

Who Gets In? A Conjoint Analysis of Labor Market Demand and Immigration Preferences in England and Japan[†]

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Abstract

We advance research on attitudes towards immigration using an experimental design that more clearly separates between skill level and labor market demand. In single profile conjoint design experiments fielded in England and Japan, we replicate the well-established finding that high-skill immigrants are generally preferred to low-skill immigrants. However, we also show a more nuanced result in that labor market demand — regardless of skill level — is also important. Indeed, in both England and Japan, the public is willing to accept low-skill workers in high-demand occupations at levels at least as much as for high-skill but low-demand occupations. Labor market demand is an important factor in understanding attitudes towards economic migration.

Keywords: migration, immigration, conjoint, skill, labor market

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Birthrates across the OECD are “well below those needed for population replacement” (OECD 2023), which poses significant problems to nations and governments as the number of retirees grows relative to the size of the workforce. Immigration is a potential solution to the issue of a shrinking population; however, opposition, particularly in the context of rising right-wing populism, makes it a politically contentious issue for leaders and policymakers. This problem is especially acute in Japan and the United Kingdom, two countries that (a) have birthrates below the OECD average, (b) face worker shortages across a variety of occupations, and (c) face unique immigration challenges given their specific particulars. Having left the European Union, the UK can no longer rely on free movement from EU member states to fill employment vacancies, so must rely on visa programs (which can be costly in time and money). In Japan, the topic of immigration is largely taboo, where political leaders seem to deliberately keep migration policy away from the public eye.

Public attitudes toward immigrants have been extensively studied (see review articles, Ceobanu and Escandell 2010; Esses 2021; Fussell, Hunter, and Gray 2014; Hainmueller and Hopkins 2014). Previous research convincingly shows that high-skilled immigrants are preferred to low-skilled immigrants (Aalberg, Iyengar, and Messing 2012; Facchini and Mayda 2012; Fietkau and Hansen 2018; Ford and Mellon 2020; Hainmueller and Hiscox 2010; Hainmueller and Hopkins 2015; Hainmueller, Hiscox, and Margalit 2015; Helbling and Kriesi 2014; Igarashi, Miwa, and Ono 2022; Iyengar et al. 2013; Naumann, Stoetzer, and Pietrantuono 2018; Solodoch 2021; Turper et al. 2015; Tzeng and Tsai 2020; Valentino et al. 2019). This attitude “seems to be a universal trend” (Igarashi, Miwa, and Ono 2022, p. 1), and only a few studies contest this common result (Malhotra and Newman 2017; Newman and Malhotra 2019).

This paper expands this area of research by arguing that labor market demand is an important additional factor beyond skill alone that influences judgments about immigration. This paper contends that, though accurate, skill level alone may be an incomplete picture in how people make decisions about the desirability of potential immigrants. Our study asks Japanese and English respondents whether they would grant a hypothetical migrant a work visa while varying their occupations along with the country of origin, gender, age and length of visa characteristics. Although we replicate

the finding that higher-skilled immigrants are generally preferred, we also find that labor market demand is additionally important. A second novel finding that emerges is the greater variation in support by occupation among English respondents. The latter finding is perhaps reflective of an English political and media environment where immigration debates are front and center and the cause of internal strife within and across political parties, rather than deliberately downplayed as it is by Japanese political elites.

Economists are often at odds with the public, as they argue that immigration contributes to economic growth by expanding the workforce, fostering innovation, and addressing demographic challenges like aging populations (Borjas 2014). From a political economy perspective, they argue that immigration also improves global competitiveness and promotes cross-border collaboration, while diversifying markets and improving resource allocation efficiency (Dustmann and Frattini 2014). How do we reconcile the positive effects of immigration with a hostile political environment? One possibility is that public support for admitting unskilled workers, particularly in high-demand sectors, provides policymakers with greater flexibility in shaping immigration policy. Alternatively, anti-immigration sentiment may simply be sufficiently disconnected from economic considerations that even relatively high levels of support when immigration decisions are framed this way to alter political discourse. In short, admitting workers in high demand but lower-skill occupations such as social care and agriculture may not have to be done discreetly or as policy “carve-outs.” Framed correctly, a public debate over immigration can be healthy and does not have to be as contentious as it has become in England or remain in the shadows as it has in Japan.

Impact of Occupation Roles

There is a robust literature that examines attitudes towards immigrants and immigration, but we believe that there is still more to learn by considering *labor market demand* as separate from *skill level*. Focusing on specific occupations, we can better separate these two distinct concepts than when using more blunt approaches, such as using education as a proxy for skill (e.g., Helbling and Kriesi 2014; Tzeng and Tsai 2020) or asking questions about the abstract skill level (e.g., Gerber

et al. 2017; Hainmueller and Hiscox 2010). Although educational levels can capture true differences in skill, Malhotra, Margalit, and Mo (2013, pp. 393-394) highlight several measurement and conceptual problems with this approach. They claim that non-economic aspects vary between highly educated and low educated, and skill varies within the same education category (see also Polavieja 2016 for critiques on using education as a variable to measure people’s skill levels).

Several landmark analyses directly ask respondents questions that use general assessments of skill separate from labor market demand, such as whether immigrants are high- or low-skilled (Gerber et al. 2017; Hainmueller and Hiscox 2010), professional or unskilled (Ford and Mellon 2020), or compare manual with nonmanual labor (Kage, Rosenbluth, and Tanaka 2022). Although valuable, this approach does not clarify how individuals categorize immigrants within these broad labels. When participants try to imagine high-skilled immigrants, some might picture a nurse, while others might picture a computer programmer or a university professor. Moreover, some of these mental images can conflate *skill* with *labor market demand* (such as people with expertise in artificial intelligence).

Another approach used in the literature — and the one we adopt — is to measure skill via occupation. The definition of skill is diverse in academic scholarship (Boucher 2020), but contrasting occupational categories (Denney and Green 2021; Hainmueller and Hopkins 2015; Iyengar et al. 2013; Solodoch 2021) is a suitable approach because job titles can capture both economic and educational background to a large extent (Solodoch 2021, p.1017). Moreover, the occupation is particularly suitable for conjoint studies and is the approach often used to indicate the level of skill in this type of experimental design (e.g., Hainmueller, Hiscox, and Margalit 2015; Steele, Abdelaaty, and Than 2023).

Employment Demand in Host Country

We believe that we can advance a more nuanced understanding of support for migration by more directly considering employment demand in addition to skill. A shortcoming of some previous studies is their lack of explicit differentiation between the skill level of potential immigrants and

the demand for employment (e.g., Denney and Green 2021; Hainmueller and Hopkins 2015). Our design explicitly includes occupations representing all four combinations in a 2×2 framework of skill level (high/low) and labor market demand (high/low). The level of employment demand means how much each occupation demands laborers in the job market of the host country.

