What's in a Name? Perceived Ethnic Discrimination in Tokyo's Rental Housing Market*

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Abstract

This paper studies perceived ethnic discrimination in Tokyo's rental housing market using a survey-based experiment. Native Japanese and foreign-born respondents evaluate whether applicants with ethnically identifiable names are likely to receive a viewing invitation for the same rental property. Both groups expect non-Japanese applicants to face significantly lower viewing chances than an otherwise identical Japanese applicant, although native Japanese respondents perceive substantially larger penalties. Perceived disadvantage varies across ethnic groups and is smallest for culturally proximate Western-Japanese applicants. Among foreign-born respondents, prior experiences of everyday discrimination are associated with more pessimistic expectations regarding rental access. Respondents also assess their own prospects more favourably than those of their broader nationality group, consistent with the personal-group discrimination discrepancy (PGDD).

Keywords: Perceived discrimination; Ethnic discrimination; Rental housing market; Immigration; Personal-Group Discrimination Discrepancy; Japan
JEL codes: J15, R31, C90, D91

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1 Introduction

Access to housing is central to social and economic integration, yet discrimination in rental markets remains widespread, particularly for ethnic minorities and immigrants. Focusing on the rental market is especially salient in the Tokyo context, where renting constitutes the dominant tenure form: the homeownership rate is approximately 44.6% in Tokyo, compared to around 61% nationwide, implying that a majority of households in the capital rely on rental housing.[1]

Existing evidence suggests that ethnic discrimination in Japan's rental housing market is persistent. In addition to correspondence-based evidence of differential treatment by realtors and landlords (Sugasawa and Harano, 2023), repeated nationwide surveys commissioned by the Japanese Ministry of Justice have consistently reported that foreign residents experience difficulties securing housing, with real estate agents and landlords frequently identified as major sources of perceived discrimination (Ministry of Justice Japan, 2024, 2023, 2022). While Japan's growing reliance on foreign labour and the increase in foreign-born residents following a 2018 immigration reform (Chiavacci, 2025), exclusionary screening practices are visible in publicly accessible rental advertisements, where expressions such as 'no foreigners', 'foreigners negotiable', and 'foreigners allowed' continued to appear on rental listings on major housing platforms. At a broader level, Japan's immigration and social institutions continue to reflect persistent ethnic hierarchies (Shipper, 2016), making housing access a salient setting in which to study unequal treatment.

While existing research captures differential treatments in Japanese housing transactions, less is known about the broader symbolic impact attached to, generated from, and reproduced through such differential treatments, including the ways in which it symbolically contributes to certain groups' stigma, social exclusion, and perceived hierarchies of belonging in the society. However, as recognised in scholarship on discrimination, the harm of differential treatment extends beyonbd the denial of partiuclar opportunities in the relevant market. As Brest (1976) argued in the context of segragation, discrimination in its core operate by stigmatising certain groups as inferior, while Hellman (2011) emphasises the demeaning and status-expressive dimensions of unequal treatment. Discrimination often signals the perceived social worth of particular groups wihtin the broader community, and thereby shape perceived social status and beliefs about whether certain groups are accepted members of society. In this sense, differential treatments in housing markets carry both allocative and symbolic consequences (Horgan, 2020; Wacquant, 2007; Hastings, 2004).

As such, perceptions are economically consequential even when they diverge from realised/symbolic behaviour. Anticipated discrimination may influence search intensity, application strategies, neighbourhood choice, and willingness to participate in particular housing markets. Perceived barriers to housing access may therefore contribute to residential sorting and unequal integration outcomes independently of realised/symbolic landlord behaviour. Studying subjective expectations of discrimination, as distinguished from actual experience thereof, is therefore important not only for understanding realised/symbolic market behaviours, but also for analysing how social stigma surrounding immigrant and minority status is reproduced through and interacts with housing markets.

Because the symbolic dimensions of discrimination lie in socially recognised moral worth assigned to particular groups through social relations (Anderson, 1999), both through hostility towards out-groups and preferential treatment towards in-groups (Portmann and Stojanović, 2022), the social meaning of discriminatory treatment cannot be fully understood solely through

[1] See `https://stats-japan.com/t/kiji/11963`, last accessed in May 2026.

individual experiences of exclusion. From this perspective, the relevant question is not necessarily whether individuals personally experience discriminatory treatment, but how individuals perceive the treatment of the broader social groups to which belong. This group-oriented dimension of symbolic discrimination is reflected in the literature of the personal-group discrimination discrepancy (PGDD), which distinguishes between perceptions of personal disadvantage and perceptions of discrimination directed against one's broader social group (Crosby, 1982; Taylor et al., 1990; Dion, 2001).

This paper studies perceived ethnic discrimination in Tokyo's rental housing market. Most existing research in this area relies on correspondence studies that measure landlord behaviour directly. While highly informative, such approaches face well-known identification challenges, as differential outcomes may reflect not only discriminatory preferences but also landlords' inferences about unobserved characteristics correlated with group signals such as names (Heckman, 1998). We therefore adopt a complementary survey-experimental approach inspired by (Lepinteur et al., 2025). Rather than observing realised outcomes, we elicit expectations about access to housing from native Japanese and foreign-born residents. This allows us to study perceived discrimination and differential perceived in-group premia (Portmann and Stojanović, 2022). Concretely, we implement a survey-experiment in which respondents evaluate the likelihood that rental applicants receive a viewing invitation for a standardised property. Applicant characteristics are held constant except for ethnically identifiable names, allowing us to isolate perceived name-based discrimination across Japanese, Indonesian, Chinese, Western Nationals, Western-Japanese, Vietnamese, and South Korean profiles.

We document five main findings. First, both native Japanese and foreign-born respondents expect non-Japanese applicants to face substantially lower viewing probabilities than an otherwise identical Japanese applicant. Second, native respondents perceive significantly larger penalties, indicating systematic differences in how majority and minority groups assess the same market environment. Third, perceived discrimination varies with respondents' characteristics: older, higher-income, and university-educated respondents expect stronger penalties, while gender differences are negligible. Fourth, among foreign-born respondents, prior experiences of everyday discrimination are associated with more pessimistic expectations, with evidence of a nonlinear relationship; Japanese-language proficiency is positively associated with perceived access, while legal status adds little explanatory power. Fifth, respondents systematically evaluate their own chances more favourably than those of applicants from their own nationality group, consistent with the personal-group discrimination discrepancy and an optimism bias in subjective expectations. The age gradient, in particular, points to multiple underlying mechanisms – such as experience-based learning, cohort effects, or differential exposure to recent market developments – that cannot be disentangled within the current design and remain an important avenue for future research.

This paper contributes to the literature in three ways. First, it provides new evidence on perceived discrimination in a non-Western housing market. Second, it complements correspondence studies by focusing on expectations rather than realised behaviour. Third, it shows that perceptions of discrimination vary not only across applicant groups and respondents, but also between assessments of group-level disadvantage and individual expectations. This finding links our study to the literature on the personal-group discrimination discrepancy (PGDD), which documents that individuals often perceive stronger discrimination against their group than against themselves personally (Crosby, 1982; Taylor et al., 1990; Dion, 2001). Such patterns are commonly interpreted as reflecting optimism or self-serving biases in subjective expectations. While PGDD is well established in social psychology, evidence in housing markets remains very scarce; existing housing-related work has focused mainly on Canada (Dion, 2001) and, more

recently, Europe (Martiniello, 2025). To the best of our knowledge, our study is the first to document PGDD in a Japanese housing context and among the first in Asia more broadly.

The remainder of the paper is organised as follows. section 2 describes the institutional context, section 3 outlines the survey design, section 4 presents the results, and section 5 concludes. The Appendix provides further supplemental materials.

2 Context

2.1 Restrictive Immigration policy and Ethnic Hierarchies in Japan

Labour Import Without 'Immigration' For decades, Japan denied the need for an immigration policy, instead implementing a system of de facto labour importation through side and back door entry, while limiting integration pathways of permanent residence for foreign nationals (Vermillo Herman, 2021). In official discourse, the Japanese government has continued to reject the notion of 'immigration', treating 'immigration' as implying permanent settlement and integration (Hasegawa, 2023). While the 2018 reform created two new visa categories – Specified Skilled Worker (SSW) Type 1 and 2 – explicitly recognising the need for lower-qualified labour (Chiavacci, 2025), former Prime Minister Shinzo Abe stated during a Diet session on 29 October 2018 that 'the government has no intention to adopt a so-called immigration policy'. While formally framed as temporary labour migration measures rather than 'immigration' policy, the reform nevertheless opened limited pathways to longer-term residence and family reunification in sectors such as agriculture, construction, and eldercare.

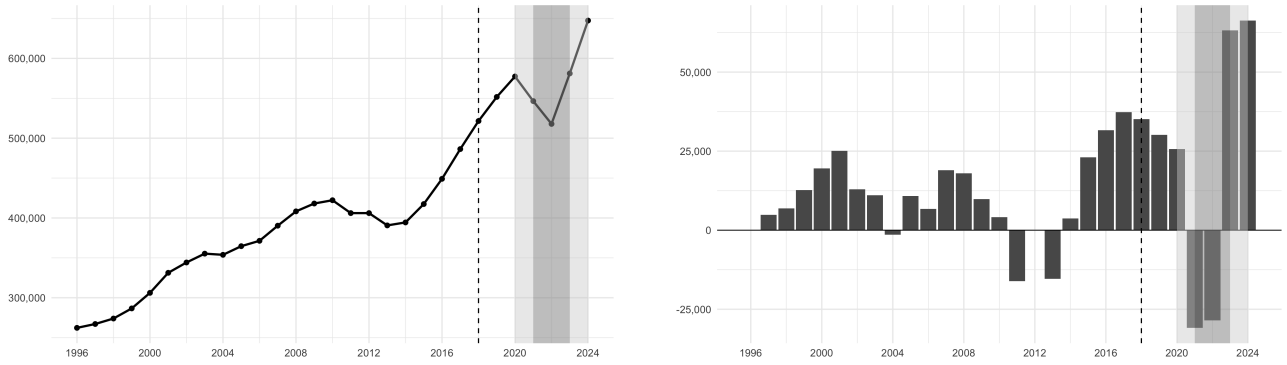
Ethnic Hierarchies and Differential Integration The 2018 changes were prompted by severe labour shortages, demographic crisis, and coordinated business lobbying rather than a desire for cultural diversity (Vermillo Herman, 2021). This shift was facilitated by centralisation of immigration authority under the new *Immigration Services Agency (ISA)*, reducing bureaucratic fragmentation that had long stalled reform (Chiavacci, 2025). Despite institutional shifts, policies remain rooted in ethnonationalist frameworks which creates a clear ethnic hierarchy where certain ethnic groups are prioritised (Shipper, 2016). Policies continue to differentiate immigrants based on perceived cultural compatibility, co-ethnicity and racial proximity – most notably privileging *Nikkeijin* and *Zainichi* Koreans (Tsuda, 1998).[2] In the context of Japan, identity-based concerns are found to be the primary reason behind anti-immigrant sentiments and preferences for cultural homogeneity (Davison and Peng, 2021).

