysis

Cases selected were for their regime design variability, not as an inventory of Canadian law: Ontario as a pretty standard recruiting process regime, BC as a compensation- and disclosure-focused transparency regime and then our federal regime as a base nationally harmonizing framework for a vast set of equality and compensation norms within federally regulated workplaces. Instruments examined in their current consolidated/enacted form as at July 2026. The focused coded regimes were information only in terms of the presence/absence of general duties relating to required pay levels, of whether a Canada-experience requirement applied, of pre-qualified lists/known job openings, of AI use, post-interview disclosure of information; the reasons and appeal and review process and records retention and/or posting fraud mechanisms.

The presence/absence recording of a 'general duty' occurred in a particular instrument where the wording necessitated the conduct. Absence means that the 'issue' did not occur in the selected law(s), not that a common law/ other statute does not contain that(ose) obligation(s) (privacy statutes, human rights law, bargaining law, particularized industry requirements, common law claims).

3.5 Integration, Ethics, and Research Integrity

The integration merged actual market outcomes with theoretical, legal and knowledge gaps in one overall presentation. The constraint of the interpretation rule was that public information differences could indicate a population and situation in which it is possible to be sensitive, but they cannot do that; sensitivity to lack of transparency actually was a scholarly argument that may indicate a potential explanation for market failure but nothing about the occurrence of market failure in Canada. A legal requirement may or may not indicate existence, delivery to the relevant people/groups or the presence of such protection.

This research relied only on the publicly presented, aggregated evidence and existing literature and law; it did not include human participants' actual reactions, identifiable cases or linkage of any type. According to section 2.2 of Canada'sTri-Council Policy Statement, such research does not require institutional research ethics board review (Panel on Research Ethics, 2022), although institutional policies may require documentation of waiver. The citation data was validated through comparison with publisher information and Crossref for each entry.

4. Findings

4.1 Labour-Market Patterns by Landing Recency

A continued labor market disadvantage applied to the new immigrants throughout 2019–2025. The employment-rate disadvantage of the new immigrants was reduced by nearly half from 14.2 percentage points to 6.9 percentage points during 2019–2025. The unemployment-rate disadvantage of new immigrants varied year by year from 4.6 percentage points to 4.5 percentage points in 2019 and 2025, respectively.

However, the effect of the pandemic on the unemployment rate appeared as the most pronounced and a disadvantage as large as 5.0 percentage points in 2020.

The unemployment rate disadvantage continued to be extremely large point in 2024, with 5.6 percentage points (the biggest figure in the entire seven-year period). Reporting on a year-by-year basis rather than considering individual points as a continuum is preferred to avoid selection bias.

Table 4
Employment and unemployment outcomes for recent immigrants and Canadian-born adults aged 25–54, 2019–2025

Year	Born: employment %	Recent: employment %	Employment deficit pp	Born: unemployment %	Recent: unemployment %	Unemployment disadvantage pp
2019	85.2	71.0	14.2	4.3	8.9	4.6
2020	81.8	69.3	12.5	7.1	12.1	5.0
2021	84.1	76.3	7.8	5.6	8.5	2.9
2022	86.2	78.0	8.2	3.9	7.7	3.8
2023	86.3	77.9	8.4	4.0	8.0	4.0
2024	85.7	77.2	8.5	4.3	9.9	5.6
2025	84.9	78.0	6.9	4.9	9.4	4.5
<i>Note.</i> Authors’ calculations from Statistics Canada Table 14-10-0472-01. “Recent” means landed five years or less earlier; pp = percentage points. Gaps may differ slightly because of rounding.						

Landing recency had a different impact in 2005. The employment rate among recent landed immigrants was 78.0%, compared to 81.7% among Immigrants landed 5 to10 years ago and 82.6% among Immigrants landed > 10 years ago. However, unemployment rates fell with increasing length of establishment from 9.4 among recent landed immigrants to 6.9% and 5.9%, respectively.