We argue that labor market demand is distinct from two prevalent approaches: employment competition (e.g., Hainmueller and Hiscox 2007; Hainmueller, Hiscox, and Margalit 2015; Kunovich 2013; Malhotra, Margalit, and Mo 2013; Mayda 2006; Naumann, Stoetzer, and Pietrantuono 2018; O'Rourke and Sinnott 2006; Pardos-Prado and Xena 2019) and welfare fiscal burden anxieties (e.g., Dustmann and Preston 2007; Facchini and Mayda 2009, 2012; Fietkau and Hansen 2018; Gerber et al. 2017; Helbling and Kriesi 2014). Regarding these two primary approaches in the literature (competition and fiscal anxiety), Hainmueller and Hiscox (2010) conduct a survey experiment in the United States and find a preference for high-skilled immigrants regardless of an individual's personal skill or wealth and conclude that neither theory explains public attitudes. Solodoch (2021, p. 1014) suggest that sociotropic or non-economic concerns — 'civic-minded calculations on the state of the nation' — might play a more significant role in explaining why people believe what they do when it comes to favoring more or less immigration (see also McLaren and Johnson 2007). Valentino et al. (2019) finds that participants are more likely to admit high-skilled new arrivals than low-skilled, regardless of the socioeconomic status of the participant. Socio-tropic considerations such as these versus more egocentric concerns like labor market competition suggest that local populations are concerned about accepting immigrants by considering their possible influence on the entire economy. If locals ponder the overall country-level economic situation when making judgments, they also should be sensitive to labor market demand.

Additional explanatory factors in immigration judgments

Previous research yields inconsistent and contradictory results over whether economic or non-economic elements affect public attitudes more strongly. Some publications suggest that economic factors have a greater influence on public opinion compared to aspects such as the ethnic back-

ground of new arrivals to the country (Aalberg, Iyengar, and Messing 2012; Harell et al. 2012; Iyengar et al. 2013; Turper et al. 2015). Using data from the United States and the Netherlands, Turper et al. (2015) argue that economic threats have more influential impacts than cultural disparities. However, other studies point out that cultural factors have comparatively more prominent effects on public attitudes (e.g., Müller and Tai 2020; Sides and Citrin 2007).

Additional explanatory factors at the level of the potential immigrant include race/ethnicity, country of origin, gender, and age. Ford (2011) demonstrates that, in the United Kingdom, immigrants who are white and culturally similar are preferred over those who are non-white and culturally different. Another study in the UK provides evidence that the negative attitude towards Eastern Europeans is due to economic threats and crimes (Hellwig and Sinno 2017). Similarly, Iyengar et al. (2013) show that nationality is a major contributing factor to the assessment of immigrants in seven countries. Combining these approaches, some scholars treat the country of origin as a measure of attitudes towards different ethnicities (Dustmann and Preston 2007; Turper et al. 2015). However, the economic-cultural “threat” divide is nuanced; Bloom, Arikan, and Lahav (2015) show that in European countries, the culturally threatened natives prefer similar people in terms of race and ethnicity, but the material threat makes the Europeans support racial and ethnically distant immigrants because of the low possibility of contesting resource acquisition.

Turning to gender and age, we see that conjoint studies consistently show a preference for women over men (Denney and Green 2021; Findor et al. 2022; Steele, Abdelaaty, and Than 2023). Ward (2019) shows that concerns about the admission of male immigrants are rooted in the perception of men as threats to security and safety. When it comes to age, there is evidence that younger (working aged) immigrants are preferred to older ones (Findor et al. 2022; Hedegaard and Larsen 2023).

Our expectation is that *labor market demand* will be an important factor in explaining attitudes toward immigration, above and beyond the skill level. In other words, we expect respondents to prefer immigrants in high-demand occupations to those in low-demand occupations, regardless of their skill level. We assess this conjecture using a single-profile conjoint design where we vary occupation by both skill level and labor market demand. One virtue of the conjoint approach we

adopt is that it allows us to consider additional factors (or attributes, in the language of conjoint studies), such as age, sex, and country of origin.

Case selection

Japan and the United Kingdom have similar profiles — island nations with stable political systems with roughly similar per capita GDPs in the bottom half of the G7 (7th and 5th, respectively). Despite these similarities, there are important differences between the two nations when it comes to immigration and public debate around the topic.

In the smaller United Kingdom (population near 70 million people), net migration averaged roughly 200,000 annually since the early 2000s, though it was considerably higher in the last few years. In 2022, net migration soared to more than 700,000 due to the combined effects of the post-Brexit points-based immigration overhaul, provisions made for those fleeing war (Ukraine) and political turmoil (Hong Kong), and a burgeoning student visa program. Looking more specifically at the post-Brexit “points-based” system for work visas, this change led to a significant increase in the number of visas issued to non-EU nationals (Sturge 2022). Higher education was a significant draw as the number of student visas increased, and as part of the post-Brexit landscape, these visas also offered more favorable terms by allowing graduates to remain in the UK for at least two years to find work.

Consistent with our conjectures, UK visas were easier to obtain in high-market demand occupations. In some cases, workers could secure visas on salaries as low as £22,000 if their job category featured on the official “shortage occupation list.” These factors, changes to policy, labor demand, and very high (and increasing) inflows, contributed to a general media framing of the issue that is critical of immigration. Despite a broadly negative environment, staffing shortages in essential but low-paid sectors, such as social care for seniors, exert pressure to soften anti-immigration sentiment.

In Japan (population over 125 million), net migration is much smaller in both absolute and percentage terms. For the past few decades, Japan has faced economic stagnation, exacerbated by low

birthrates and a foreign-born population of only 2% (Akram 2019). Although the foreign workforce in Japan reached record highs in 2023 (Rehm 2023), Japan remains a far more homogeneous society than the United Kingdom. Former Prime Ministers Shinzo Abe and Kishida Fumio were reluctant to communicate the need for increased immigration to fulfill the skills gaps brought on by an aging population or to explain the significant policy changes that had been made to enable increased, if hidden, migration to Japan.

Neither Abe nor Kishida pushed for comprehensive immigration reform. Rather, they opened the (side) door to migrants by tweaking 2018 amendments to the Immigration Control Act, relying on what Rehm (2023) calls “side doors—pathways to admit primarily lower skilled foreign workers while legally denying their presence.” More formally, these side doors are found in the “Technical Intern Training Program” (TITP), a program first introduced in 1993 that allows workers from developing countries to come to Japan to receive training in industry, under the premise of those receiving skills returning to their home countries after their quasi-apprenticeship in Japan. Ambiguities in the legal status of immigrants in these programs led to charges of abuse of these workers. Amendments to TITP in the 2010s clarified the status of these workers and introduced points-based preferential treatment for highly skilled foreign professionals in 2012. However, Oishi (2012) notes a limited impact of the points system to facilitate high-skill workers due to the generally unattractive working and living environments for migrants in Japan.

Similar to the UK, changes to the Japanese visa system have specifically prioritized jobs with high demand in the labor market. In 2018, Prime Minister Abe introduced a “Specified Skilled Worker” (SSW) system to boost foreign workers in economic sectors with labor shortages. Oishi (2021) notes that these reforms included a change in the definition of “skill” in the laws and were more reflective of the needs of the labor market than the skilled / unskilled dichotomy. Rehm (2023) reports that 70% of the SSWs come from programs linked to TITP. However, it remains difficult to move from SSW to permanent residency and relocate family members of these workers to Japan. In short, immigration policies and immigrants often lurk in the shadows of Japanese civil society and immigrants remain far less visible in Japan than in the UK due to their much smaller numbers

relative to the country’s population.¹

Data, Methods, and Design

Design and Dependent Variable: In June 2023, a conjoint experiment was embedded within a monthly survey of a representative sample of 646 English and 1,501 Japanese respondents. In this type of profile evaluation study, respondents are shown repeated “trials” of details about a potential (hypothetical) immigrant, called a profile. For our case, each Japanese respondent was shown four profiles, while English respondents were shown eight. This yielded 6,004 Japanese and 5,144 English responses.²

In the language of a conjoint study, each profile has randomly assigned “levels” across a number of different dimensions or “attributes.” The advantages of the conjoint design “enable researchers to non-parametrically identify and estimate the causal effects of many treatment components simultaneously” (Hainmueller, Hopkins, and Yamamoto 2014, p. 2). We consider variations in support for migrants in specific high-skilled versus low-skilled occupations, and additionally examine differences in support when other characteristics of the hypothetical migrant vary, specifically their age, national background, sex, and term of visa. A more detailed list of attributes and levels and a sample profile that respondents viewed are available in Table 1.