Figure 1 illustrates the recent increase in the migrant population in Tokyo – albeit with a temporary slowdown during the COVID-19 period – in parallel with the *2018 Partial Amendment of the Immigration Control and Refugee Recognition Act*. This slowdown reflects the introduction of strict border controls, which were lifted only gradually, with Japan reopening to international tourism on 11 October 2022 and removing all remaining COVID-19 entry requirements on 29 April 2023.[3] Corresponding figures for different nationality groups are shown in Figure 5 in the Appendix.

[2] *Nikkeijin* refers to people of Japanese descent who are not current Japanese residents and *Zainichi* is a term typically associated with ethnic Koreans residing in Japan. This is underpinned by a long history of imperialism and discrimination against these groups. More recent immigration policy changes have put Southeast Asian immigrants at the bottom of the ethnic hierarchy (Shipper, 2016).

[3] Ministry of Foreign Affairs of Japan: `https://www.mofa.go.jp/ca/fna/page4e_001053.html`, last accessed in May 2026.

Figure 1: Foreign Residents in Tokyo, 1996–2024



(a) Total Foreign Residents in Tokyo

(b) Annual Change in Foreign Residents

Notes: The dashed vertical line marks the *2018 Immigration Control and Refugee Recognition Act* reform. Shaded areas indicate the COVID-19 period. The darker shaded region corresponds to years fully affected by pandemic-related restrictions, while lighter shaded regions correspond to partially affected years. Data are from the *Tokyo Statistical Yearbook*.

2.2 Tenant-Protective Property Law and the Spatial Structure of Tokyo

Spacial Order under Tokugawa Japan and Rental Housing Development The feudal samurai order developed by Tokugawa Japan (1603-1868) left a lasting impact on the urban spatial structure of Edo, present-day Tokyo. It was structured around the authority of the Tokugawa shogunate, headed by the *Shogun*, and regional *daimyo*s, high-ranking *samurai*s with large land, who 'held their domains in trust and not as private possessions', for their military support in the decisive battle (Jansen, 2000). Daimyo themselves were hierarchically divided into *shimpan* (Tokugawa collateral relatives), *fudai* (hereditary vassal allied before the battle of Skigahara), and *tozama* (outside lords), with the Tokugawa regime strategically concentrating *fudai* lands closer to the political centre, Edo, while *tozama* domains were frequently located at the geographical periphery. This spatial and political hierarchy reflected broader insider-outsider structures embedded within Tokugawa society, revolving around the enduring household (*ee-eh*) system. It often incorporated subordinate tenants, servants, and retainers within quasi-familial structures of dependancy, while those ouside such networks were positioned as outsiders. Jansen further suggests that this insider-outsider distinction continued to shape modern perception of non-Japanese residents as socially separate outsiders (*gaijin*).

The unique concentration of *daimyo* and samurai households in Edo contributed to the proliferation of rental arrangements within the city. Edo was itself spacially dominated by *bukechi* (samurai land), which was not freely alienable, unlike commercially transferrable urban land in cities such as Osaka (Suzuki, 1984). According to Suzuki, this institutional restriction contributed to the development of a distinctive urban rental system in Edo whereby samurai households with financial hardship increasingly rented out land instead of transferring ownership. Suzuki further argues that this practice spread beyond samurai districts within Tokyo, contributing to the historically high prevalence of rental housing. Following the Meiji Restoration and the Land Tax Reform, land was commodified and became subject to heavy taxation. It further incentivised landlords to generate income through leasing, while retaining symbolic and status-related significance of landownership beyond economic value, particularly in former samurai districts of Tokyo. These historical and institutional development contributed to the

historically high prevalence of rental housing in present-day Tokyo.

Wartime Tenant Protection and Long-Term Tenure Security The introduction of the Building Protection Act, the Land Lease Act, and the Building Lease Act before and after the WWI was driven by rapid land price inflation, which incentivised landlords to transfer land to third-party to remove tenants whose leasehold interests lacked proprietary protection under Japanese civil law. Against the background of wartime militarism, the government sought to stabilise urban labour supply for armament production and the war economy. Following the Rent Control Order, the 1941 amendments to the Land Lease Act and the Building Lease Act maximised tenure security by introducing automatic renewal mechanisms and the 'just cause' requirement, severely restricting landlords' ability to refuse renewal or teminate leases. This structure was largely inherited by the current Act on Land and Building Lease and gave rise to the widely recognised landlord perception that 'once leased out, never comes back'. This institutional structure has contributed to persistent risk-averse behaviour among landlords in Japanese rental housing markets.

The Contemporary Tokyo Rental Market While the 2000 amendment introduced the fixed-term building lease system as an alternative framework operating alongside the ordinary lease regime, to which the automatic renewal and the 'just cause' requirement continue to apply, the fixed-term system remained relatively uncommon for more than two decades. One reason was the prolonged economic stagnation since the 1990s, which led to declining land prices and reduced the economic incentive for termination, as opportunities for rent increases were limited. Another was the widespread preference for rental housing among younger households concerned about negative equity associated with long-term housing loans. This situation only began to shift recently, as land prices in Tokyo started to rise again around the COVID-19 period, leading some landlords to begin adopting fixed-term building leases from around 2025 onwards. That said, much of Tokyo's rental housing market remains structurally oriented toward relatively stable and long-term occupancy rather than short-term rental turnover.

Existing research documents persistent socio-economic and spatial inequalities within Tokyo's housing market. Although levels of segregation are generally lower than in many Western metropolitan areas, disparities remain visible across occupational, income, and ethnic dimensions (Masaya, 2021; Fielding, 2004; Fujita and Hill, 2012). Foreign-born residents are concentrated in specific wards such as Shinjuku and Edogawa, reflecting both labour-market sorting and historical migration networks.[4]

Tokyo's rental market therefore provides an important setting in which to study perceived discrimination. Renting constitutes the dominant housing tenure form in the capital, and access to rental housing is often mediated through private landlords and real estate agents, creating substantial scope for unequal treatment at the screening stage. Existing studies further suggest that social perceptions and cultural proximity continue to shape attitudes towards foreign-born residents in Japan (Davison and Peng, 2021; Shipper, 2016).

At the same time, Japan's housing system differs from many Western contexts in important respects. Rather than a traditional housing ladder characterised by gradual transitions from renting into ownership, Tokyo's housing market is marked by relatively long-term reliance on rental housing, particularly among younger and mobile households (Izuhara, 2010). This increases the importance of equitable access to rental accommodation for the social and economic integration of foreign-born residents.

[4]Immigration Services Agency (2024) data indicate that Shinjuku has the largest foreign-born resident population among Tokyo's 23 wards.

2.3 Weak Anti-discrimination Law

Absence of Comprehensive Housing Anti-Discrimination Law Article 14 of the Japanese Constitution prohibits discrimination on grounds including race, creed, sex, social status, and family origin. Japan became a party to the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD) in 1995, and it entered into force for Japan in 1996. In the housing context, Japanese courts have recognised certain forms of nationality-based differential treatment as unlawful under tort law and the principle of good faith in the Japanese Civil Code, particularly where landlords or real-estate agents refused to conclude tenancy agreements with non-Japanese applicants. [5] More recently, the Tokyo District Court awarded damages against a real-estate agency that expressed its unwillingness to rent to persons from a particular country. [6]

However, unlike the United Kingdom and European Union member states, Japan does not have statutory anti-discrimination provisions explicitly regulating differential treatment in the housing sector, nor an independent national human rights or equality body with monitoring/enforcement powers. In the United Kingdom, the Equality Act 2010 expressly prohibits race discrimination in relation to the disposal and management of premises in the housing sector.[7] At the European Union level, the Racial Equality Directive (2000/43/EC) requires Member States to prohibit discrimination in access to and supply of goods and services available to the public, including housing, both in the public and private sectors. The Directive further requires Member States to designate bodies for promotion of equal treatment and establish effective, proportionate, and dissuasive sanctions for infringements of anti-discrimination law.[8] All the Member States have transposed this Directive to their national laws (European Commission, 2007).

The United Nations' Committee on the Elimination of Racial Discrimination repeatedly expressed concerns regarding discriminatory treatment by private actors, particularly discrimination in housing in Japan. The Committee has also criticised the absence of statutory provisions explicitly prohibiting racial discrimination, the lack of effective remedies, and weak institutional enforcement mechanisms in Japan (Committee on the Elimination of Racial Discrimination, 2001, 2010, 2014, 2018). In response, the Japanese government argued that the Human Rights Bureau within the Ministry of Justice engaging in protecting human rights (Committee on the Elimination of Racial Discrimination, 2019). While the Bureau, originally established in 1948, explicitly recognises nationality-based exclusion in the housing market as a human-rights issue, it lacks institutional independence from the government and does not possess binding enforcement powers. The Japanese government also maintained that 'We do not recognize that the present situation of Japan is one in which discriminative act cannot be effectively restrained by the existing legal system...', thereby maintaining that the existing Japanese legal framework was sufficient to address discriminatory conduct without further legislative intervention (Ministry of Foreign Affairs of Japan, 2000).

Hate Speech Regulation without Criminal Sanction Because perceptions of discrimination are often influenced not only by direct experiences but also by publicly expressed exclusionary attitudes, the Japanese legal and regulatory treatment of discriminatory speech is also relevant to the present study. Japan maintains reservations to Article 4(b) and (c) of CERD, which require the criminalisation of certain forms of hate speech and racist organisations, citing

[5] Osaka High Court, 5 October 2006; Osaka High Court, 22 March 2007; Kyoto District Court, 2 October 2007.

[6] Tokyo District Court, 9 October 2019.

[7] Equality Act 2010, ss4, 9(1)(b), 13, 19, 26, 27 and 33-35.

[8] Art 3(1)(h), 13, 15.

concerns regarding freedom of expression. The Committee has repeatedly expressed concerns regarding racist and xenophobic speech in Japan (Committee on the Elimination of Racial Discrimination, 2010, 2014, 2018).

In response to growing domestic and international criticism, Japan enacted the Hate Speech Act. [9] However, the Act has a limited scope and lack enforcement structure. The definition of prohibited conduct is relatively narrow, requiring speech or behaviour intended to promote or induce discriminatory sentiments or discriminatory behaviour (Art 2). Moreover, the Act does not impose any sanctions, instead providing only that 'citizens of Japan shall endeavor to deepen their understanding of the need to eliminate unfair discriminatory speech or behaviour' (Art 3). While Japanese courts have, in some cases, awarded damages against hate speech both offline and online[10], the CERD Committee has continued express concerns regarding the absense of effective anti-hate speech enforcement mechanisms in Japan (Committee on the Elimination of Racial Discrimination, 2018).

