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Crossing currents: age, period, and cohort effects on Japanese perceptions of China, Russia, and the U.S. (2007–2022)

Zeng Cai[1], Xiaoguang Fan[2] and Ken'ichi Ikeda[3]

[1]Department of Sociology, School of Public Affairs, Zhejiang University, Hangzhou, China, [2]School of Public Affairs, Zhejiang University, Hangzhou, China and [3]Faculty of Social Studies, Department of Media, Journalism and Communication, Doshisha University, Kyoto, Japan
Corresponding author: Xiaoguang Fan; Email: xgfan@zju.edu.cn

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Abstract

Diplomatic events are frequently cited as key determinants of public opinion on foreign countries. However, the process of political socialisation also plays a critical role in shaping such views over time. In this study, we examine trends in Japanese perceptions of China, Russia, and, as a comparative background, the U.S., focusing on the influences of age, period, and cohort effects. Utilising data from the Pew Research Center's Global Attitude & Trends Survey (2007–2022), we apply the hierarchical age–period–cohort model to disentangle these three effects. Our findings indicate that while the older tend to hold more negative views of these three countries, the influence of age appears weaker than initially hypothesised. While major international crises tend to worsen perceptions across the board, regional disputes exert additional fluctuations (period effect). In comparison to the age and the period effects, cohort effects reveal a generational divide: First, contrasting with the U.S. case, different cohorts exhibit different perceptions toward China and Russia. Second, those born before or after the Cold War generally have more positive attitudes towards the two countries than those born during it. Notably, regional events appear to have little impact on these cohort-based attitudes. We also find that the age effect is more pronounced in the case of Russia, while period and cohort effects are more significant in the case of China. Our conclusions remain robust when controlling for other demographic factors. This study provides a temporal dynamics of Japanese foreign perceptions, utilising sociological methods to explore issues within international relations.

Keywords: hierarchical age–period–cohort model; Japan–China relations; Japan–Russia relations; Japanese foreign perceptions; political socialisation

1. Introduction

What affects public opinion towards foreign countries? Country-level factors, including official conferences, sovereignty disputes, and military activities, are typically the first considerations. These explanations may appear adequate, but the subjectivity of individuals should also be considered (Hurwitz and Peffley, 1987; Zaller, 1992). Indeed, this attitude towards foreign affairs is closely related to the notion of political socialisation (Niemi and Hepburn, 1995; Wasburn and Covert, 2017). Political socialisation occurs throughout individuals' life cycles, with the classic hypothesis suggesting that as individuals age, their political and social attitudes shift, reflecting gradual and enduring changes influenced by life experiences and responsibilities.

Do different stages of individuals' life cycles equally affect society? In most developed countries, the answer is no. Ageing populations now constitute a greater proportion of the demographic structure than younger generations, leading to what is often called a 'silver democracy' (Yashiro, 2016; McClean, 2020). Numerous studies have demonstrated that older voters have significantly higher electoral turnout rates than younger people (Wattenberg, 2020). Older individuals also dominate political institutions, with an over-representation of elderly parliamentarians, cabinet members, and political candidates, thereby reinforcing their political influence (Stockemer and Sundström, 2022). This dominance of older generations further shapes society's political culture, including perceptions of international relations. The cyclical relationship between demographic change and political influence underscores the importance of considering demographic perspectives when analysing public attitudes towards foreign countries. However, few studies have considered the importance of this critical demographic factor in shaping foreign perceptions.

The age–period–cohort (APC) framework can be used to explain these life-cycle changes, as it disentangles the distinct effects of age, period, and cohort on attitudes over time (Ryder, 1965). Age effects capture changes attributable to ageing, meaning that the same individuals may hold different attitudes at different stages of life. For example, those born during the Cold War might have been more open to foreign engagement in their 20s but become more sceptical in their 40s due to accumulated life experiences. Cohort effects, in contrast, stem from the unique historical and social situation under which individuals were born and raised. For instance, individuals who were 20 years old during the Cold War may have viewed foreign countries with ideological distrust, whereas those who were 20 in a globalised era might exhibit a more neutral stance. Period effects, distinct from both, reflect influences from historical events experienced simultaneously by all age groups. For example, the 2008 global financial crisis may have affected people of all ages by reshaping perceptions of global economic interdependence and national vulnerability. In this study, we use the APC model to examine how these three dimensions shape perceptions of foreign countries over time.