We deliberately chose a single profile design (allow vs. not allow) because we care about both

¹This characterization, valid when we fielded the surveys in June 2023, may be shifting. In late July 2025, the Upper House election concluded with the newly emergent far-right populist party Sanseito (“Party of Do-It-Yourself”) capturing 14 of the 124 seats contested (Kelly and Geddie 2025). The party’s campaign was rooted in anti-immigrant and conspiracy-laden rhetoric. Although still a minor force, its electoral surge prompted Prime Minister Ishiba to take concrete action: unveiling, in the race’s closing days, the “Office for the Promotion of a Harmonious Society with Foreign Residents”, aimed at addressing voter anxieties over foreign-resident crime, over-tourism, driver’s license conversions, and property purchases. The heightened visibility of immigration issues, fueled by a party explicitly opposing foreigners and their behaviors, suggests that Japan’s historically subdued framing of immigration in political life may be poised to change significantly (Lau, Takiguchi, and Nishioka 2025).

²YouGov and Rakuten Insight conducted fieldwork in England and Japan, respectively. The monthly survey part of a wider series of monthly surveys measuring the components of political trust in the two countries in the wake of COVID-19, with funding provided by the Japanese Society for the Promotion of Science (Grant 20211704) and the UK Economic and Social Research Council (Grant ES/W011913/1). Additional project information can be found at <https://www.trusttracker.org/>. The objectives of the broader project required an England-specific, rather than UK-wide, sampling frame; therefore, we generalize our findings only to England in the remainder of the paper.

the *differences* across profiles as well as the specific quantity of support for admitting a potential immigrant. The single profile design allows for simple comparisons across the varied profiles but also aligns with a real-world situation where a migrant applies for a work visa using their personal characteristics and is either given a visa or is not. The outcome variable for our single profile design asks respondents “[s]hould this person receive a work visa to come to [COUNTRY]?”³

Consistent with previous research, we expect that respondents will prefer more skilled potential migrants to less skilled ones, and they will favor offering visas to workers where there is higher labor market demand. We measure skill and labor demand using specific occupations (see Table 2). We do not expect the direction of support by job role and country of origin to be different between nations. However, the discussion of immigration, immigration levels, and the complexity of forming a coherent, politically viable immigration policy is much more visible in political and media debates in the England than it is in Japan. Therefore, we expect that the variation in support between immigration characteristics is greater in England than in Japan.

Using occupation as a measure of both skill level and labor market demand: The key migrant characteristic of interest is occupation and how this varies by skill level and demand in the receiving nation. We take this approach by drawing on (Denney and Green 2021) and (Solodoch 2021) in their studies of immigration in South Korea and the Netherlands, respectively. Rather than making implicit comparisons by occupation and demand, our design explicitly chooses occupations that vary both in underlying level of skill and in labor market demand in Japan and England, which we present in Table 2.

To select occupation types for hypothetical immigrants to Japan and the United Kingdom, we follow (Naumann, Stoetzer, and Pietrantuono 2018) and (Gusciute, Mühlau, and Layte 2022) by classifying occupations of survey respondents that were inspired by the four skill level divisions in the 2016 edition of the International Standard Classification of Occupations (ISCO-08). The high-skilled occupations were drawn from the skill levels of ISCO 3 and 4, while the low-skilled occupations were selected from the levels 1 and 2 (see Online Appendix A). To determine labor

³For discussions of when single profile designs are appropriate in political science experiments, see Bansak et al. (2021) and Badas and Stauffer (2023).

Table 1: Attributes and Levels

Attributes	Levels
Age (years old)	24 (reference category) 44 64
Gender	Male (reference category) Female
Occupation	Computer programmer (reference category) Doctor Lawyer Office manager Fruit and vegetable picker Home care worker Retail salesperson Call Centre Telemarketer
Country of origin	<i>Japan</i> Peru (reference category) China South Korea Vietnam <i>England</i> India (reference category) Australia Poland Nigeria
Length of stay	Long term (reference category) Short term

market demand, we reviewed policy documents, official visa schemes, and media reports from each country. In the UK, for example, the demand for fruit pickers and home care workers has increased significantly in the post-Brexit era (Daniel and Cooper 2022), and these occupations have been included on the Government’s Shortage Occupation List (Thiemann et al. 2024). In Japan, where immigration has historically been limited, the aging population and the shrinking workforce have driven the need to expand migrant labor, particularly for low-skilled jobs. In response, the government introduced the Specified Skilled Worker Visa System (SSW) in 2019, which prioritizes sectors such as agriculture and nursing care. The occupations in our ‘high demand’ category are featured on these various shortage or special visa lists. In contrast, occupations such as retail work,

Table 2: Occupation - Level of Skill and Level of Employment Demand

Occupation	High demand	Low demand
High skilled	Computer programmer Doctor	Lawyer Office manager
Low skilled	Fruit and vegetable picker Home care worker	Retail salesperson Call center telemarketer

telemarketing, and office staff are not included in the migration priority frameworks of either country.

While demand for high-skilled workers like computer programmers is growing globally, the specific need for professions like lawyers and office managers remains relatively low, especially because these positions typically require domestic qualifications or culturally embedded knowledge. Doctors also face significant barriers to qualification, but we classify them as a high-demand occupation. In the UK, the departure of many EU-trained physicians following Brexit led to active efforts to recruit medical professionals from other countries (Campbell 2022). In Japan, the number of immigrants is steadily increasing, and the rapid growth in foreign tourism has generated a growing demand for multilingual doctors (Hamada 2025). These needs are particularly acute in settings where communication barriers can have serious implications, leading to increased interest in recruiting foreign-trained medical professionals. Therefore, although the demand for all high-skilled occupations is not equivalent, our classification reflects structural labor shortages and immigration policy responses in each national context.

Other attributes and levels: As discussed in the literature review, a key focus of previous experiments was the measurement of variations in the support for migrants by their country of origin. We were faced with a difficult choice — use the same countries for both our samples (even though the meanings attached to those countries might be different) or try to use choices that we expect will evoke similar perceptions, which requires using different experimental levels within the country of origin attribute across the two samples. We opted for the second approach, limiting our choices to the top 15 source countries for each country rather than using the same levels for the nation of origin. Data were retrieved from e-Stat for Japan and the Office of National Statistics for England. For

cultural proximity, we chose Australia for the UK and South Korea for Japan. Vietnam and Poland are a significant source of workers in Japan and Britain, respectively, so these were also chosen. In the United Kingdom, India and Nigeria are Commonwealth nations, former British colonies, which send migrants with ethnic minority backgrounds to the UK. Japan occupied a significant portion of China during World War Two, and today China is the largest supplier of migrants to the nation. Finally, Peru is home to a significant Japanese diaspora, and Peruvians of Japanese descent are returning in small but significant numbers, particularly to work in understaffed sectors.