3 Survey Design

3.1 Technical Implementation and Quality Assurance

A cross-sectional online survey was administered between April and May 2025 using the Japanese panel provider *GMO Research*. The survey targeted residents of the Greater Tokyo area and employed quota sampling to recruit approximately 800 Japanese nationals and 200 foreign-born residents. Foreign-born respondents were oversampled to ensure sufficient statistical power for subgroup analyses.

The questionnaire was implemented through Qualtrics and included multiple data-quality safeguards, including minimum completion-time thresholds, response-completeness checks, location validation, and duplicate-response prevention. After applying these validity filters, a small number of observations was excluded due to incomplete or inconsistent responses. Implementation details are summarised in Appendix A.

Ethical approval was obtained from the Department of Land Economy, and informed consent was secured from all participants prior to participation.

3.2 Development of Fictitious Rental Applicants

Applicant profiles were constructed using *Japanese Immigration Agency* (2024) data to reflect the composition of migrant inflows following the 2018 immigration reforms. To isolate perceived discrimination, profiles differed only in ethnically identifiable names while all other applicant characteristics were held constant. Applicant names were pre-tested for ethnic recognisability and standardised using Japanese script conventions to preserve comparability across profiles. Table 1 reports the final applicant profiles.

Further details on name construction, validation procedures, script standardisation, and translation protocols are provided in Appendix B.

[9] Act of the Promotion of Efforts to Eliminate Unfair Discriminatory Speech and Behaviour against Persons Originating from Outside Japan (2016).

[10] For instance, the Kyoto District Court (7 October 2013) awarded damages against an extremist anti-Korean organisation whose members repeatedly used loudspeakers near a Korean school to disseminate discriminatory and derogatory speech targeting ethnic Koreans. More recently, the Tokyo High Court (12 May 2021) awarded damages that were relatively high by Japanese tort law standards against a blogger, who had posted discriminatory and derogatory comments against ethnic Koreans.

Table 1: Applicant Profiles

Name	Ethnicity	Native Translation	Katakana Characters
Taro Yamamoto	Japanese	山本太郎	山本太郎
Andi Surya Purta	Indonesian	Andi Surya Purta	アンディ・スルヤ・プトラ
Wei Chang	Chinese	张伟	ウェイ・チャン
Thomas Laurent	Western	Thomas Laurent	トーマ・ローラン
James Takeda	Japanese-Western	James Takeda	ジェームズ・武田
Nguyễn Văn Minh	Vietnamese	Nguyễn Văn Minh	グエン・ヴァン・ミン
Park-Ji Hoon	Korean	박지훈	パク・ジフン

Notes: Native scripts are shown where applicable; Katakana is used to standardise the rendering of non-Japanese names.

3.3 Questionnaire Design

The questionnaire comprised three sections. The first collected respondents' socio-economic characteristics. The second asked participants to evaluate the likelihood of each applicant securing a rental viewing for a standardised property. The third, administered only to foreign-born residents, included a condensed version of the Everyday Discrimination Scale (Williams et al., 1997), adapted to capture perceived discrimination in rental access and search strategies.

The survey was developed in English and translated into Japanese using machine translation, followed by verification by four native speakers. This process ensured linguistic accuracy and minimised potential bias in the evaluation tasks.

Section 1: Socio-Economic Characteristics. Questions to elicit socio-economic variables were drawn from established government sources.[11] The official questionnaires are available in English and Japanese. Hence, no translation bias is expected.

Where necessary, supplemental measures were incorporated using standardised national benchmarks, including income deciles from the *2024 National Family Expenditure and Income Survey* and ethnicity classifications adapted from the *CIA World Factbook*. As ethnicity is not typically captured in Japanese surveys, questions were designed using broad, participant-selectable groupings and reviewed for cultural sensitivity by native Japanese academics.

The following variables were included as independent predictors: economic (income, industry, employment status, housing status) and cultural (gender, age, ethnicity, education level), with additional variables for foreign-born residents only (visa status, length of residence, and language proficiency).

Questions were harmonised across groups using Qualtrics branching logic, excluding non-applicable variables for Japanese respondents to maintain comparability. Variables such as visa status, language proficiency, and length of residence are central to testing the integration paradox in the Tokyo context (Steinmann, 2019), while prior international exposure among Japanese respondents (e.g., study abroad) may moderate susceptibility to societal bias (Tomiura et al., 2019).

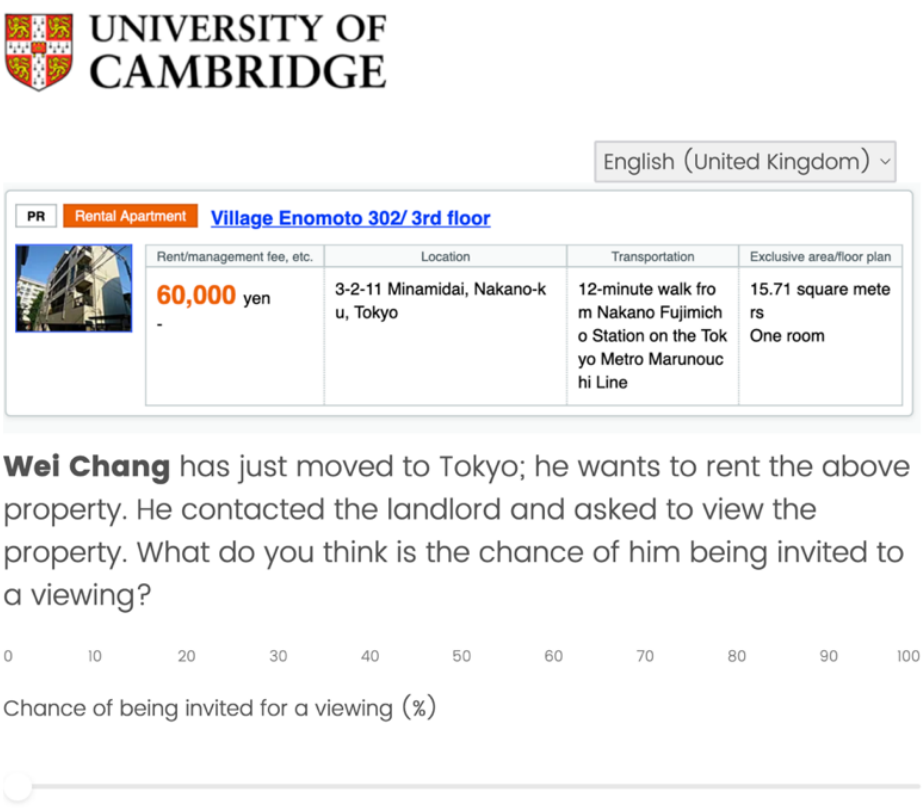
[11]The questions were taken from the *Ministry of Justice Basic Foreign Residents Survey* (`https://www.moj.go.jp/isa/content/001421198.pdf`), the *2020 National Census* (`https://www.stat.go.jp/english/data/kokusei/2020/summary.html`), and the *National Survey of Family Income, Consumption and Wealth* (`https://www.stat.go.jp/english/data/zenkokukakei/index.html`).

Section 2: Perceived Likelihood of Securing a Rental Viewing. This section aims to elicit participants' subjectively perceived likelihood of different people being invited to a viewing. Therefore, participants are shown a rental listing together with one of the profiles developed in subsection 3.2. At the end, participants are also asked to assess the probability that they themselves would be offered a viewing. The same listing was used throughout the entire experiment.

We consistently elicit the perceived likelihood on a 11-step Likert scale as shown in Figure 2. A neutral question design was employed to reduce priming or coercion.

The property listing used was sourced from *LIFULL Homes*, one of the largest real estate websites in Japan and the experimental platform of choice also used by Sugasawa and Harano (2023). The selected property is located in the Tokyo ward with the median number of foreign-born residents according to official statistics. It is a one room apartment, in keeping with the applicant profile portraying a single male, with a rent of 60,000 yen per calendar month (National Association of Real Estate Transactions, 2020), which is the average for a property in this area. The purpose of the property listing is to anchor respondents' expectations and provide a degree of familiarity where they may be caught off guard by the question style (Weiss and Roberts, 2018).

Figure 2: Eliciting the Perceived Likelihood to be Invited



Notes: The figure shows a snapshot of the experimental screens presented to participants to elicit their subjective perceptions of the likelihood of being invited to a viewing.

Section 3: Everyday Discrimination Scale (EDS). This section was displayed to foreign-born resident respondents only. Respondents were presented four questions (printed in Appendix C) from the EDS survey used to validate perceived discrimination levels. Precisely,

participants are asked to rate how often they experience four types of discriminatory situations. This allows us to compile an standardised and comparable measure of discrimination experienced by participants.

We use this measure in two ways. First, we test whether the EDS score correlates with objective proxies of integration such as legal status (permanent visa), length of stay, and Japanese language proficiency. Second, the design allows us to test whether perceived discrimination differs between assessments of one's own prospects and assessments of one's broader nationality group.

Specifically, we anticipate that the probability an individual assigns to their ethnic category will be lower than the probability they assign to themselves due to the well-documented personal-group discrimination discrepancy (PGDD). Emerging from relative deprivation theory, early studies on PGDD showed that working White women reported lower levels of personal than group-based discrimination in employment and income contexts (Crosby, 1982). This pattern has subsequently been replicated across racial, ethnic, and gender groups in multiple countries. Dion (2001) first documents the effect in the context of perceived discrimination in the rental housing market, focusing on Canada.

The selected EDS items capture courtesy, receipt of poorer service relative to others, perceptions of being feared, and perceptions of being viewed as dishonest. These measures were chosen for their relevance to landlord decision-making in offering property viewings (Clark, 2007; Hamovitch et al., 2022; Hanson et al., 2011). Responses are elicited on a Likert scale and re-coded to a linear scale for processing (almost every day = 5 to never = 0), before being aggregated into a composite index of perceived everyday discrimination.

4 Empirical Analyses

4.1 Evidence of discrimination in Tokyo's housing market

4.1.1 Do native and foreign-born residents in Japan expect discrimination of non-Japanese rental applicants?

We first focus on assessing the sample[12] of native Japanese residents and assess their perceptions. We compute an overall average perceived probability of applicants (excluding oneself) being invited to a viewing of 54.7% (median: 55.7%). Those probabilities are significantly lower when excluding the native Japanese candidate: 52.4% (median: 52.2%).