Participation among the newcomers was 86.1%, only 3.2 percentage points lower than that of those born in Canada 89.3%

The high participation, combined with high unemployment and low employment rates, indicates highly involved immigrants on the labour market, which are not successfully translated into employment. However, this should not be the explanation for this unsuccessful translation.

Table 5
Selected 2025 outcomes by immigrant status and landing recency

Group	Employment rate (%)	Unemployment rate (%)	Participation rate (%)
Born in Canada	84.9	4.9	89.3
All landed immigrants	81.4	6.9	87.4
Landed ≤ 5 years earlier	78.0	9.4	86.1
Landed > 5 to 10 years earlier	81.7	6.9	87.8
Landed > 10 years earlier	82.6	5.9	87.8
<i>Note.</i> Statistics Canada Table 14-10-0472-01; adults aged 25–54.			

4.2 Gender, Region of Birth, and Provincial Differentiation

Aggregated immigrant groups mask significant variation. In 2025, recent immigrant women had an employment rate of 69.5 and an unemployment rate of 11.8, while the rates for native-born Canadian women were 83.5 and 4.1. The employment rate for recent immigrant men and native-born Canadian men were roughly equal (86.4 versus 86.3%), but again, recent immigrant men had a higher unemployment rate (7.4 versus 5.6%). These descriptive outcomes support consideration of intersecting positions, but they don’t differentiate between gender, care, immigrant class, occupation, or discrimination.

Table 6
Selected 2025 labour-market outcomes by gender and region of birth

Group	Employment rate (%)	Unemployment rate (%)	Participation rate (%)
Canadian-born women	83.5	4.1	87.1
Recent immigrant women	69.5	11.8	78.8
Canadian-born men	86.3	5.6	91.4
Recent immigrant men	86.4	7.4	93.3
African-born landed immigrants	78.1	9.6	86.4
Asian-born landed immigrants	80.7	6.8	86.7
European-born landed immigrants	86.3	5.4	91.2
<i>Note.</i> Statistics Canada Table 14-10-0472-01/02; adults aged 25–54. Broad origin regions pool diverse countries, cohorts, immigration classes, and occupational profiles and should not be interpreted as estimates of individual discrimination.			

Patterns of broad origin-region groups were also distinguished. For example, we found that in 2025 the unemployment rates for Inuit/born landed immigrants were respectively 5.9 and 15.4 percentage points higher than those for European-born landed immigrants, while the employment rates were respectively 2.5 and 9.3 percentage points lower. Likewise, for African-born landed immigrants, employment and unemployment differences from European-born sources respectively averaged 2.9 and 8.0 percentage points.

When examining provincial differences, we found that in 2025 the unemployment rate for recent immigrants was respectively 0.2 and 2.5 points higher than the Canadian-born rate in Ontario and in British Columbia, while being respectively 0.4 and 2.0 points higher in Alberta and Quebec.

It can be hypothesized that differences in economic structure, settlement patterns, occupation, language ability, and cohort composition between recent immigrants of different origin regions or residing in different provinces explain at least some of the variation. Our findings point to different contexts where formal information on recruitment sources could be especially beneficial; they do not provide estimates of an exact regulatory effect.

4.3 Mechanisms Identified in the Scholarly Evidence

The discussion converged to four main themes: information asymmetry leads to search costs; procedural unfairness leads to loss of Fairness & Trust; failed reciprocities lead to lack of respect; migrant vulnerability to stigma means the deterrent from refusal carries much more weight. Algorithmic hiring exaggerates the stakes: disclosure in itself is not enough, a multilayer mechanism between verification, validity, and scrutiny is in play, where the extent of Transparency impacts everyone, but the degree to which the minority migrant depends on information – or indeed whether they can shield them from uncertainty and produce countervailing evidence is the relevant factor upon which the ROVF may speculate as to a Link between opacity and precarity (rather than between LFS disparate) and thus be able to speculate in a convincing framework for how one may infer causality.