Other migrant attributes that could prime support or opposition include the sex of the applicant, with women potentially gaining more support because they are perceived as less threatening and less likely to commit a crime (Ward 2019). Respondents may view younger adult migrants as more likely to work, pay taxes, and be less of a burden on the social welfare system. Following Hedegaard and Larsen (2023), our hypothetical migrant is 24, 44, or 64 years old, and our expectation is that the respondents should be more likely to endorse younger migrants. Finally, we introduce another novel aspect to our conjoint about the time required for a visa. Although the specifics vary between countries, many countries have long- and short-term work visas. Governments can respond to seasonal needs, such as during harvest time in agriculture, by issuing short-term visas. Respondents may be more supportive of temporary migration to meet labor needs, with the idea that the migrant would soon return home.

Analytic approach: We report the marginal means (MMs) because the key experimental attribute of interest is the multicategory occupation variable, and AMCEs are sensitive to the reference categories chosen in each manipulation (Clayton, Ferwerda, and Horiuchi 2021; Leeper, Hobolt, and Tilley 2020). In our case, MMs are average respondent support for offering a hypothetical migrant with the given attribute of interest a visa. This approach allows for direct comparison of the level of preference for granting a visa to someone in a chosen profession vis-à-vis another of our listed professions. Likewise, if the MM is higher for a migrant from one country over another, for women over men, for the youngest category over others, or for short-term over long-term visa awards, we can say that our results imply a stronger support for those in the former versus the latter

Figure 1: Experimental conjoint task examples

(a) England

UK visa applicant profile	
How old is the person?	24
What gender is the person?	Female
What job is the person applying for?	Retail worker
What country is the person from?	India
Is the person seeking a long term or short term visa?	Long term

Should this person receive a work visa to come to the UK?

☐ Yes
☐ No

(b) Japan

申請者の情報	
年齢	24
性別	男性
就労する職業	小売店販売員
出身国	中国
滞在許可の種類（長期／短期）	長期

この申請者は日本に来るための就労ビザを発給されるべきでしょうか？

☐ はい
☐ いいえ

categories (Leeper, Hobolt, and Tilley 2020).

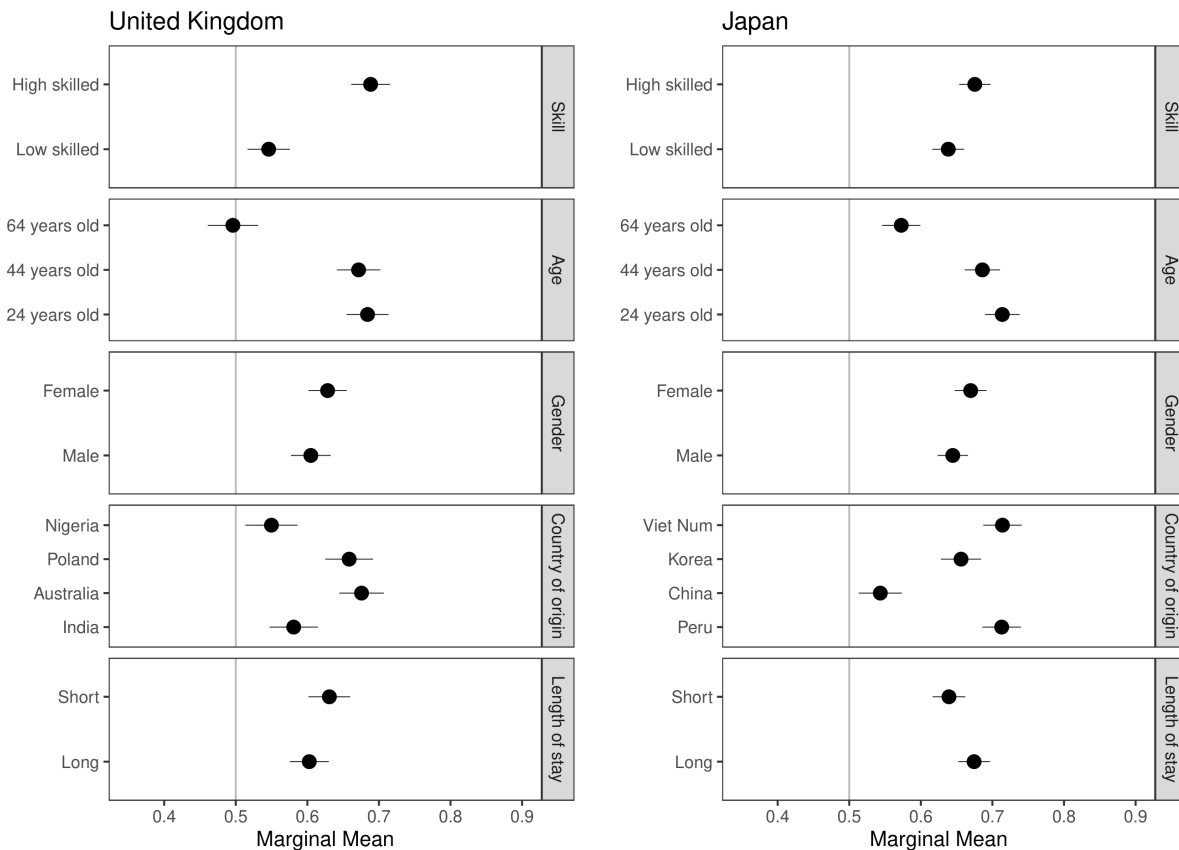
Results

Our primary argument is that it is important to consider both *skill* and *labor market demand* when thinking about judgments about allowing potential workers into a country. Before discussing these specific results, for which we generally find support, it is first important to point out the high level of support for issuing visas across the board. Overall, 61.6% of profiles shown in England and 65.7% of profiles in Japan were deemed worthy of receiving a visa.

We take the analysis in turns, first presenting the results by *occupational skill*, followed by occupational demand. Figure 2 paints an extremely familiar picture: higher-skilled immigrants are preferred to those with lower skill levels.

Given some of the subtle differences in how we implemented the conjoint design in each country, we do not pool the data for analysis. Fortunately, we get remarkably consistent results in both cases. The left panel of Figure 2 shows that English respondents have significant differences in supporting a hypothetical migrant according to occupational skill. For aggregated trials in which