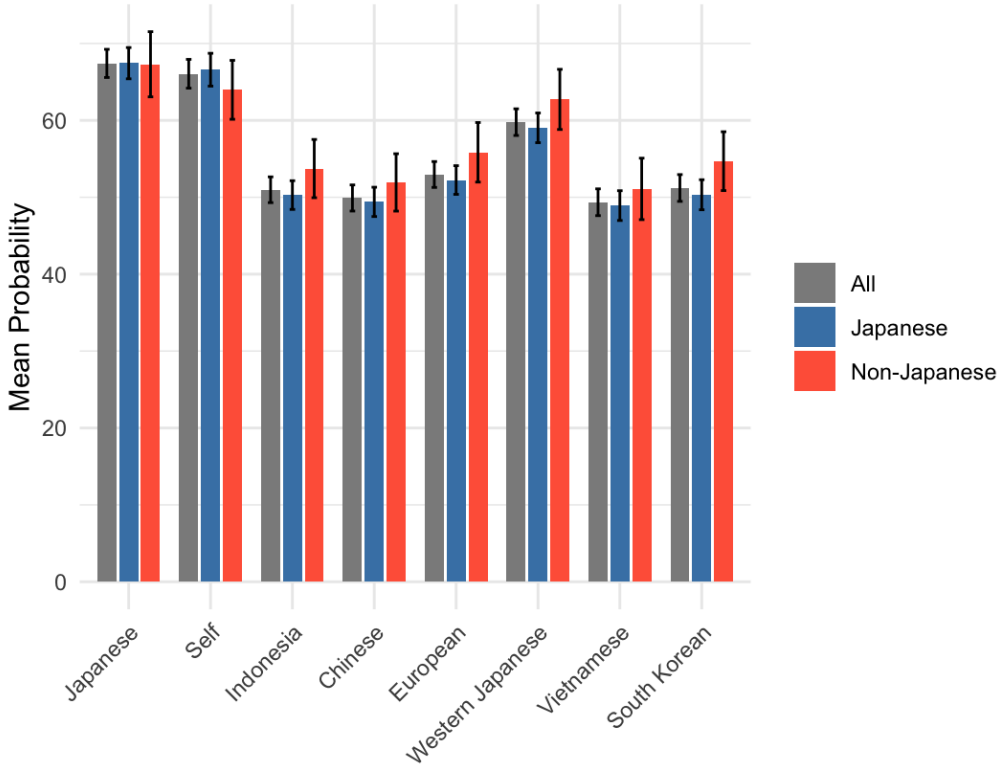
Splitting responses into averages per applicants' ethnic group reveals large heterogeneity, as shown in Figure 3. Japanese residents expect all types of non-Japanese applicants to have a substantially lower probability of being invited to a viewing. The difference to native Japanese applicants is statistically significantly negative at the 0.01 level. Collectively stated differences are smallest for Western Japanese, and highest for Vietnamese followed by Chinese, Indonesians and South Korean. Western Nationals are perceived to have the highest chance of securing a viewing across all non-Japanese groups.

Beyond reporting averages for the full sample – including both native residents and those of foreign descent – we also disaggregate the data by respondents' ethnic background. This enables us to examine whether perceptions differ between native Japanese and residents of different origins.

Visual inspection of Figure 3 already suggests lower probabilities are expected for non-Japanese

[12]Table 9 in the Appendix reports summary statistics.

Figure 3: Mean stated viewing probabilities.



Notes: Collectively stated average probabilities of applicants of different ethnic backgrounds being offered a viewing. Overall probabilities as well as splits by native Japanese and foreign-born participants. Bars indicate standard deviations.

applicants by the group of non-Japanese survey participants in comparison to Japanese participants.

Table 2 reports corresponding numeric results. Probabilities are benchmarked against the viewing-invitation probability of the applicant with a Japanese name (*Taro Yamamoto*). First, we clearly reject the notion that applicants of different origins are perceived as being treated equally as the native Japanese applicant *Taro Yamamoto* (the benchmark) is viewed as having the highest likelihood of receiving an invitation to a viewing. This pattern holds for both groups of participants – native Japanese and foreign-born – indicating a shared awareness of discriminatory behaviour. Across both samples, the difference is statistically highly significant for all profiles.

To assess the importance of differences, we compute Cohen's d to achieve a standardized measure of deviations. Again, the Japanese applicant *Taro Yamamoto* acts as benchmark as this applicant is ranked top in terms of viewing invitation likelihood Table 2. The Cohen's d estimates indicate that Japanese nationals perceive stronger bias relative to foreign-born respondents when the Japanese baseline is standardised. Among Japanese respondents, effect sizes are moderate to large ($d > 0.5$), with Indonesian and Chinese applicants positioned 0.71 and 0.67 standard deviations below the baseline, respectively. In the foreign-born respondents subsample, these effects are attenuated (0.55 and 0.59). By contrast, the Western–Japanese applicant yields a small effect size ($d < 0.5$) across both groups, yet again smaller in size

Table 2: Differences in Perceived Likelihood of Viewing Invitations by Origin

	Indonesian	Chinese	Western Nationals	Western Japanese	Vietnamese	South Korean	Self-Perceived
Japanese							
Probability (%)	50.28	49.40	52.24	59.03	48.91	50.33	66.58
Difference from Japanese (%)	-17.12***	-17.90***	-15.16***	-8.44***	-18.59***	-17.18***	-0.95
Cohen's d	0.71	0.67	0.62	0.40	0.69	0.65	0.04
N	788	785	783	780	776	772	773
Non-Japanese							
Probability (%)	53.73	51.93	55.85	62.72	51.09	54.69	63.97
Difference from Japanese (%)	-13.57***	-15.57***	-11.48***	-4.61***	-16.24***	-12.64***	-3.36
Cohen's d	0.55	0.59	0.45	0.21	0.57	0.47	0.11
N	198	197	195	195	195	195	195

Notes: Entries report paired comparisons between the Japanese applicant (Taro Yamamoto) and each target applicant. "Probability" gives the mean perceived likelihood of receiving a viewing invitation for the target applicant. "Difference from Japanese" is calculated as target applicant probability minus Japanese applicant probability; negative values therefore indicate a lower perceived likelihood than for the Japanese applicant. Cohen's d is based on the paired difference between the Japanese applicant and the target applicant. N varies slightly across comparisons because each estimate uses respondents with complete paired responses for the relevant applicant pair. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

among foreign-born respondents. Finally, the effect size for self-perceived probability is negligible, suggesting that respondents in both subsamples evaluate their own prospects as broadly comparable to those of Japanese applicants.

Assessing the perceived ranking of different types of non-Japanese applicants, natives and foreign-born respondents show large agreement in ranking as evident from Table 2. Most notably, both attribute the highest likelihood to themselves: The difference to the Japanese applicant is, while negative, not statistically different from zero.

All other groups are rated significantly lower. Both respondent groups further agree in ranking Western Japanese highest among the non-Japanese categories, followed by Western Nationals and South Koreans. The high ranking of Western Japanese is consistent with the idea that ethnic similarity can buffer against perceived discrimination (Pager and Shepherd, 2008). Differences between the two groups emerge only at the bottom of the ranking: foreign-born respondents assign the lowest likelihood to Chinese applicants, whereas native Japanese place Chinese above Indonesians and rank Vietnamese last.

In addition to univariate comparisons, we test for systematic differences within a regression framework (see Table 3). Model (1) regresses stated likelihoods on applicants' nationality without additional controls. The estimated coefficients closely mirror the averages reported in Table 2. We cluster standard errors at the participant level to account for within-participant correlation in responses.

Model (2) accounts for participant-specific baseline levels in stated likelihoods by incorporating individual fixed effects. This specification absorbs all time-invariant respondent characteristics that could influence overall response levels. While the model's explanatory power naturally increases, the inclusion of fixed effects has no substantive impact on the estimated coefficients for the different ethnic groups, reinforcing the robustness of the findings.

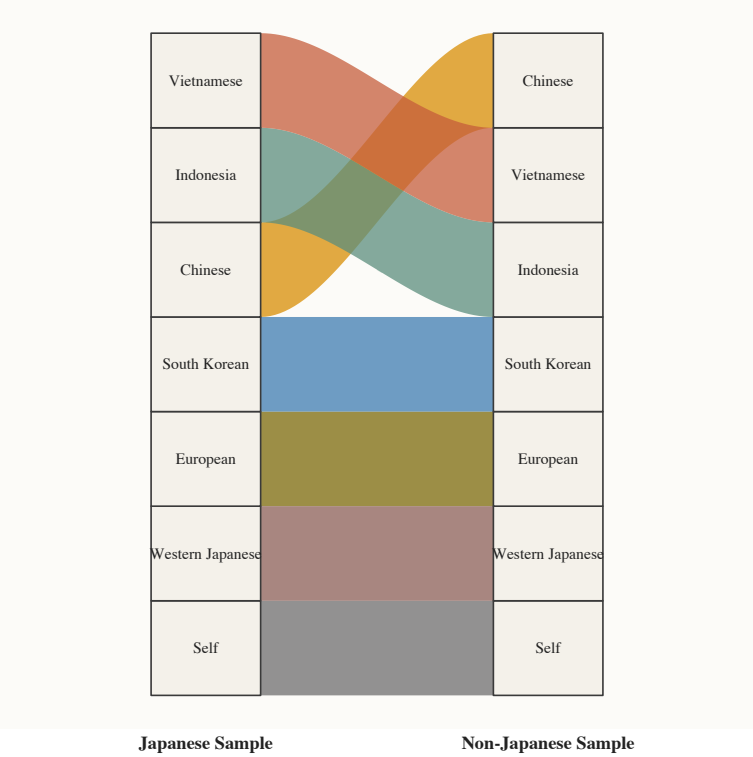
Finally, Model (3) interacts applicants' nationality with a dummy for Japanese respondents, allowing us to assess systematic differences in how natives and foreign-born respondents perceive the likelihoods associated with different applicant types. A Wald test confirms that this

Table 3: Perceived Likelihood of Viewing Invitations

	(1)	(2)	(3)
Constant	67.406***		
	(0.935)		
Chinese	-17.500***	-17.387***	-15.458***
	(0.851)	(0.674)	(1.502)
Western Nationals	-14.446***	-14.349***	-11.401***
	(0.799)	(0.675)	(1.507)
Indonesia	-16.430***	-16.407***	-13.566***
	(0.776)	(0.673)	(1.499)
South Korean	-16.199***	-16.117***	-12.555***
	(0.857)	(0.677)	(1.507)
Vietnamese	-18.055***	-17.999***	-16.160***
	(0.878)	(0.676)	(1.507)
Western Japanese	-7.639***	-7.580***	-4.524***
	(0.684)	(0.675)	(1.507)
Self	-1.348*	-1.308*	-3.278**
	(0.779)	(0.677)	(1.507)
Chinese × Japanese respondent			-2.414
			(1.680)
Western Nationals × Japanese respondent			-3.686**
			(1.685)
Indonesia × Japanese respondent			-3.555**
			(1.677)
South Korean × Japanese respondent			-4.458***
			(1.686)
Vietnamese × Japanese respondent			-2.300
			(1.686)
Western Japanese × Japanese respondent			-3.821**
			(1.685)
Self × Japanese respondent			2.470
			(1.686)
Respondents FE	.	✓	✓
Clustered SE by Respondents	✓	.	.
Adj. R^2	0.058	0.079	0.082
F-statistic	69.16***	238.85***	121.70***
Observations	7820	7820	7820

Notes: The reference category for applicants' nationality is Japanese (Taro Yamamoto). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Figure 4: Ranking Shifts in Cohen's d by Origin



Notes: Rankings are based on Cohen's d from paired comparisons between the Japanese candidate and each comparison profile in perceived likelihood of viewing an invitation. Rank 1 (at the bottom) indicates the smallest negative deviation. The left column shows native Japanese respondents; the right column shows non-Japanese respondents.

distinction is important, as stated probabilities differ significantly between the two groups ($\chi^2_7 = 27.006$, $p = 0.0003^{***}$).