4.4 Regulatory Coverage of Recruitment Opacity

Within the examined jurisdictions, Ontario offered the most comprehensive recruitment disclosures as of July 2026. These included the introduction of salary reporting, a ban on Canadian experience, disclosure requirements concerning the use of artificial intelligence, vacancy status, job posting site capabilities for some fraud reporting, and a maximum 45-day period to notify candidates of a hiring decision, with data required to be held for three years (Ontario, 2000, 2024). Further requirements about job-posting sites were made by the Working for Workers Seven Act, 2025 (Ontario Legislative Assembly, 2024a, 2024b, 2025).

However, Ontario maintained a distinction in its reporting obligations by stating the conclusion of a hiring process but not providing individualised explanations, which may have otherwise included logic and reasoning in employment decision-making processes. Similar individualised explanations were only explicitly included to a lesser degree in British Columbia. Its recent Pay Transparency Act obliges salary range information, prohibits collection of pay history, and does not refer to vacancy status and artificial intelligence (British Columbia, 2023). Some federal legal provisions address equity, pay and pay equity; however, these do not provide a general framework on how information needs to be communicated to job seekers. (Canada, 1985, 1995, 2018).

Table 7
Directed coding of selected Canadian recruitment-transparency regimes

Transparency requirement	Ontario	British Columbia	Federal baseline
Pay in public posting	Yes, subject to coverage and range exceptions	Yes, expected pay or range	No general cross-sector posting duty identified
Canadian-experience restriction	Yes, covered postings and forms	No comparable duty in selected Act	Equality protections; no general posting rule
Existing-vacancy disclosure	Yes	No	No general duty
AI-use disclosure	Yes, when AI screens, assesses, or selects	No	No general duty

Transparency requirement	Ontario	British Columbia	Federal baseline
Post-interview notification	Yes, decision-status notice within 45 days	No	No general duty
Reasons or human review	Not generally required	Not generally required	Complaint rights for prohibited discrimination; no routine explanation
Records or reporting	Three-year retention for covered materials	Pay-transparency reporting for covered employers	Employer reporting and pay-equity duties in covered workplaces
Fraudulent-posting mechanism	Yes, platform reporting mechanism and policy	No general duty in selected Act	No general duty
<i>Note.</i> Coding is based on the consolidated Ontario Employment Standards Act, 2000 and O. Reg. 476/24; the Working for Workers Seven Act, 2025; British Columbia's Pay Transparency Act; and the Canadian Human Rights Act, Employment Equity Act, and Pay Equity Act. This is a research synthesis, not legal advice.			

4.5 Integrated Findings

Various streams of evidence create a view of complementarity rather than evidence for one's causal case waiting to be assembled. Public data tell us where in labour market conversion are the least converted aspects of it. Scholarship reveals how a variety of mechanisms-opacity, uncertainty, low contestability-can influence behavior.

The statute shows that a legislative consensus has been created with respect to what is becoming a separable domain of legal policy: pay, authenticity of vacancies, the use of AI, communication, and fraud.

The rest of the work is establishing whether these various sources of opacity translate into differences in treatment for individual migrants holding other factors constant.

Table 8
Joint display of triangulated evidence

Observed context	Scholarly mechanism	Regulatory response	Residual uncertainty
Recent immigrants show persistent unemployment disadvantage despite high participation	Institutional unfamiliarity and screening barriers may weaken conversion from search to work	Ontario addresses vacancy, experience, pay, AI notice, and decision status	LFS does not observe applications, opacity, or employer behaviour
Recent immigrant women show the largest 2025 disparity	Gender, care, race, credentials, and immigration status may interact with search costs	Human-rights and employment-equity regimes prohibit or monitor some inequality	Aggregate data do not isolate intersectional mechanisms
African-born immigrants show weaker aggregate outcomes than European-born immigrants	Names, foreign experience, credentials, networks, and screening can produce differentiated access	Ontario restricts Canadian-experience requirements in covered recruitment	Broad origin groups cannot isolate discrimination or opacity
Protections vary by jurisdiction and stage	Justice and trust depend on timely, intelligible, and contestable procedures	Ontario offers broad process coverage; B.C. emphasizes pay; federal law supplies equality baselines	Implementation, awareness, compliance, and labour-market effects remain untested
<i>Note.</i> The joint display distinguishes contextual patterns, mechanisms, formal policy coverage, and unanswered causal questions.			