Figure 2: Occupation skill level on support for accepting immigrants

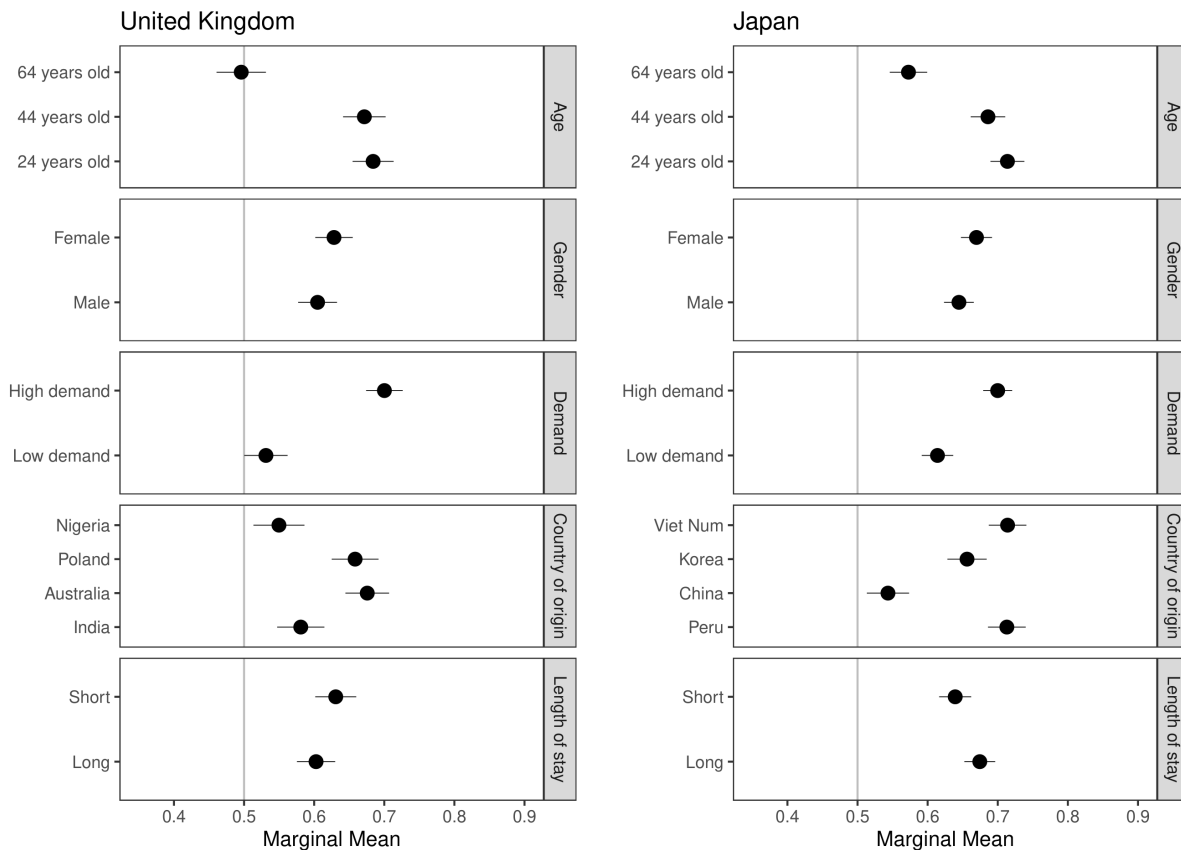


Marginals means from conjoint.

the respondent has a highly skilled respondent, they are willing to grant a visa close to 70% most of the time in both Japan and England. Support for a migrant in a lower skilled occupation falls slightly to the low to mid 60s in percentage terms in Japan (statistically insignificant), but falls considerably to the middle 50s in England. However, these numbers still suggest surprisingly high levels of support even for low-skilled employees, a result that runs strongly counter to conventional wisdom about support for immigration in these countries!

Taking into account *labor market demand* decisively helps explain these results. When we disaggregate respondent support for granting visas by skill demand rather than skill, we can clearly see the importance of labor market demand. In both Japan and England, Figure 3 shows support for granting working visas to those in high-demand occupations also hovers near 70 percent. In both

Figure 3: Occupation labor market demand on support for accepting immigrants



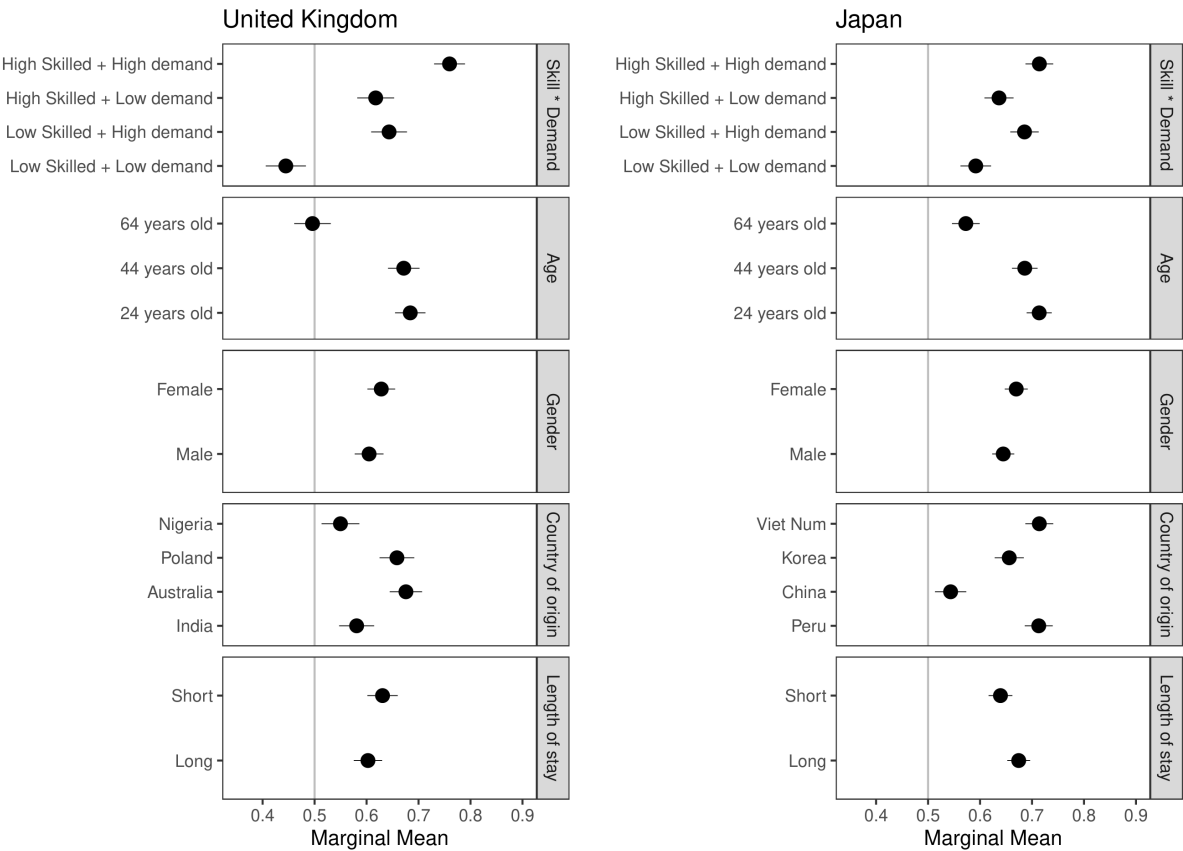
Marginals means from conjoint.

nations, we see significant declines in approval for visas for those in low-demand occupations; in Japan, support falls to approximately sixty percent, while in England it falls to the low to mid 50s.

Figure 4 reveals nuanced variations across job categories. High-skill, high-demand workers receive the most support. High-skilled but low-demand and high-demand but low-skill have similar levels of support — but the latter actually garners slightly higher levels of support, a finding that holds in both countries. Support for low-demand/low-skill workers is dramatically less (although this is more pronounced in England).