Consistent with the univariate comparisons in Table 2, the results indicate that native respondents assign even lower likelihoods to non-Japanese applicants. This pattern is driven in particular by lower probabilities attributed to Western Nationals, Indonesian, South Korean, and Western Japanese applicants.

Notably, while foreign-born respondents show relatively little differentiation between Western Japanese and Japanese applicants, native respondents place substantially greater weight on this distinction, possibly reflecting a deeper sensitivity to cultural nuances that may be less apparent to non-Japanese observers. Moreover, in line with the historically strained relationship between Korea and Japan, Japanese respondents account for a large share of the negative effect observed for South Korean applicants.

Similarly, applicants of Western and Indonesian origin are attributed a significantly lower likelihood by native Japanese participants. While in the univariate assessment natives and immigrants perceived no significant differences in chances between themselves and the Japanese applicant, the multivariate structure clearly identifies significantly lower perceived chances by immigrants than natives, which is consistent with the overall highest likelihood attributed to the Japanese applicant.

These differences between natives and immigrants in perceptions indicate that foreign-born respondents may not capture all the nuances of Japanese societal structure.

4.2 The Role of Participants' Socio-Economic Characteristics

Table 4: Heterogeneity Results

	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	67.406***	67.293***	66.201***	64.805***	68.010***	64.165***
	(0.934)	(2.158)	(1.253)	(1.344)	(1.355)	(1.547)
NJA	-15.046***	-12.301***	-14.701***	-13.352***	-16.487***	-12.656***
	(0.739)	(1.658)	(0.995)	(1.042)	(1.037)	(1.234)
Japanese respondent		0.141				
		(2.393)				
NJA × Japanese respondent		-3.434*				
		(1.851)				
Female			2.911			
			(1.873)			
NJA × Female			-0.828			
			(1.478)			
Age > 50				5.263**		
				(1.860)		
NJA × (Age > 50)				-3.504**		
				(1.474)		
Income = Below Median					-1.189	
					(1.870)	
NJA × (Income = Below Median)					2.842*	
					(1.474)	
Degree						5.417**
						(1.932)
NJA × Degree						-4.005**
						(1.533)
Clustered SE by Respondents	✓	✓	✓	✓	✓	✓
Adj. R^2	0.035	0.036	0.036	0.037	0.035	0.036
F-statistic	248.80***	87.47***	86.58***	88.26***	84.85***	87.30***
Observations	6852	6852	6852	6845	6852	6852

Notes: The reference category for *NJA* is the Japanese applicant (Taro Yamamoto). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Having established that non-Japanese applicants are perceived to face lower chances of securing a viewing, we next collapse all non-Japanese profiles into a single 'Non-Japanese Applicants' (NJA) category and examine heterogeneity by respondents' characteristics. Table 4 reports the results.[13] Model (1) reaffirms the baseline findings obtained with separate non-Japanese applicant categories: Participants jointly expect a lower chance of NJAs to secure a viewing as compared to the Japanese applicant. Model (2) confirms again that Japanese respondents perceive a significantly larger penalty for non-native applicants than non-Japanese respondents. Model (3) tests for differences by gender. Perceived discrimination appears not to differ between female and male participants.

Model (4) splits the sample at the median age. Older respondents expect higher viewing probabilities overall, but they also perceive a significantly larger disadvantage for NJAs. The findings for gender and age are in line with results from Luxembourg based on revealed discrimination rather than stated perceptions (Lepinteur et al., 2025). The finding that older Japanese participants perceive stronger disadvantages for NJAs may be driven by several mechanisms. The age gradient may reflect experience-based learning, cohort effects, or differential exposure to recent market developments. Distinguishing between these mechanisms is beyond the scope of the present design and remains an avenue for future research.

[13] We cluster standard errors at the respondent-level. Controlling for individual FE again leads to very similar marginal effects.

Model (5) indicates that lower-income respondents anticipate less discrimination against NJAs, implying that higher-income respondents perceive a stronger penalty. Model (6) distinguishes respondents by educational attainment (degree vs. no degree). Respondents with a degree perceive a larger disadvantage for non-native applicants.

Compared with results for Luxembourg by Lepinteur et al. (2025), our findings show both clear parallels and some differences across the heterogeneity dimensions examined. Most importantly, Models (3) and (4) align with their results in showing no meaningful heterogeneity by gender and stronger perceived discrimination among older respondents. However, Model (6) reveals a different education gradient: whereas Lepinteur et al. (2025) find stronger discrimination among less-educated participants, our results suggest that respondents with a degree perceive a larger disadvantage for non-native applicants.

To further investigate the education effect in Model (6), we estimate the specification on subsamples defined by participants' nationality. When including participants from Asian countries with comparatively strong education systems (Japan, China, Taiwan, and South Korea), the estimated interaction effect remains qualitatively similar but becomes smaller in magnitude.

We further test whether restricting the sample to native Japanese or foreign-born respondents alters the effects in Models (2)–(6). The results remain quite stable across these restricted samples, and we do not find substantially different estimates when focusing on either group separately.

Overall, perceived discrimination varies systematically with age, income, and education, but not gender. Older, higher-income, and university-educated respondents perceive larger disadvantages for non-Japanese applicants, whereas the estimated effects are otherwise stable across respondent subgroups.

4.3 The Role of Foreign-Born Respondents' Own Experience of Discrimination

Additional questions elicit foreign-born respondents' self-reported experiences of discrimination ($N = 195$ valid), as detailed in subsection 3.3. Respondents are presented with four scenarios capturing how others behave towards them in different contexts. Responses are coded such that lower values correspond to more frequent experiences of unequal treatment. In addition to examining each dimension separately, we construct an individual-level index of experienced discriminatory behaviour by averaging responses across the four scenarios.

As shown in Figure 6 in the Appendix, only a small fraction of foreign-born respondents report never having experienced discriminatory behaviour. The modal response across all scenarios is "A few times a month" (see Table 5), indicating that recurring exposure to subtle forms of discrimination is common within the sample. These items capture everyday instances of unequal treatment adapted to the housing context and are expected to be closely related to respondents' perceived likelihood of receiving a viewing invitation.

To examine this relationship, we first estimate bivariate correlations between the stated probability of securing a viewing and the composite discrimination index. We find a positive yet modest correlation (Spearman's $\rho = 0.125$, $H_0 : \rho = 0$ vs. $H_1 : \rho > 0$ rejects H_0 with p-value $= 0.041$), indicating that stated perceived viewing likelihoods capture a related—though not identical—construct to broader measures of perceived discrimination. Repeating this test separately for each discrimination dimension reveals that no individual component is, in isolation, statistically significantly correlated with the subjectively stated viewing probability. This suggests that the observed association reflects the combined effect of multiple dimensions of perceived discrimination rather than any single category alone.

Table 5: Most Frequent Response for Each EDS Item

Question	Most frequent response	n	%
EDS1	A few times a month	68	34.2
EDS2	A few times a month	85	42.7
EDS3	A few times a month	107	53.8
EDS4	A few times a month	119	59.8

Notes: Entries report the modal response category for each EDS item. Percentages are the share of responses for that item selecting the modal category.

Next, we regress the stated probability of securing a viewing on the composite discrimination index and incrementally add further controls. We also test for a non-linear relationship between the two factors. Table 6 shows that respondents' perceived likelihood of receiving a viewing invitation is systematically associated with their prior experiences of discrimination. Across all six specifications (1)–(6), the EDS score enters positively and is highly statistically significant, while its squared term is negative and statistically significant throughout, confirming a robust nonlinear relationship. This implies that respondents with more frequent prior discrimination experiences (i.e., lower EDS scores) report lower expected probabilities of receiving a viewing invitation, whereas those who report less frequent discrimination express more optimistic expectations. The negative coefficient on the squared term further suggests diminishing marginal effects: the positive association between more favourable past treatment and perceived viewing chances weakens at higher levels of the EDS index.

Furthermore, we examine whether integration into Japanese society is associated with individuals' perceived success in the housing application process. Integration is proxied by permanent residency status, length of stay in Japan, and self-reported Japanese language proficiency. Length of stay, included in specifications (4) and (6), is statistically insignificant in both models, suggesting that time spent in Japan does not meaningfully explain variation in perceived probabilities of receiving a viewing invitation. Japanese language proficiency, introduced in specifications (2) and (6), is positively associated with perceived success and weakly significant in specification (2); however, the effect becomes statistically insignificant in specification (6) once additional controls are included, indicating limited robustness. Permanent residency status, included in specifications (3) and (6), also remains positive but statistically insignificant throughout.

In contrast, economic resources appear to matter. Log income, included in specifications (5) and (6), enters positively and is statistically significant in both models, suggesting that higher-income respondents report more optimistic expectations regarding their rental prospects.