However, previous research using the APC model has focused mainly on demographic and epidemiological issues (e.g., Rosenberg *et al.*, 2014; Yang *et al.*, 2004), although some studies have addressed sociological and political issues. In sociology, the model has been applied to explain the causal effects on work efficiency (e.g., Kwon and Schafer, 2012), homogeneous marriage (e.g., Twenge and Blake, 2021), social capital formation (e.g., Schwadel and Stout, 2012), and other issues. Others have focused on political behaviour, such as voting (e.g., Tilley and Evans, 2014) and the various affective orientations towards political institutions (e.g., Eisenstein *et al.*, 2017). However, these studies all focus on domestic problems rather than international relations. To address this gap, in our study, we consider citizens' perceptions of foreign countries from the APC perspective and explore how public opinion relates to international cooperation and conflicts.

Japan represents a unique case for observing public perceptions towards other countries (Lipscy, 2023). Japan simultaneously manages its relations with great powers such as the United States, China, and Russia (McCarthy, 2018), each defined by distinct historical and institutional dynamics. The Japan–US alliance is a deeply institutionalised and globally oriented partnership, anchored in security cooperation and shared democratic values. While the relationship has remained resilient, occasional frictions over trade and memory politics may have nonetheless played a non-negligible role in shaping bilateral perceptions (Krauss, 2021). In contrast, Japan–China relations are marked by structural tension – characterised by deep economic interdependence but persistent political rivalry – where unresolved disputes over history, territory, and regional leadership keep the relationship fragile (Wan, 2021). Meanwhile, Japan–Russia relations remain stalled by the symbolic weight of the Northern Territories dispute, with limited cooperation and low institutional trust despite geographical proximity and sporadic diplomatic overtures (Bukh, 2021). To systematically explore how subjective perceptions shape Japanese attitudes towards these countries, this study integrates Japan's unique geopolitical context, demographic ageing trends, and methodological innovations using the APC model. Specifically, this study aims to disentangle social changes – particularly those related to life stages (Jennings and Niemi, 1981; Sears and Brown, 2023) and the information environment (Kalla and

Broockman, 2020; Levitan and Visser, 2009; Mutz, 1998) –from the descriptive tendencies in Japanese perceptions.

We examine how Japanese citizens' perceptions of foreign countries are shaped by multiple intersecting factors, metaphorically described as 'crossing currents'. Our research represents the first attempt to explore perceptions of neighbouring countries like China and Russia, while employing the U.S. as a reference point, by decomposing age, period, and cohort effects. The following sections first present our theoretical discussion, upon which we formulate our hypotheses. We then outline the empirical data and measures, present the main findings, and explore the theoretical implications of this study.

2. Theoretical background: Age, period, and cohort differentials in foreign perceptions

The three distinct formation mechanisms for a specific tendency identified in the political and sociological literature are age, period, and cohort effects (Glenn, 2005; Yang and Land, 2013). In the case of foreign perceptions, the age effect supposes a life-course pattern in which older people have little contact with foreigners or feel that they are socially vulnerable to them (Tanabe, 2013). This effect has also become more salient due to the ageing population (Ohtake and Saito, 1998; Shirahase, 2009; World Economic Forum, 2023). The period effect reflects the impact of historical transition on people's perceptions of foreign countries, such as diplomatic events in Japan. Finally, the cohort effect refers to the differential perceptions across birth cohorts, highlighting how cohort replacement can influence the extent of these effects in a society. We aim to estimate all three effects in our research, to fully understand the variation in Japanese perceptions of China and Russia, and even the United States.

2.1 Age effect

In this study, our age effect focuses on whether perceptions of foreign countries change due to ageing-related factors. Numerous studies have shown that people become more conservative as they age (e.g., Tilley, 2002; Tilley and Evans, 2014). This phenomenon can primarily be attributed to two factors. First, from a physiological perspective, as people age, their brain plasticity decreases, and elevated stress hormones heighten their sensitivity to external threats (Casey *et al.*, 2008; Lupien *et al.*, 2009). This neurological shift may reduce cognitive flexibility, making older individuals less adaptable to new social environments and more likely to rely on established biases when evaluating foreign groups. Second, from a psychological standpoint, older individuals, having fewer opportunities for social interaction due to life experience limitations and narrower information sources, may develop more negative perceptions of outsiders, further reinforcing xenophobic tendencies (Allport, 1954; Pettigrew, 1998; Pettigrew and Tropp, 2006). Limited exposure to diverse social groups restricts opportunities for intergroup contact, which has been shown to mitigate prejudice; in turn, this isolation can reinforce in-group favouritism and out-group distrust. This conservative life-course pattern remains even when controlling for income, social status, and the socialisation process (Helgason and Rehm, 2023). Conservatism emphasises traditional values and often the adoption of a stricter immigration policy, which may further reduce elderly people's favourable impressions towards foreigners. Although some studies argue that older individuals are less likely to support the available reservoir of a populist, anti-establishment radical right (e.g., Jou and Endo, 2016; Matsutani, 2019), these studies fail to convincingly articulate a clear logical pathway linking age to populism and, subsequently, to attitudes towards foreign countries. In particular, they do not explore why older individuals are less supportive, nor do they distinguish cohort-based generational differences from age-related life-cycle effects. The theoretical and empirical findings noted above suggest that senior citizens in Japan will be less likely to show positive attitudes towards other countries. Thus, we propose the following hypothesis:

H1. As Japanese individuals' age, their favourability towards China, Russia, and the U.S. decreases significantly.

2.2 Period effect

Unlike the age effect, the period effect manifests through sudden, transient events that simultaneously impact all citizens. Previous studies have widely recognised that both global-level events and regional diplomatic incidents significantly alter public perceptions. At the global level, large-scale historical transitions, such as the 2008 global financial crisis and the COVID-19 pandemic, have played a crucial role in shaping worldwide public attitudes by transcending national borders and profoundly impacting international political dynamics, global economic systems, and transnational social life.

In the Japanese context, scholars often attribute sudden changes in attitudes to territorial disputes and historical awareness (e.g., Kokubun *et al.*, 2017; Mori, 2006). Many scholars attribute shifts in Japanese perceptions of China to conflicts around the Senkaku Islands (Diaoyu Islands), the military actions of China's People's Liberation Army, and historical awareness since the late 19th century (Takahara *et al.*, 2023; Takahara and Hattori, 2012). Similarly, Bukh (2024) noted that since the late 1960s, the territorial dispute over the Northern Territories (Kuril Islands) has significantly shaped Japanese views of the Soviet Union and later Russia. This dispute was emphasised by the Liberal Democratic Party government, and although the attempts at resolution made during Abe Shinzo's second term (2012.12.26–2020.09.16) ultimately failed, perceptions of Russia became more positive during that time. Regarding the United States, although the Japan–US alliance has remained fundamentally stable, periodic controversies – such as disputes over U.S. military bases in Okinawa and trade frictions – have nonetheless influenced Japanese public perceptions, reflecting underlying shifts in diplomatic narratives. Therefore, we consider the period effect equivalent to that of diplomatic events. To observe these events, we retrospectively analyse the behaviour of critical political actors, such as the Prime Minister, President, and Minister of Foreign Affairs. Thus, we hypothesise:

H2a. Japanese individuals' favourability towards China, Russia, and the U.S. changes instantly and significantly in response to global-level events.

H2b. Japanese individuals' favourability towards China, Russia, and the U.S. changes instantly and significantly in response to transient diplomatic events.

2.3 Cohort effect

The cohort effect primarily refers to groups born within the same specific time period and the life experiences that distinguish them from other cohorts. According to socialisation theory and life course theory, these experiences shape the values and worldviews of those in the cohort throughout their lives (Inglehart, 2018; Mannheim, 1952; Ryder, 1965). It is widely believed that adolescence and early adulthood are critical periods for identity development and socialisation, during which collective memory is predominantly formed.[1] As a result, individuals who grow up in different cohorts may develop distinct collective memories that shape their perceptions of other countries. Once these collective memories become sufficiently powerful, they can form the basis of prejudice, nationalism, and cultural identities (Pennebaker *et al.*, 1997; Verovšek, 2016). The question remains: what kinds of memories contribute to shaping Japanese foreign perceptions?

Significant and emotional events are commonly known to form vivid and lasting memories (Brown and Kulik, 1977; Hirst and Phelps, 2016). As this perception is relevant to the field of international relations, these events can be categorised into several levels (Kertzer and Tingley, 2018; Singer, 1961; Waltz, 1959). First, global-level events such as the two World Wars, the Cold War, and globalisation, which took place during individuals' formative years, profoundly shaped collective memories and, in

[1]The exact years during which collective memory (political socialisation) is formed remain a subject of scholarly debate. Moreover, research focusing on Japan as a case study is notably scarce. As such, we refrain from explicitly defining the specific years of adolescence and early adulthood in our context.