Significant differences in other hypothetical characteristics of migrants are worth noting and comparing across the two nations. Our analyses echo prior findings demonstrating differences in support for migrants by country of origin and our experiment reinforces these findings. English

Figure 4: Occupation factoring in both skill and labor market demand on support for accepting immigrants



Marginals means from conjoint.

respondents are most likely to support migrants from culturally close Australia, but support for workers from Poland is a close second and the differences between nations are not significant. Support from the Commonwealth nations that provide England with large numbers of racial minorities still attains majority approval but is significantly less than that of the two former white majority nations. In England, support for migrant workers differentiates far more by occupation than it does by national background. For Japan, most respondents approve of granting visas to migrants from all the hypothetical national backgrounds, likely because the Japanese are more inclined to see the needs for immigrants to fill job vacancies. However, there is notably less support for Chinese migrant workers.

The question at the end of each vignette asks if the respondent would give migrants with hypothetical characteristics a visa enabling them to work in the nation. It is no surprise that support is considerably reduced for the migrant near retirement age, but respondents in both nations do not differentiate between a young and middle-aged worker. In both nations, there is slightly more support for a female worker over male counterparts, but these differences are not significant. Respondents also do not significantly vary their support by length of the visa offered to the worker.

To ensure that the trends observed above are not driven by respondent characteristics, we conducted subgroup analyses to examine the heterogeneity of effects. We used five moderator variables: gender, age, educational attainment, political ideology, and general trust. Age was dichotomized into respondents aged 45 and under versus those over 45. Educational attainment was coded as either college graduate or non-college graduate. Ideology was measured on an 11-point scale (0–10), with values of 0–4 classified as left-leaning, 5 as centrist, and 6–10 as right-leaning. General trust was measured on a 7-point scale, with values of 3 or lower coded as low trust, and 4 or higher as high trust. Full results from these analyses are presented in Online Appendix B.

As expected, respondents with higher trust, left-leaning ideology, and a college degree generally showed greater support for granting visas to immigrants. However, the overall pattern of preferences regarding skill and labor market demand remained consistent across all subgroups. In both the UK and Japan, immigrants in high-skill, high-demand occupations were consistently the most preferred,

followed by those in high-skill/low-demand and low-skill/high-demand occupations. Immigrants in low-skill, low-demand occupations were least preferred, with support particularly low among respondents with right-leaning ideologies and low levels of trust.

Conclusion

Our analyses replicate and expand upon existing research demonstrating that citizens differentiate between high- and low-skilled immigrants (e.g., Hainmueller and Hiscox 2010), while offering a more nuanced perspective: in both England and Japan, public attitudes toward immigration are shaped not only by skill level but also by labor market demand. Notably, support for granting visas to immigrants filling essential but low-wage jobs, such as home care workers, is statistically indistinguishable from support for visas in high-skilled occupations that require a university degree but are not in high demand. Our results indicate that labor market demand influences immigration preferences as much as skill level, challenging the conventional view that skill is the primary determinant in visa approval.

We find remarkably consistent results between our two target countries. Nonetheless, under a speculative “eyeball” test, the experimental effects of our conjoint levels for skill and demand appear to be slightly greater in England than in Japan. This finding raises interesting questions for future research about the extent to which cultural and linguistic factors affect baseline levels of support and moderate the effect(s) of immigrant characteristics.

Our cross-national comparison of public attitudes in England and Japan may offer a useful lens into how national context may shape evaluations of immigration, given their distinct immigration experiences and the differing influence of media and political discourse. In England, immigration is a highly politicized and widely debated issue, often ranking among the most important public concerns. In 2024, 38% of the British named immigration the most important issue facing the country, and this level rose precipitously in the period 2022–2024 (Richards, Fernández-Reino, and Blinder 2025). This salience probably contributes to the wider variation that we observe in the

evaluations of migrant profiles by English respondents.

In contrast, immigration in Japan is both less demographically prominent and less politically charged. Only 2–3% of Japan’s population is foreign-born, and in surveys, immigration rarely ranks among the top national concerns. These low levels of immigration may help explain why the issue has not become a source of political polarization. According to the Pew 2018 Global Attitudes Survey, 75% of the Japanese respondents believed that immigrants wanted to adopt Japanese customs, the highest level of agreement among the countries surveyed (Gonzalez-Barrera and Connor 2019). Although our own survey does not include direct measures of immigration salience or detailed media exposure data, this interpretation is consistent with widely available public opinion data and offers an empirically grounded, if cautious, explanation for the cross-national patterns we observe.

Our results suggest that the public may be willing to accept economic arguments emphasizing labor market demand over skill alone. While these type of demand-based economic needs are recognized implicitly in many visa systems, including those in England and Japan, there might be broader scope for positive public engagement. This is particularly relevant in sectors facing acute labor shortages, where public resistance to immigration may be lower than commonly assumed (Solodoch 2021). In response to an excellent point raised by one of the reviewers, we consider what would happen if there were a mismatch between occupations designated on official government shortage lists and broad public perception via media coverage (that is, low demand occupations are perceived as high demand or vice versa). If this were to happen, our expectation is these *perceptions* of labor market demand shaped by media coverage would be more important than whether or not those occupations were included on a government occupation shortage lists. We encourage future research to consider the accuracy of labor market demand perceptions across a broad range of occupations.

One important facet of our experiment is that we observe fairly high support for offering visas. We suspect that focusing on visas for putatively competent and qualified workers results in an elevated baseline level of support, compared to the full universe of potential entrants. At the suggestion of one of the reviewers, we explored whether respondents have a budget constraint in the number

of visas they are willing to allow. While not a formal constraint, we proxy budget constraint by the trial number with higher numbers indicating later trials. When we treat trial number as a linear predictor, there is a negative and significant coefficient implying that later trials were less likely to receive a visa — which would be consistent with a budget constraint. That said, it is hard from our data to discern whether this is exclusively a budget constraint or is potentially learning (in later trials, respondents are less likely to accept marginal profiles knowing there are more attractive profiles available). To try and further differentiate between these explanations we look at the marginal means for the first half of trials (1-4 England, 1-2 Japan) and the second half of trials (5-8 England, 3-4 Japan), looking specifically at skill, demand, and their combination. We observe declines nearly across the board. The lone exception is high-demand but low-skill occupations — the rate of supporting a visa stays the same or even potentially increases slightly (Online Appendix D, Figures S10 and S11). We strongly urge future work to consider an experimental task that imposes some sort of budget constraint on the number of visas one could accept.

Although our findings indicate high support for immigrants coming explicitly to work, it remains an open question whether the same public acceptance would apply to immigrants with in-demand skills who are not necessarily tied to an immediate job. For example, would a highly skilled immigrant in a high-demand field receive similar levels of support if their visa was not employment-dependent? Would the absence of explicit labor market integration weaken public backing, or might other factors such as cultural proximity, language proficiency, and perceived contributions to innovation in a destination economy play a more significant role? Addressing these questions would contribute to a deeper understanding of how the intersections of economic need, migration policy, and national identity shape immigration preferences across different national contexts.