Overall, while the models explain only a limited share of the variation in perceived viewing probabilities (adjusted R^2 ranging from 0.035 to 0.065 across specifications (1)–(6)), they consistently indicate that prior experiences of discrimination are a key determinant of respondents' expectations. Income also plays a meaningful role, whereas conventional indicators of integration—such as language proficiency, visa status, and length of stay—show limited and non-robust associations. By contrast, perceptions of group-level success, namely the collective perceived success of foreign-born respondents in the Japanese housing market, appear to be more strongly associated with perceived individual outcomes. Taken together, these findings suggest that subjective expectations in the rental housing market are shaped less by individuals' own integration characteristics and more by broader perceptions of how foreign-born respondents are treated within Japanese society, with economic resources playing a secondary but still

Table 6: Determinants of Respondents' Perceived Own Likelihood of Receiving a Viewing Invitation

	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	41.045***	27.784**	38.136***	37.077***	32.674***	23.362*
	(8.864)	(11.265)	(9.054)	(12.427)	(9.463)	(13.524)
EDS score	20.550***	18.542***	19.667***	20.950***	21.081***	18.440***
	(6.735)	(6.775)	(6.741)	(6.806)	(6.662)	(6.853)
EDS score^2	-3.999***	-3.439***	-3.781***	-4.078***	-4.092***	-3.406**
	(1.281)	(1.307)	(1.286)	(1.295)	(1.267)	(1.328)
Language skills		1.441*				1.166
		(0.764)				(0.783)
Permanent visa			5.832			4.503
			(3.953)			(4.035)
Length of stay				0.565		-0.396
				(1.238)		(1.272)
Log income					4.897**	4.382**
					(2.090)	(2.111)
Adj. R^2	0.039	0.051	0.045	0.035	0.061	0.065
F-statistic	4.91***	4.50***	4.02***	3.33**	5.18***	3.25***
Observations	195	195	195	195	195	195

Notes: The dependent variable is respondents' perceived own likelihood of receiving a viewing invitation. *EDS score* measures the frequency with which respondents report having experienced discriminatory behaviour. *Language skills* is defined as the sum of reading and speaking ability. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

important role.

4.4 Group-Level Perceptions versus Individual Expectations

As motivated in subsection 3.3, we test whether individuals differentiate between anticipated group-level discrimination and their own expected treatment, following the personal-group discrimination discrepancy (Dion, 2001). Specifically, we examine whether respondents assign lower probabilities of securing a viewing to their ethnic group in general than to themselves.

To this end, we regress participants' self-perceived likelihood of securing a viewing on the probability they attribute to applicants of their own nationality. The analysis focuses on respondents for whom a corresponding nationality profile is available, namely Japanese, Vietnamese, Chinese, South Korean, and Indonesian applicants.

Under the hypothesis of optimistic self-assessment relative to the group, the coefficient on the matched nationality profile should be strictly smaller than one.

Table 7 reports the results across six specifications. Models (1), (3), and (5) estimate log-log specifications, while models (2), (4), and (6) present results in levels. Across all specifications (1)–(6), the coefficient on the matched nationality profile is positive, highly statistically significant, and consistently below one, ranging from 0.643 to 0.647 in the log-log models and from 0.722 to 0.739 in the linear models. Indeed, in all specifications, the coefficient on the matched nationality profile is significantly smaller than one ($p < 0.001$), providing strong support for the hypothesis that respondents evaluate their own prospects more favourably than those of

their nationality group.[14]

This pattern provides strong and robust support for the hypothesis: respondents systematically rate their own chances of receiving a viewing invitation more favourably than those of applicants from their own nationality group.

The magnitude of the coefficient further suggests that while group-level perceptions strongly shape individual expectations, they are not translated one-to-one. Instead, individuals exhibit a clear optimism bias, discounting the degree of discrimination faced by their broader group when assessing their own prospects.

This result is stable across specifications. Models (1) and (2), which include nationality fixed effects, yield nearly identical coefficients to models (3) and (4), where these fixed effects are omitted but individual controls are introduced. Adding socioeconomic controls—such as log income and education—in models (3) and (4), and jointly with nationality fixed effects in models (5) and (6), leaves the coefficient on the matched nationality profile virtually unchanged. This indicates that the observed gap between individual and group-level expectations is not driven by observable characteristics such as income or education.

Regarding the control variables, higher income is positively and significantly associated with more optimistic self-assessed viewing probabilities in models (3)–(6), while the effect of education is weaker and not consistently robust across specifications. Nationality fixed effects in models (1), (2), (5), and (6) reveal level differences across groups but do not affect the central relationship of interest.

Overall, the findings provide strong evidence of a systematic divergence between perceived group discrimination and individual expectations. While respondents clearly recognise discriminatory patterns affecting their nationality, they simultaneously maintain more favourable beliefs about their own chances, consistent with an optimism or self-serving bias in subjective expectations.

5 Conclusions

This study studies perceived ethnic discrimination in Tokyo's rental housing market using a survey experiment. Both native Japanese and foreign-born respondents expect applicants with non-Japanese names to face substantially lower chances of receiving a viewing invitation than an otherwise identical Japanese applicant. These findings suggest that unequal treatment in rental access is not only perceived by minority groups themselves, but is also widely recognised by the majority population.

The paper makes three main contributions. First, it provides new evidence on perceived discrimination in a non-Western housing market during a period of demographic and institutional change in Japan. Second, by focusing on subjective expectations rather than realised outcomes, it complements the large correspondence-study literature and highlights how perceptions themselves may shape housing search behaviour and market participation. Third, the paper contributes to the limited literature on the personal-group discrimination discrepancy (PGDD) in housing contexts by showing that respondents systematically assess their own prospects more favourably than those of their broader nationality group.

Several additional findings emerge from the analysis. Native Japanese respondents perceive larger penalties for non-Japanese applicants than foreign-born respondents, although both groups rank applicants similarly overall. Perceived disadvantage also varies systematically

[14]We test $H_0 : \beta = 1$ against the one-sided alternative $H_1 : \beta < 1$, using $t = (\hat{\beta} - 1)/SE(\hat{\beta})$. The null is rejected in all specifications (1)–(6), with test statistics of $t = -14.86$ in (1), -10.73 in (2), -15.22 in (3), -11.73 in (4), -15.17 in (5), and -11.14 in (6) (all $p < 0.001$).

Table 7: Group Perceptions vs. Individual Expectations

	(1)	(2)	(3)	(4)	(5)	(6)
	Log-log	Linear	Log-log	Linear	Log-log	Linear
Intercept	0.224	-6.537	1.236***	12.300***	-0.037	-15.042
	(0.401)	(12.062)	(0.102)	(2.059)	(0.400)	(12.027)
Matched nationality profile	0.647***	0.739***	0.643***	0.722***	0.643***	0.732***
	(0.024)	(0.024)	(0.023)	(0.024)	(0.024)	(0.024)
Vietnam	1.238***	22.346			1.321***	24.994*
	(0.461)	(13.981)			(0.456)	(13.810)
China	1.417***	32.978***			1.488***	34.893***
	(0.406)	(12.286)			(0.402)	(12.144)
Japan	1.164***	23.199*			1.259***	26.159**
	(0.400)	(12.132)			(0.396)	(11.992)
South Korea	1.233***	25.352**			1.299***	27.324**
	(0.419)	(12.677)			(0.414)	(12.522)
Log income			0.097***	2.801***	0.102***	2.921***
			(0.026)	(0.794)	(0.026)	(0.790)
Degree			0.082*	3.820**	0.063	3.085**
			(0.049)	(1.497)	(0.050)	(1.498)
Nationality FE	✓	✓			✓	✓
SE Controls			✓	✓	✓	✓
Adj. R^2	0.462	0.513	0.465	0.518	0.474	0.525
F-statistic	155.50***	190.20***	261.80***	322.50***	116.90***	143.10***
Observations	900	900	900	900	900	900

Notes: The dependent variable is respondents' self-perceived likelihood of receiving a viewing invitation. In log-log models, the dependent variable and matched nationality profile are transformed as $\log(1+x)$. The matched nationality profile is the perceived viewing likelihood for the applicant profile corresponding to the respondent's own nationality. The omitted nationality category is Indonesia. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

across ethnic categories, with Western-Japanese applicants viewed as substantially closer to native Japanese applicants than other non-Japanese groups. In addition, perceptions differ across respondents' socio-economic characteristics: older, higher-income, and university-educated respondents perceive larger disadvantages for non-native applicants, whereas gender differences are limited.

Among foreign-born respondents, prior experiences of everyday discrimination are strongly associated with more pessimistic expectations regarding rental access. By contrast, conventional indicators of integration—such as visa status and length of stay—show comparatively limited explanatory power. These findings suggest that subjective experiences and broader perceptions of social treatment may shape expectations in the housing market more strongly than formal indicators of integration alone.

The findings should be interpreted subject to several limitations. First, the study examines perceived rather than realised discrimination and therefore cannot determine the extent to which expectations correspond to actual landlord behaviour. Second, although the experimental design isolates name-based ethnic signals, respondents may still associate names with unobserved characteristics beyond ethnicity. Third, the cross-sectional survey design does not allow causal identification of the mechanisms underlying differences in perceptions across respondent groups.

Overall, the results highlight a gap between formal access to housing and perceived access

to housing in contemporary Japan. As Japan's foreign-born population continues to grow, reducing both perceived and actual barriers in rental markets may require greater transparency in tenant-screening processes and institutional mechanisms that make equal access to housing more credible in practice.

References

Ahmed, A. M. and Hammarstedt, M. (2008). Discrimination in the rental housing market: A field experiment on the internet. *Journal of Urban Economics*, 64(2):362–372.

Anderson, E. S. (1999). What is the point of equality? *Ethics*, 109(2):287–337.

Asad, S. A., Banerjee, R., and Bhattacharya, J. (2023). Do workers discriminate against their out-group employers? evidence from an online platform economy. *Journal of Economic Behavior Organization*, 216:221–242.

Bao, H. X. H. and Saunders, R. (2023). Reference dependence in the UK housing market. *Housing Studies*, 38(7):1191–1219.

Brest, P. (1976). In defence of the antidiscrimination principle. *Harvard Law Review*, 90(1):1–282.

Chiavacci, D. (2025). Dam break in Japan's immigration policy: the 2018 reform in a long-term perspective. *Social Science Japan Journal*, 28(1):jyae033.

Clark, L. M. (2007). Landlord attitudes toward renting to released offenders. *Federal Probation*, 71:20.

Committee on the Elimination of Racial Discrimination (2001). Concluding observations of the committee on the elimination of racial discrimination: Japan. CERD/C/304/Add.114.

Committee on the Elimination of Racial Discrimination (2010). Concluding observations of the committee on the elimination of racial discrimination: Japan. CERD/C/JPN/CO/3-6.

Committee on the Elimination of Racial Discrimination (2014). Concluding observations on the combined seventh to ninth periodic reports of japan. CERD/C/JPN/CO/7-9.

Committee on the Elimination of Racial Discrimination (2018). Concluding observations on the combined tenth and eleventh periodic reports of japan. CERD/C/JPN/CO/10-11.

Committee on the Elimination of Racial Discrimination (2019). Information received from japan on follow-up to the concluding observations. CERD/C/JPN/Co/10-11/Add.1.

Crosby, F. (1982). *Relative deprivation and working women*. Oxford University Press.

Davison, J. and Peng, I. (2021). Views on immigration in Japan: identities, interests, and pragmatic divergence. *Journal of Ethnic and Migration Studies*, 47(11):2578–2595.