turn, had a lasting influence on individual attitudes across most countries. Second, regional events can also have an effect. For attitudes towards China and Russia, previous international relations research suggests that incidents like the prime minister's apologies for World War II, visits to the Yasukuni Shrine, and island disputes, although less impactful on global politics, have become part of the Japanese collective memory (Berger, 2010; Liao, 2015). Similarly, for attitudes towards the U.S., certain regional diplomatic events have contributed to Japan's historical memory. While Japan-US relations are generally viewed as friendly, opposition to the establishment of U.S. military bases in the 1950s and debates over trade policies in the 1980s represent key diplomatic tensions that may have shaped cohort-based differences in attitudes (Iokibe, 2008; Yoshimi, 2007). Thus, we assume that these global and regional events not only have immediate period effects but also enduring cohort effects:

H3a. Among different Japanese cohorts, the favourability towards China, Russia, and the U.S. changes significantly in response to the collective memory of global-level events.

H3b. Among different Japanese cohorts, the favourability towards China, Russia, and the U.S. changes significantly in response to the collective memory of regional diplomatic events.

The domestic implications of governance should also be examined. Effective governance at the national level is characterised by the stability of socio-political and socio-economic orders within a state (Brown, 2023), which not only enhances the well-being of citizens but also projects an image of reliability and competence internationally. For foreign observers, effective governance is associated with favourable investment climates, safe tourism destinations, and trustworthy diplomatic partners (LiPuma *et al.*, 2013; Kaufmann *et al.*, 2010). Although estimations of governance can vary significantly, crises have historically been clear indicators of its deterioration. In Japanese media and public discourse, domestic instability in China and Russia is often interpreted as evidence of regime fragility. In contrast, similar issues in the United States are generally seen as internal fluctuations within a stable democratic system and are thus less likely to affect public attitudes. Notably, episodes such as the Great Proletarian Cultural Revolution, large-scale student demonstrations in China, and the stagnation of the Soviet Communist regime were widely perceived in Japan as signs of internal disorder and ideological exhaustion. These events reinforced a long-standing image of authoritarian fragility in both countries. Thus, we examine the connections between domestic crises and perceptions of China and Russia (the Soviet Union), and hypothesise:

H3c. Among different Japanese cohorts, favourability towards China and Russia decreases significantly in response to the deterioration of domestic governance.

In addition to international, regional, and national factors, individual subjectivity should also be considered. According to the intergroup contact (IC) hypothesis, contact between members of different groups can lead to reduced prejudice and improved intergroup relations under certain conditions (Allport, 1954; Pettigrew, 1998; Pettigrew and Tropp, 2006). Face-to-face communication is generally regarded as effective because it allows individuals to build understanding and empathy through personal experiences. Although this type of communication may not always be perceived as important or emotional, its effects should not be neglected. Opportunities for intergroup contact vary greatly among cohorts. For instance, Japanese individuals born at the beginning of the Cold War rarely had opportunities to interact with people from the Communist bloc, instead relying on information filtered through the Iron Curtain to form their opinions about the Chinese or the Soviets. Especially regarding the Soviets, the domestic publications that individuals can read can be divided roughly into two groups: articles and books by Japanese writers and translations of texts written by foreigners, mainly American and British writers (Bukh, 2024). By contrast, interaction with Americans has been more accessible across cohorts due to Japan's longstanding alliance with the United States and the significant U.S. presence in postwar Japan. Therefore, variations in direct intergroup contact are likely to have a greater

impact on perceptions of China and Russia than on perceptions of the U.S. Therefore, we assume that cohorts with more opportunities for contact are more likely to have positive attitudes towards China and Russia. To confirm our assumption, we utilise data from the Immigration Services Agency of Japan, given its comprehensiveness and reliability. We therefore hypothesise:

H3d. Among different Japanese cohorts, favourability towards China and Russia varies considerably according to the likelihood of intergroup contact.

3. Methodology

3.1 Data

The data used for our study are drawn from the Global Attitude & Trends Survey (GATS) conducted by the Pew Research Center Pew Research Center, 2024 . The GATS is an international survey that explores people's views on a variety of topics, and it has highlighted the degree of change in worldwide public opinion (Kohut and Stokes, 2006). The Japanese segment of the GATS presents unique advantages, as unlike the Japanese Electoral Studies survey Japanese Electoral Studies (JES), 2024, it includes questions on perceptions of a wider range of foreign countries, and in contrast to the Public Opinion Poll on Internationalization and Citizens' Political Participation, it is conducted almost annually and spans a longer period Public Opinion Poll on Internationalization and Citizens' Political Participation, 2024. Multiple cross-sectional surveys over several periods have been combined, and the long duration over which the data have been collected makes them suitable for a comprehensive APC analysis.