5. Discussion

5.1 Recruitment Opacity as a Potential Multiplier

In conclusion, the primary one is conditional. Recruiting opacity can plausibly be tested as potentially a mediator that contributes to migrant vulnerability, but in this paper its causal impact is not measured. From LFS, it appears to be simultaneous with an improvement among recent migrants and a resilient one.

A significant drop in the recent immigrant employment deficit, by half, occurred in the years to 2025, while in 2025 the rate remains approximately double the rate for Canadian-born Canadians, and established immigrants fare predictably better over time as networks and experience grow. The huge gaps between male and female recent immigrants mean that recentness alone cannot be taken as an explanation of this gap.

Opacity may be a mechanism which works unequally: people have different degrees of risk aversion or different capabilities to process opaque information. Locally networked applications turn to networks for informal cues, while in the absence of networks a recent migrant may lack any substitute to the formality and bureaucracy of official hiring or may suffer from a lack of information; if you have other options to the official hiring process, you can walk away from it – people with degrees whose valuation may be at stake stay within it. As such, the same hiring process has different kinds of costs (financial, procedural, etc.) or different value for different seekers of work.

None of the alternative causal factors, including demand shocks on the macroeconomic level, class, language, occupation type, education level, location, discrimination, childcare responsibilities and degree equivalence, could be seen as obsolete. This research shows how it acts under a condition that seems

to work among them.

5.2 Theoretical Contributions

First, the proposed conceptualization of transparency reconsiders transparency as an architecture of process in which tools such as pay transparency, AI notice, notice of decision, or reporting could be complements rather than alternatives. A process still may be procedurally obscure even with full notice and pay-reporting: such a process may have obscure or undefined phases, stages of evaluation, accommodation, or timing, or provide mere notice of status in cases where the process may have erroneously decided, failed to permit, or be unable to reverse or correct an automated rejection.

Second, this framework also elaborates applicant-reaction theory by making labour-market position and institutional experience salient foreground components; while other justice models represent candidates simply as agents, some sort of resources are necessitated if applicants are to successfully “read” obscured, or procedurally equal but faulty, data (Roberts, for instance;).

Third, it connects applicant-reaction theory with allocational and institutional vulnerabilities, rather than presumptively viewing as the root cause of macro-level shortcomings the actions of micro-level candidates (and with a critical eye towards the “invisibility as uncivility” presumption); the ROVF outlines discrete, testable claims about the effects of the absence of communication-of a process and system-,including misdirected effort in the job search, delays in decision making, premature acceptance of lower quality job offers, diminished search effort, or - perhaps most importantly- an absence of notice in cases of a potential

or imminent incorrect, irrevocable automated determination- thereby avoiding an ecologically fallacious conclusion.

Fourth, a notion of “contestability” is presented to link transparency and accountability, which requires, in addition to the information made transparent by those various process mechanisms, readable information; a knowable record; and identifiable decision-owners responsible for decision-making and accountable for it, typically in algorithmic hiring scenarios, on readily accessible channels of appeal.

5.3 Regulatory and Policy Implications

The importance of Ontario's structure lies in how the definition of recruitment is in the realm of labour law and thus provides job seekers and the job-posting individual an array of judgment options. Notability of vacancy as real as one for forty-five days; elimination of 'non-Canadian Experience'; is for the visitor. That website's ability to crack down on fictitious vacancies acknowledges a jurisdiction to manage (Ontario 2000, 2024 and Ontario Legislative Assembly 2025).