Dion, K. L. (2001). Immigrants' perceptions of housing discrimination in Toronto: The Housing New Canadians Project. *Journal of Social Issues*, 57(3):523–539.

European Commission (2007). The race equality directive. Accessed 17 May 2026.

Fielding, A. J. (2004). Class and space: Social segregation in Japanese cities. *Transactions of the Institute of British Geographers*, 29(1):64–84.

Fujita, K. and Hill, R. C. (2012). Residential income inequality in Tokyo and why it does not translate into class-based segregation. In *Residential Segregation in Comparative Perspective*. Routledge.

Hamovitch, L., Zannella, L., Rempel, E., Graf, H., and Clow, K. (2022). "you are not the tenant i am looking for:" an analysis of landlords' response to rental inquiries from wrongfully convicted individuals. *Wrongful Conv. L. Rev.*, 3:34.

Hanai, R. (2016). Language choice in Japanese–Korean families: Focusing on the Korean language heritage of Korean mothers. *The Japanese Journal of Language in Society*, 19(1):207–214.

Hanson, A., Hawley, Z., and Taylor, A. (2011). Subtle discrimination in the rental housing market: Evidence from e-mail correspondence with landlords. *Journal of Housing Economics*, 20(4):276–284.

Hasegawa, K. (2023). Inclusion and exclusion of immigrants and refugees in japan: A preliminary study. *Japanese Yearbook of International Law*, 66:212–244.

Hastings, A. (2004). Stigma and social housing estates: Beyond pathlogical explanations. *Journal of Housing and the Built Environment*, 19(3):233–254.

Heckman, J. J. (1998). Detecting discrimination. *Journal of Economic Perspectives*, 12(2):101–116.

Hellman, D. (2011). *When is Discrimination Wrong?* Harvard University Press.

Horgan, M. (2020). Housing stigmatization: A general theory. *Social Inclusion*, 8(1):8–19.

Huang, A. H. and Bao, H. X. H. (2026). Good jobs, good tenants? Understanding racial and gender discrimination in the housing market. *Housing Studies*, 41(4):816–843.

Izuhara, M. (2010). Shifting trajectories of homeownership in Japan. *Housing Studies*, 25(3):301–315.

Jansen, M. B. (2000). *The Making of Modern Japan*. Harvard University Press.

Lepinteur, A., Menta, G., and Waltl, S. R. (2025). Equal price for equal place? Demand-driven racial discrimination in the housing market. *Regional Science and Urban Economics*, 111:104089.

Martiniello, B. (2025). 'My name is a barrier': coping with discrimination in the rental housing market. *Journal of Ethnic and Migration Studies*, 51(17):4412–4436.

Masaya, U. (2021). Socio-spatial segregation in the era of growing economic disparities: The case of Tokyo. *Geographical Review of Japan. Series B*, 94(1):18–30.

Ministry of Foreign Affairs of Japan (2000). Comments of the japanese government on the concluding observations adopted by the committee on the elimination of racial discrimination on march 20, 2000, regarding initial and second periodic report of the japanese government.

Ministry of Justice Japan (2022). 2021 report on the basic survey of foreign residents (in japanese). Technical report, Ministry of Justice Japan. An English summary is available at: https://www.moj.go.jp/isa/content/001415911.pdf as well as the questionnaire used: https://www.moj.go.jp/isa/content/001415921.pdf.

Ministry of Justice Japan (2023). 2022 report on the basic survey of foreign residents (in japanese). Technical report, Ministry of Justice Japan. An English summary is available at: https://www.moj.go.jp/isa/content/001415876.pdf as well as the questionnaire used: https://www.moj.go.jp/isa/content/001415884.pdf.

Ministry of Justice Japan (2024). 2024 report on the basic survey of foreign residents (in japanese). Technical report, Ministry of Justice Japan. An English summary is available at: https://www.moj.go.jp/isa/content/001450859.pdf as well as the questionnaire used: https://www.moj.go.jp/isa/content/001436044.pdf.

Pager, D. and Shepherd, H. (2008). The sociology of discrimination: Racial discrimination in employment, housing, credit, and consumer markets. *Annual Review of Sociology*, 34(1):181–209.

Porter, C. O., Outlaw, R., Gale, J. P., and Cho, T. S. (2019). The use of online panel data in management research: A review and recommendations. *Journal of Management*, 45(1):319–344.

Portmann, L. and Stojanović, N. (2022). Are immigrant-origin candidates penalized due to ingroup favoritism or outgroup hostility? *Comparative Political Studies*, 55(1):154–186.

Shipper, A. W. (2016). *Fighting for Foreigners*. Cornell University Press, Ithaca, NY.

Steinmann, J.-P. (2019). The paradox of integration: Why do higher educated new immigrants perceive more discrimination in Germany? *Journal of Ethnic and Migration Studies*, 45(9):1377–1400.

Sugasawa, T. and Harano, K. (2023). A field experiment on discrimination against foreigners in the rental housing market in Japan examining the 23 wards of Tokyo. *Journal of the Japanese and International Economies*, 69:101273.

Suzuki, R. (1984). *Studies on the Land Lease and House Lease Act (in Japanese)*. Sohbunsha.

Tamaoka, K. and Miyaoka, Y. (2003). The cognitive processing of Japanese loanwords in Katakana. *Japanese Psychological Research*, 45(2):69–79.

Taylor, D. M., Wright, S. C., Moghaddam, F. M., and Lalonde, R. N. (1990). The personal/group discrimination discrepancy: Perceiving my group, but not myself, to be a target for discrimination. *Personality and Social Psychology Bulletin*, 16(2):254–262.

Tomiura, E., Ito, B., Mukunoki, H., and Wakasugi, R. (2019). Individual characteristics, behavioral biases, and attitudes toward foreign workers: Evidence from a survey in Japan. *Japan and the World Economy*, 50:1–13.

Tsuda, T. (1998). The stigma of ethnic difference: The structure of prejudice and 'discrimination' toward Japan's new immigrant minority. *The Journal of Japanese Studies*, 24(2):317–359.

Vermillo Herman, J. O. (2021). Japanese immigration policy: Examining its political, institutional, and economic basis. Naval Postgraduate School, Monterey, CA, USA, `https://apps.dtic.mil/sti/trecms/pdf/AD1164491.pdf`.

Wacquant, L. (2007). Territorial stigmatization in the age of advanced marginality. *Thesis Eleven*, 91(1):66–77.

Weiss, S. and Roberts, R. D. (2018). Using anchoring vignettes to adjust self-reported personality: A comparison between countries. *Frontiers in Psychology*, 9:325.

Williams, D. R., Yu, Y., Jackson, J. S., and Anderson, N. B. (1997). Racial differences in physical and mental health: Socio-economic status, stress and discrimination. *Journal of Health Psychology*, 2(3):335–351.

Appendix

A Survey Administration and Data Quality Procedures

The survey was administered online through *GMO Research*, one of the largest panel providers in Japan, in combination with the Qualtrics survey platform. GMO was selected due to its broad demographic coverage and ability to recruit foreign-born residents within the Greater Tokyo area, a population that is difficult to access through conventional survey methods.

Online panel data are increasingly used in behavioural and urban research due to their scalability, participant diversity, and compatibility with experimental survey designs (Porter et al., 2019; Asad et al., 2023; Bao and Saunders, 2023). Qualtrics was used for questionnaire implementation and survey logic, while GMO acted as the participant recruitment intermediary.

Several procedures were implemented to improve data quality. First, the survey incorporated minimum completion-time thresholds to identify low-effort responses. Second, response completeness checks and consistency checks were applied throughout the questionnaire. Third, device metadata and geolocation validation were used to confirm respondents' location within the Greater Tokyo area. Duplicate participation was prevented through unique user identifiers.

The survey was initially developed in English before being translated into Japanese and additional foreign languages commonly used by foreign residents in Japan. Translations were reviewed by native speakers to ensure linguistic consistency and minimise interpretation bias.

A pilot phase and pre-programming process were conducted prior to fieldwork to verify survey logic, randomisation procedures, and respondent flow. Data collection took place in April 2025.

B Construction and Validation of Applicant Names

B.1 Selection of Applicant Profiles

Applicant profiles were constructed using *Japanese Immigration Agency* (2024) data to reflect the composition of the 30.7% increase in migrants between 2018 and 2025. The selected profiles correspond to the principal nationality and visa groups represented in Tokyo's foreign resident population. In addition to foreign-born applicant groups, two benchmark profiles were included: a native Japanese applicant and a Western-Japanese applicant (i.e., a foreign-born individual of partial Japanese descent). The latter group was included because prior research suggests that co-ethnicity and perceived cultural proximity may shape evaluations of migrants in Japan (Shipper, 2016).

All applicant characteristics other than names were held constant across profiles in order to isolate perceptions associated with ethnic signals conveyed through names. Applicant identities were standardised as male to reflect prevailing market norms and minimise gender-related variation. This approach is supported by evidence indicating that males may face greater discrimination in rental markets, thereby reducing the need for gender-based stratification (Ahmed and Hammarstedt, 2008; Huang and Bao, 2026). Gender-ambiguous names were avoided to ensure clarity.

B.2 Name Validation Procedure

To ensure that applicant names were recognisable and consistently associated with the intended ethnic categories, a bilingual pre-test was conducted using a sample of 100 respondents recruited through *Prolific*, supplemented by targeted recruitment of Japanese participants.

Respondents were asked to identify the likely ethnic background associated with each name. Names were retained only if they achieved a recognition accuracy threshold of at least 70%, consistent with conventions in correspondence-study research (e.g., Ahmed and Hammarstedt, 2008). Names failing to meet this threshold were excluded from the final survey instrument.

Mean recognisability was higher in English-language responses (94%) than in Japanese-language responses (83%), reflecting linguistic constraints associated with transliteration into Japanese script. While ANOVA results showed no statistically significant differences across names, the model explained more than 60% of the variation in recognition outcomes, indicating meaningful differentiation between applicant categories.

The name validation exercise additionally served as a pilot test for the broader experimental design by assessing whether ethnic signals embedded in names remained sufficiently salient once presented in Japanese script.

B.3 Script Standardisation and Linguistic Design

A key methodological consideration was whether names would remain ethnically distinguishable once translated into Japanese script. To preserve ethnic salience while maintaining comparability across profiles, non-Japanese names were standardised using Katakana characters, which are conventionally used in Japanese for foreign names and loan words. Distinctly Japanese names were presented in Kanji characters. For Western–Japanese profiles, first names were rendered in Katakana and surnames in Kanji to preserve cultural plausibility and reflect mixed ethnic identity.