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References

- Aalberg, Toril, Shanto Iyengar, and Solomon Messing. 2012. "Who is a 'deserving' immigrant? An experimental study of Norwegian attitudes." *Scandinavian Political Studies* 35 (2): 97–116.
- Akram, Tanweer. 2019. "The Japanese economy: Stagnation, recovery, and challenges." *Journal of Economic Issues* 53 (2): 403–410.
- Badas, Alex, and Katelyn E Stauffer. 2023. "Descriptive representation, judicial nominations, and perceptions of presidential accomplishment." *Representation* 59 (2): 249–270.
- Bansak, Kirk, Jens Hainmueller, Daniel J Hopkins, and Teppei Yamamoto. 2021. "Conjoint Survey Experiments." In *Advances in Experimental Political Science*, ed. James N Druckman and Donald P Green. Cambridge University Press.
- Bloom, Paul B, Gizem Arikan, and Gallya Lahav. 2015. "The effect of perceived cultural and material threats on ethnic preferences in immigration attitudes." *Ethnic and Racial Studies* 38 (10): 1760–1778.
- Borjas, George J. 2014. *Immigration Economics*. Cambridge, MA: Harvard University Press.
- Boucher, Anna K. 2020. "How 'skill' definition affects the diversity of skilled immigration policies." *Journal of Ethnic and Migration Studies* 46 (12): 2533–2550.
- Campbell, Denis. 2022. "Brexit has worsened shortage of NHS doctors, analysis shows." *The Guardian*. URL: <https://www.theguardian.com/society/2022/nov/27/brexit-worsened-shortage-nhs-doctors-eu>.
- Ceobanu, Alin M, and Xavier Escandell. 2010. "Comparative Analyses of Public Attitudes Toward Immigrants and Immigration Using Multinational Survey Data: A Review of Theories and Research." *Annual Review of Sociology* 36 (1): 309–328.
- Clayton, Katherine, Jeremy Ferwerda, and Yusaku Horiuchi. 2021. "Exposure to Immigration and Admission Preferences: Evidence from France." *Political Behavior* 43: 175–200.

- Daniel, Rhiannon, and Polly Cooper. 2022. "UK labour shortage: 'It used to be easy to get fruit pickers'." *BBC News*.
- Denney, Steven, and Casey Green. 2021. "Who should be admitted? Conjoint analysis of South Korean attitudes toward immigrants." *Ethnicities* 21 (1): 120–145.
- Dustmann, Christian, and Ian P Preston. 2007. "Racial and Economic Factors in Attitudes to Immigration." *The B.E. Journal of Economic Analysis and Policy* 7 (1): 1–39.
- Dustmann, Christian, and Tommaso Frattini. 2014. "The fiscal effects of immigration to the UK." *The economic journal* 124 (580): F593–F643.
- Esses, Victoria M. 2021. "Prejudice and Discrimination Toward Immigrants." *Annual Review of Psychology* 72 (1): 503–531.
- Facchini, Giovanni, and Anna Maria Mayda. 2009. "Does the Welfare State Affect Individual Attitudes toward Immigrants? Evidence across Countries." *The Review of Economics and Statistics* 91 (2): 295–314.
- Facchini, Giovanni, and Anna Maria Mayda. 2012. "Individual attitudes towards skilled migration: An empirical analysis across countries." *The World Economy* 35 (2): 183–196.
- Fietkau, Sebastian, and Kasper M Hansen. 2018. "How perceptions of immigrants trigger feelings of economic and cultural threats in two welfare states." *European Union Politics* 19 (1): 119–139.
- Findor, Andrej, Matej Hruška, Petra Jankovská, and Michaela Pobudová. 2022. "Who should be given an opportunity to live in Slovakia? A conjoint experiment on immigration preferences." *Journal of Immigrant & Refugee Studies* 20 (1): 79–93.
- Ford, Robert. 2011. "Acceptable and unacceptable immigrants: How opposition to immigration in Britain is affected by migrants' region of origin." *Journal of Ethnic and Migration studies* 37 (7): 1017–1037.

- Ford, Robert, and Jonathan Mellon. 2020. "The skills premium and the ethnic premium: A cross-national experiment on European attitudes to immigrants." *Journal of Ethnic and Migration Studies* 46 (3): 512–532.
- Fussell, Elizabeth, Lori M Hunter, and Clark L Gray. 2014. "Measuring the environmental dimensions of human migration: The demographer's toolkit." *Global Environmental Change* 28: 182–191.
- Gerber, Alan S, Gregory A Huber, Daniel R Biggers, and David J Hendry. 2017. "Self-interest, beliefs, and policy opinions: Understanding how economic beliefs affect immigration policy preferences." *Political Research Quarterly* 70 (1): 155–171.
- Gonzalez-Barrera, Ana, and Phillip Connor. 2019. Around the World, More Say Immigrants Are a Strength Than a Burden. Research report Pew Research Center.
URL: <https://www.pewresearch.org/global-migration-and-demography/2019/03/14/around-the-world-more-say-immigrants-are-a-strength-than-a-burden/>
- Gusciute, Egle, Peter Mührlau, and Richard Layte. 2022. "One hundred thousand welcomes? Economic threat and anti-immigration sentiment in Ireland." *Ethnic and Racial Studies* 45 (5): 829–850.
- Hainmueller, Jens, and Daniel J Hopkins. 2014. "Public Attitudes Toward Immigration." *Annual Review of Political Science* 17 (1): 225–249.
- Hainmueller, Jens, and Daniel J Hopkins. 2015. "The hidden American immigration consensus: A conjoint analysis of attitudes toward immigrants." *American journal of political science* 59 (3): 529–548.
- Hainmueller, Jens, Daniel J Hopkins, and Teppei Yamamoto. 2014. "Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments." *Political analysis* 22 (1): 1–30.

- Hainmueller, Jens, and Michael J Hiscox. 2007. “Educated preferences: Explaining attitudes toward immigration in Europe.” *International organization* 61 (2): 399–442.
- Hainmueller, Jens, and Michael J Hiscox. 2010. “Attitudes toward highly skilled and low-skilled immigration: Evidence from a survey experiment.” *American political science review* 104 (1): 61–84.
- Hainmueller, Jens, Michael J Hiscox, and Yotam Margalit. 2015. “Do concerns about labor market competition shape attitudes toward immigration? New evidence.” *Journal of International Economics* 97 (1): 193–207.
- Hamada, Kisho. 2025. “Medical Institutions Increasingly Handling Foreign Patients; Areas Responding to Increase in Overseas Visitors, Residents.” *The Japan News (Yomiuri Shimbun)* (May). Accessed July 16, 2025.
URL: <https://japannews.yomiuri.co.jp/society/general-news/20250520-255499/>
- Harell, Allison, Stuart Soroka, Shanto Iyengar, and Nicholas Valentino. 2012. “The impact of economic and cultural cues on support for immigration in Canada and the United States.” *Canadian Journal of Political Science/Revue canadienne de science politique* 45 (3): 499–530.
- Hedegaard, Troels Fage, and Christian Albrekt Larsen. 2023. “The hidden European consensus on migrant selection: A conjoint survey experiment in the Netherlands, Germany, Sweden, and Denmark.” *Acta Politica* 58 (4): 717–736.
- Helbling, Marc, and Hanspeter Kriesi. 2014. “Why citizens prefer high-over low-skilled immigrants. Labor market competition, welfare state, and deservingness.” *European Sociological Review* 30 (5): 595–614.
- Hellwig, Timothy, and Abdulkader Sinno. 2017. “Different groups, different threats: public attitudes towards immigrants.” *Journal of Ethnic and Migration Studies* 43 (3): 339–358.