Notability on most lingering issues would be on clarity explanations. Notice itself has no service that provides clarity of usage, as to usage methods, to accommodate issues, or what steps, if any, would resolve problems. The perfect benchmark would be a clarity explanation use, a specificity in category in a job use manner, the maintenance of data, traceability for investigation, and human decision as an additional layer. There is no problem of portability in having provinces that could enable this standard through provincial specifics, concerning minimums to include, verification standards, automation in job data, closing, as well as notification/reporting systems.

5.4 Implications for HR Practice

No need to wait for the law. A recruitment communication charter might have the vacancy status, pay, specifications, process and timeline, AI impact, housing, data procedures and closing points. Candidate-tracking systems may require auto-updating; individual requisition ownership by a named person will have to remain, however.

Metrics could include more than Time-to-Fill or Cost-per-Hire, such as timeliness of communication, regards closed, postings cancelled, candidate time on assessments, time to respond to request for accommodation, number of reviews requested-if an appropriate and lawful situation, and where appropriate data privacy safeguards are in place- the trends from the funnel of any equity dimension may also be analyzed. Selection by AI must be encased in registries of job-relatedness, proper vendor screening, impact analysis, audit trail, and human oversight. Applicants should be provided a simple explanation of how the AI works and opportunities for redress. Recruiters need to be prevented from assuming 'not knowing one's line of work, accent, or odd degree' precludes competence.

5.5 Research and Evaluation Agenda

1. Develop and validate a multidimensional index (Recruitment Opacity Scale) capturing the informativeness of opportunities, the clarity of procedures, closure in the process, and the contestability of algorithmic decision-making processes.
2. Recruit for longitudinal surveys, and use data on recency, networks, gender, caregiving duties, and racial and ethnic identification and background to determine when Opacity may differentially affect opportunities.
3. Recruit to study postings and procedures, conducting correspondence and experimental experiments about process, posting choice and applicant, and applicant-hiring processes to elicit the effects of Opacity.

4. Audit postings in Ontario, where reforms targeted transparency, and conduct a natural experiment about postings at employers and governments at various levels of the jurisdiction where transparency became legally effective.

5. Recruit and survey job applicants to discover their receptivity to postings and disclosures, and when, whether and with what result they employ mechanisms to receive timely closure or to get information corrected following the identification of an error in the procedure.

6. Limitations

1. Design and Validate A Multi-Dimensional Measure of Opportunities (Recruitment Opacity Scale) covering opportunity informativeness, process transparency, decision finality and decisibility of the algorithmic recruiting decision.

2. Recruit long- term into Surveys to investigate: When, whether and whom opacity affects, including several individual-level factors, recent application status, existing networks, gender, caring responsibilities and racial/ethnic identity/background

3. Recruit into Posting and Process to conduct correspondence (and experiments on) the posting of the recruitment call, participant choice in postings, and recruitment choice –process decisions; in order to measure the impact of the posting of the Call and in the process itself.

4. Audit Posting in Ontario: in which legal regulation concerning transparency in public recruitment has changed – to a natural experiment on the impact of the posting process and of postings within varied kinds of the jurisdiction; postings into varying sorts of government employment as well as into public as distinct from private organisations in the jurisdiction which experienced a legal change in transparency under new reform legislation; and

5. Recruit to and survey job candidates concerning posting response and applicant reaction to, and choice, upon, postings containing particular levels and sorts of transparency, together with, when, if, and for what impact they do make that call and respond to prompt, and final, closing timely, administrative or procedural error corrections, should it be spotted.

6. The framework proposes mechanisms at applicant and organizational levels that cannot be validated with the present aggregate data. Its value depends on future construct validation and direct empirical testing.

7. Conclusion

Recruitment opacity has been the unexamined side of labour market governance. Recent trends in immigrants' participation and success in Canadian public sector data also reveal this inequality-draining facet of these uncertainties: immigrants (more women than other groups) are strongly participating in the labour market, but with poorer employment-capture rates. Again, none of these correlations shows opacity having caused inequality; rather, they are the settings where uncertain choices and procedure-led and automatic processes fall with asymmetrical impact.