This approach standardised the presentation of applicant names while enhancing the perceptual salience of ethnic categories that were not Japanese. Prior studies emphasise that Katakana script itself conveys social and ethnic meaning in Japanese contexts (Hanai, 2016). However, loan words written in Katakana do not automatically trigger a specific ethnic association unless supported by cultural familiarity or media exposure (Tamaoka and Miyaoka, 2003). Consequently, respondents' perceptions of names are shaped not only by phonetic structure but also by broader social experience, making Katakana particularly appropriate for studying implicit bias and perceived foreignness.

Particular care was also taken to avoid pronunciation or character ambiguities across East Asian languages. For example, the Chinese surname character 張, commonly pronounced "Zhang" in Mandarin, is pronounced "Chō" in Japanese contexts. To avoid such ambiguities, native Chinese characters were not used directly in the applicant profiles. Instead, names were transliterated into Katakana to ensure that respondents interpreted ethnic signals consistently across profiles.

The final applicant profiles and their corresponding renderings in native script and Katakana are presented in Table 1.

B.4 Translation Procedures

The survey was originally developed in English and translated into Japanese using machine translation, followed by verification by four native speakers. Additional language versions were subsequently developed for Indonesian, Simplified Chinese, English, Hindi, Korean, Burmese, Nepali, Portuguese, and Vietnamese, reflecting the language categories used in the Ministry of Justice Basic Foreign Residents' Survey and covering the largest foreign resident groups in Japan.

The multilingual implementation was designed to maximise accessibility among foreign-born

residents while minimising interpretation bias across respondent groups. Japanese was set as the default language option. Active switching to an alternative language version was interpreted as an indicator of lower cultural assimilation and incorporated into the broader analysis of integration-related characteristics.

C Supplemental Questions for Non-Native Japanese Speakers

C.1 Japanese Language Ability

Speaking Ability

Question: How well can you carry a conversation in Japanese?

1. I can carry on a conversation appropriately with anyone, in any situation, on any subject.
2. I can converse fluently and naturally.
3. I can converse as needed in everyday life.
4. I can exchange basic information about family matters.
5. I can use frequently-used greetings and everyday phrases.
6. I cannot carry on a conversation at all.

Reading Ability

Question: How well can you read Japanese?

1. I can read any written material with ease.
2. I can read newspaper articles that are written from certain perspectives.
3. I can read emails that are written using everyday words and phrases.
4. I can read short and easy writings about familiar matters.
5. I can read familiar names and words used in signs and posters.
6. I cannot read well at all.

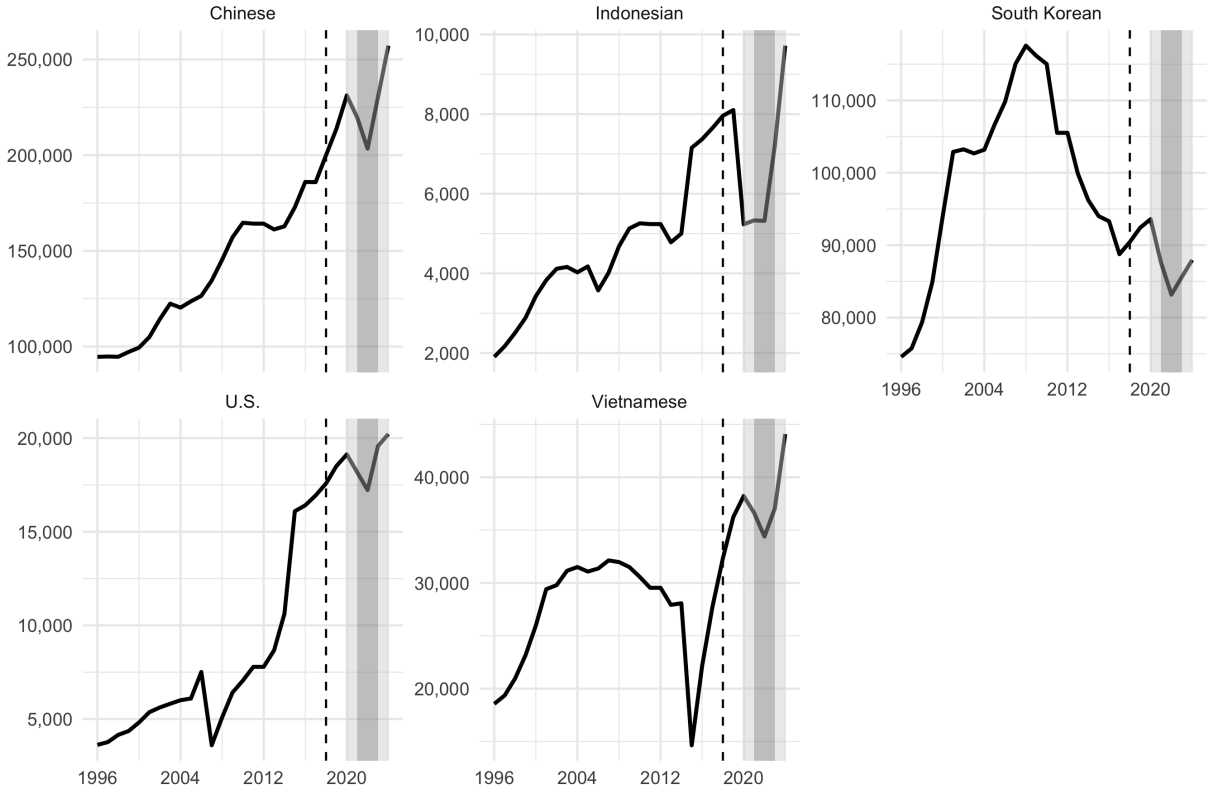
C.2 Everyday Discrimination Scale (EDS)

Question: In your day-to-day life, how often do any of the following things happen to you?

a) Situations

1. You are treated with less courtesy than other people.
2. You receive poorer service than other people at restaurants or stores.
3. People act as if they are afraid of you.
4. People act as if they think that you are dishonest.

Figure 5: Major Nationality Groups among Foreign Residents in Tokyo



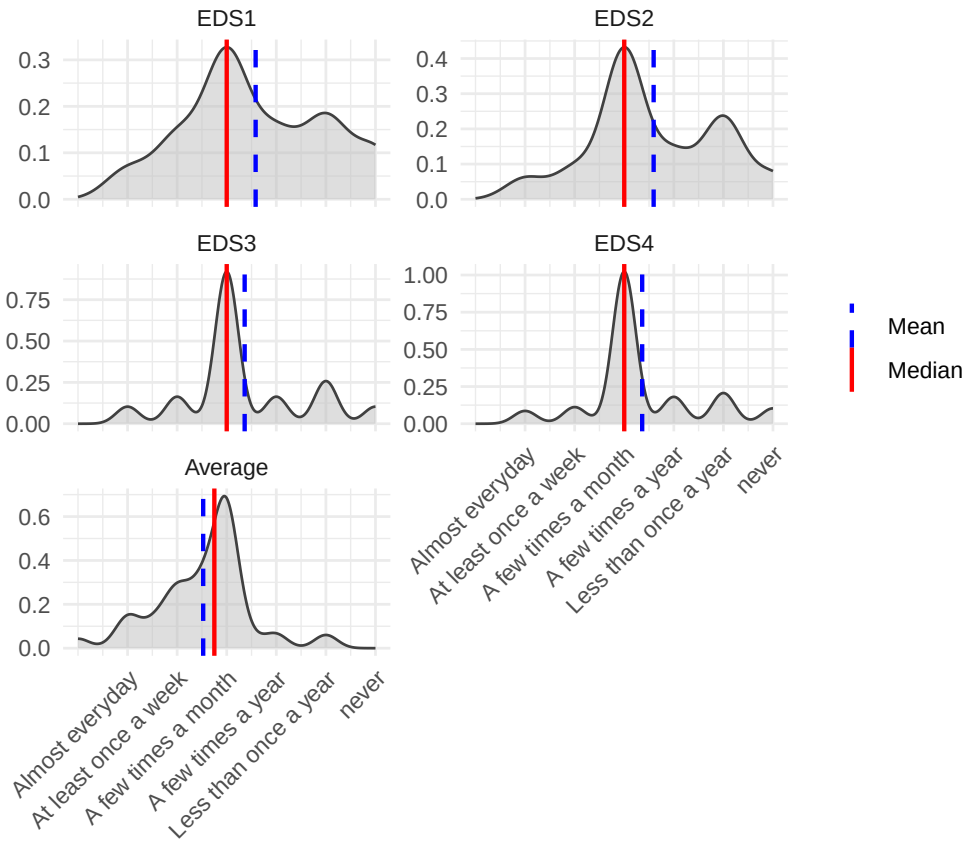
Notes: The dashed vertical line marks the 2018 Immigration Control and Refugee Recognition Act reform. Shaded areas indicate the COVID-19 period. The darker shaded region corresponds to years fully affected by pandemic-related restrictions, while lighter shaded regions correspond to partially affected years. Data are from the *Tokyo Statistical Yearbook*.

b) Response Scale

- Almost every day
- At least once a week
- A few times a month
- A few times a year
- Less than once a year
- Never

D Additional Figures and Tables

Figure 6: EDS responses



Notes: The Figure shows densities of each EDS question as well as the density of the composite index achieved as an average across responses.

Table 8: Top Five Visa Groups in Japan

Visa Status	Representative Nationality	Population	Characteristics
Highly Skilled Professional	China (Europe second)	17,912	High skill, high income, high language proficiency
Specified Skilled Worker	Indonesia	44,305	Lower skill, lower income, low language proficiency
Technical Training Intern	Vietnam	44,305	Lower skill, lower income
Permanent Resident	China	336,086	Higher skill, high language proficiency
Special Permanent Resident	South Korea	250,881	Cultural ties, high integration

Note: Data obtained from the Japanese Immigration Agency (2024).

Table 9: Summary Statistics

Variable	Mean / Share (%)	P25	Median	P75	SD
All respondents					
Age	48.10	39.00	50.00	57.00	12.60
Income (brackets)	6.05	2.00	6.00	9.00	3.99
Japanese	80.50%				
Female	40.60%				
Owner-occupier	52.80%				
Degree	58.00%				
Full-time employed	47.20%				
Non-Japanese residents					
Age	45.10	36.00	45.00	53.00	13.40
Income (brackets)	6.48	3.00	7.00	10.00	4.01
Female	51.20%				
Owner-occupier	52.70%				
Degree	70.90%				
Full-time employed	52.70%				
Length of stay	5.27	5.00	5.00	7.00	1.55
Speaking proficiency	4.94	4.00	5.00	6.00	1.36
Reading proficiency	4.94	4.00	6.00	6.00	1.43
Permanent visa	61.10%				

Notes: The Table reports summary statistics on all variables used. Numbers are computed for the full sample as well as the subsample of non-native participants.