- Igarashi, Akira, Hirofumi Miwa, and Yoshikuni Ono. 2022. “Why do citizens prefer high-skilled immigrants to low-skilled immigrants? Identifying causal mechanisms of immigration preferences with a survey experiment.” *Research & Politics* 9 (2): 20531680221091439.
- Iyengar, Shanto, Simon Jackman, Solomon Messing, Nicholas Valentino, Toril Aalberg, Raymond Duch, Kyu S Hahn, Stuart Soroka, Allison Harell, and Tetsuro Kobayashi. 2013. “Do attitudes about immigration predict willingness to admit individual immigrants? A cross-national test of the person-positivity bias.” *Public opinion quarterly* 77 (3): 641–665.
- Kage, Rieko, Frances M Rosenbluth, and Seiki Tanaka. 2022. “Varieties of Public Attitudes toward Immigration: Evidence from Survey Experiments in Japan.” *Political Research Quarterly* 75 (1): 216–230.
- Kelly, Tim, and John Geddie. 2025. “‘Japanese First’ party emerges as election force with tough immigration talk.” *Reuters* (July).
URL: <https://www.reuters.com/world/japanese-first-party-emerges-election-force-with-tough-immigration-talk-2025-07-21/>
- Kunovich, Robert M. 2013. “Labor market competition and anti-immigrant sentiment: Occupations as contexts.” *International Migration Review* 47 (3): 643–685.
- Lau, Chris, Mai Takiguchi, and Soyon Nishioka. 2025. “Japan sets up “foreigner task force” ahead of upper-house election.” *CNN* (July). Accessed: 2025-07-19.
URL: <https://edition.cnn.com/2025/07/17/asia/japan-foreigner-taskforce-election-intl-hnk>
- Leeper, Thomas J, Sara B Hobolt, and James Tilley. 2020. “Measuring subgroup preferences in conjoint experiments.” *Political Analysis* 28 (2): 207–221.
- Malhotra, Neil, and Benjamin Newman. 2017. “Explaining immigration preferences: Disentangling skill and prevalence.” *Research & Politics* 4 (4): 2053168017734076.

- Malhotra, Neil, Yotam Margalit, and Cecilia Hyunjung Mo. 2013. "Economic explanations for opposition to immigration: Distinguishing between prevalence and conditional impact." *American Journal of Political Science* 57 (2): 391–410.
- Mayda, Anna Maria. 2006. "Who is Against Immigration? A Cross-Country Investigation of Individual Attitudes Toward Immigrants." *The Review of Economics and Statistics* 88 (3): 510–530.
- McLaren, Lauren, and Mark Johnson. 2007. "Resources, group conflict and symbols: Explaining anti-immigration hostility in Britain." *Political Studies* 55 (4): 709–732.
- Müller, Tobias, and Silvio Hong Tiing Tai. 2020. "Individual attitudes towards migration: A re-examination of the evidence." *Canadian Journal of Economics/Revue canadienne d'économie* 53 (4): 1663–1702.
- Naumann, Elias, Lukas Stoetzer, and Giuseppe Pietrantuono. 2018. "Attitudes towards highly skilled and low-skilled immigration in Europe: A survey experiment in 15 European countries." *European Journal of Political Research* 57 (4): 1009–1030.
- Newman, Benjamin J, and Neil Malhotra. 2019. "Economic reasoning with a racial hue: Is the immigration consensus purely race neutral?" *The Journal of Politics* 81 (1): 153–166.
- OECD. 2023. OECD Family Database. SF2.1. Fertility rates. Technical report OECD. https://www.oecd.org/els/family/SF_2_1_Fertility_rates.pdf.
- Oishi, Nana. 2012. "The limits of immigration policies: The challenges of highly skilled migration in Japan." *American Behavioral Scientist* 56 (8): 1080–1100.
- Oishi, Nana. 2021. "Skilled or unskilled?: The reconfiguration of migration policies in Japan." *Journal Of Ethnic And Migration Studies* 47 (10): 2252–2269.
- O'Rourke, Kevin H., and Richard Sinnott. 2006. "The Determinants of Individual Attitudes Towards Immigration." *European Journal of Political Economy* 22 (4): 838–861.

- Pardos-Prado, Sergi, and Carla Xena. 2019. "Skill specificity and attitudes toward immigration." *American Journal of Political Science* 63 (2): 286–304.
- Polavieja, Javier G. 2016. "Labour-market competition, recession and anti-immigrant sentiments in Europe: Occupational and environmental drivers of competitive threat." *Socio-Economic Review* 14 (3): 395–417.
- Rehm, Maximilien Xavier. 2023. "The admission of foreigners as" human resources" the contradictory approach of Japan." Ph.D. diss. Doshisha University.
- Richards, Lindsay, M. Fernández-Reino, and Scott Blinder. 2025. UK Public Opinion toward Immigration: Overall Attitudes and Level of Concern. Briefing Migration Observatory, Centre on Migration, Policy and Society (COMPAS), University of Oxford.
URL: <https://migrationobservatory.ox.ac.uk/wp-content/uploads/2023/09/2025-Briefing-UK-Public-Opinion-toward-Immigration-Overall-Attitudes-and-Level-of-Concern.pdf>
- Sides, John, and Jack Citrin. 2007. "European opinion about immigration: The role of identities, interests and information." *British journal of political science* 37 (3): 477–504.
- Solodoch, Omer. 2021. "Do sociotropic concerns mask prejudice? Experimental evidence on the sources of public opposition to immigration." *Political Studies* 69 (4): 1009–1032.
- Steele, Liza G, Lamis Abdelaaty, and Nga Than. 2023. "Attitudes about refugees and immigrants arriving in the United States: A conjoint experiment." *Ethnic and Racial Studies* 46 (10): 2163–2191.
- Sturge, Georgina. 2022. *Bad data: How governments, politicians and the rest of us get misled by numbers*. Hachette UK.
- Thiemann, Inga, Konstantinos Alexandris Polomarkakis, Natalie Sedacca, Manoj Dias-Abey, Joyce Jiang, Caitlin Boswell, Oliver Fisher, Susan Cueva, Patty Miranda, Nova Francisca Silitonga, Mariko Hayashi, and Endang Priyatna. 2024. UK agriculture and care visas: worker exploitation

and obstacles to redress. Technical report Focus on Labour Exploitation (FLEX). Research report, March 2024.

URL: <https://labourexploitation.org/app/uploads/2024/03/Visas-full-report.pdf>

Turper, Sedef, Shanto Iyengar, Kees Aarts, and Minna van Gerven. 2015. “Who is less welcome?: The impact of individuating cues on attitudes towards immigrants.” *Journal of ethnic and migration studies* 41 (2): 239–259.

Tzeng, Rueyling, and Ming-Chang Tsai. 2020. “Good for the common good: Sociotropic concern and double standards toward high-and low-skilled immigrants in six wealthy countries.” *Social Indicators Research* 152 (2): 473–493.

Valentino, Nicholas A, Stuart N Soroka, Shanto Iyengar, Toril Aalberg, Raymond Duch, Marta Fraile, Kyu S Hahn, Kasper M Hansen, Allison Harell, Marc Helbling et al. 2019. “Economic and cultural drivers of immigrant support worldwide.” *British Journal of Political Science* 49 (4): 1201–1226.

Ward, Dalston G. 2019. “Public attitudes toward young immigrant men.” *American Political Science Review* 113 (1): 264–269.