ROVF has built into this model a rational way of looking at these inequalities. The impacts that information opacity, process opacity, decision opacity, or algorithmic opacity have can contribute to this asymmetry and injustice through the channels of disrupted reciprocity, violated trust and declined identity, with higher impacts for those with the least networks and the least normalized human identification and international credentials. Transparency measures in terms of disclosures, notice, explication, human review and accounting / enforce ability affect these multiple problems at once, working with each other.

While recruitment transparency has a limited role in resolving structurally induced inequalities and could possibly not lead us to resolve uncertainty perfectly, incentivise optimal performance or promote accountability in selection / eliminate non-merit-based outcomes, it does promote inclusion where the employment of recent immigrants continues to be vital.

Declarations

Author Contribution

S.B. conceptualized the study, designed the methodology, developed the Recruitment Opacity–Vulnerability Framework, conducted the literature synthesis and statistical and regulatory analyses, prepared the tables and figures, and drafted the manuscript. C.M. contributed to the theoretical development, interpretation of immigrant vulnerability and social implications, validation of the evidence, and critical revision of the manuscript. S.B. and C.M. reviewed and approved the final manuscript and accept responsibility for the integrity of the work.

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Figures

Recruitment Opacity-Vulnerability Framework (ROVF)

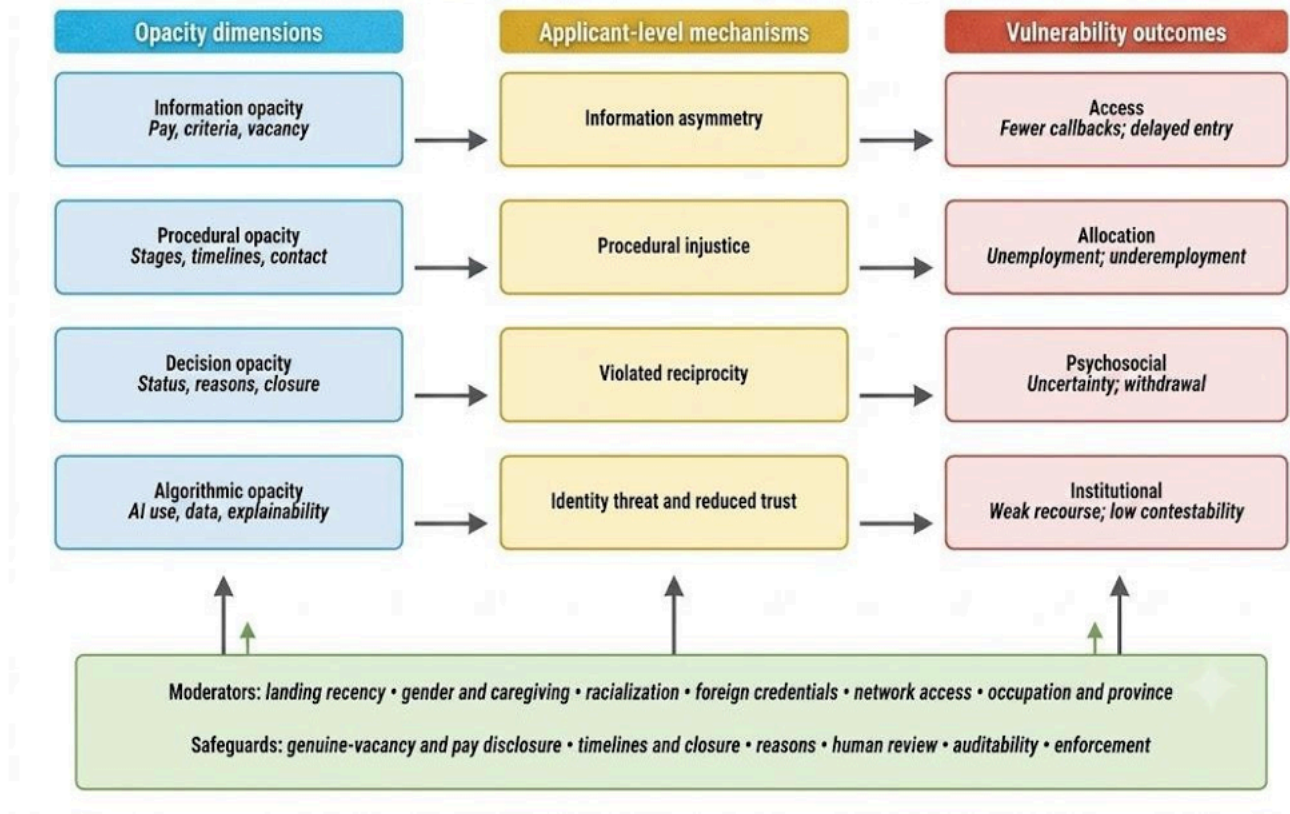


Figure 1

Recruitment Opacity–Vulnerability Framework

Note. Developed by the authors. The arrows represent proposed mechanisms and boundary conditions, not causal estimates from the aggregate data used in this study.

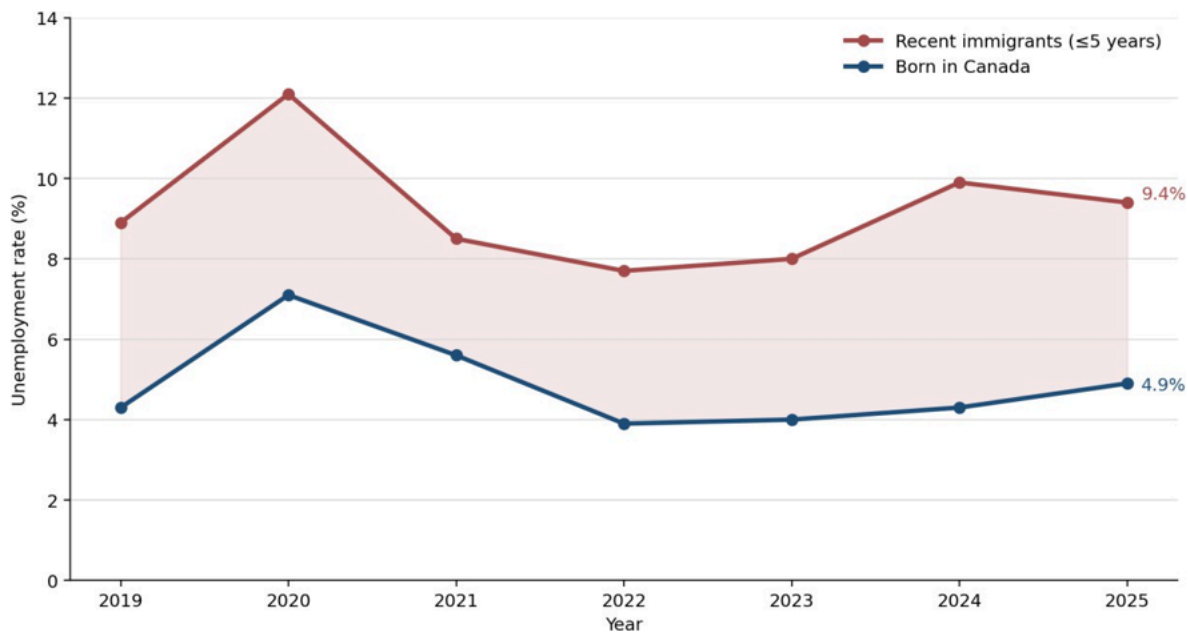


Figure 2

Unemployment rates for recent immigrants and Canadian-born adults aged 25–54, 2019–2025

Note. Authors' calculations from Statistics Canada Table 14-10-0472-01. Shading represents the annual percentage-point gap.

Supplementary Files

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- [AppendixA.docx](#)