Japanese attitudes towards China were surveyed annually from 2007 to 2022, resulting in a total sample of 12,864 individuals. Attitudes towards Russia were not surveyed in 2008, 2016, and 2021, thus resulting in a total of 9,771 respondents for this sample. Attitudes towards other neighbouring countries were also considered as potential cases, but due to insufficient survey periods, they had to be excluded. Both samples exclude any cases with missing values for the variables, as discussed in subsequent sections.

3.2 Measurement

Our dependent variable is Japanese perceptions of the three countries. This variable has been measured in previous studies using the question: 'Please tell me if you have a very favourable, somewhat favourable, somewhat unfavourable, or very unfavourable opinion of China/Russia/the U.S.'? (e.g., Gong and Nagayoshi, 2019; Jung and Jeong, 2016). The response options, therefore, range from 'very unfavourable' to 'very favourable' and are assigned values from 1 to 4, respectively. The responses from these questions show that 5,058 respondents (39.32%) have a very unfavourable view of China, 5,943 (46.20%) have a somewhat unfavourable view, 1,721 (13.38%) have a somewhat favourable view, and 142 (1.10%) have a very favourable view. For Russia, 2,521 respondents (25.80%) have a very unfavourable view, 5,034 (51.52%) have a somewhat unfavourable view, 2,102 (21.51%) have a somewhat favourable view, and 114 (1.17%) have a very favourable view. For the U.S., 519 respondents (4.03%) have a very unfavourable view, 3,592 (27.87%) have a somewhat unfavourable view, 7,698 (59.73%) have a somewhat favourable view, and 1,078 (8.37%) have a very favourable view.

The key independent variables are age, period, and cohort. The age effect is measured in five-year age groups. We consider Japan's ageing population and retain all valid samples from respondents aged 18 to 101. Due to the small sample sizes for those aged 18–19 and 90 and above, these groups are combined into the 20–24 and 85–89 age groups, respectively, which are then renamed as 18–24 and 85–101. The period variable corresponds to the survey year, resulting in 16 periods for the China- and U.S.-related samples and 13 for the Russia-related sample. The cohort effect is measured in five-year birth cohorts, from 1910 to 2004. The sample for the 1910–1924 cohort is too small, so we merge it with the 1925–1929 cohort group and rename it 1910–1929. We therefore obtain 16 cohorts in total.

In addition to the main independent variables, we include control variables to ensure robustness: gender, educational attainment, and region of residence. Gender is coded as a binary variable (0 = female, 1 = male). Educational attainment is categorised into two levels: 'below university' (coded as 0) and 'university and above' (coded as 1). The region of residence is divided into six dummy categories: 1 = Hokkaido and Tohoku, 2 = Kanto, 3 = Chubu, 4 = Kansai, 5 = Shikoku and Chugoku, and 6 = Kyushu. To ensure the robustness of the results, we consider models both with and without control variables. The model without control variables is referred to as the empty model, with the full model including the control variables. Descriptive statistics for these control variables are given in Appendix Table A1, along with an overview of their distribution within the sample.

3.3 Analytical strategy

Before conducting regressions, we must address the methodological challenge of the perfect collinearity among age, period, and cohort values (i.e., Cohort = Period – Age). Yang and Land (2006) claim that the collinearity problem can be largely addressed by their hierarchical age–period–cohort analysis-cross-classified random effect model (HAPC-CCREM). Although cohort effects cannot be completely disentangled from age and period effects in life-course dynamics (Luo and Hodges, 2020), HAPC-CCREM helps to identify specific cohorts that display distinct attitudes towards China or Russia.

The HAPC-CCREM model addresses the usual drawback of conventional fixed-effects frameworks, which often absorb either 'individual' or 'time' effects and thereby conflate age, period, and cohort into a single time dimension. By treating age as a fixed-effect (level-1) variable and designating period and cohort as cross-classified random effects (level-2) factors, HAPC-CCREM alleviates the classic age–period–cohort collinearity problem. In this setup, individual ageing is disentangled from broader historical changes or generational shifts, rather than merging them all under a one-size-fits-all 'time' category. Consequently, HAPC-CCREM offers partial pooling across distinct levels, enabling more nuanced estimation of each dimension's influence. This multilevel design, therefore, facilitates a clearer understanding of how life-course transitions (age) and macro-level effects (period or cohort) jointly shape outcomes without forcing them into a single 'time' variable (Yang and Land, 2006; Yang and Land, 2013). In our empty HAPC-CCREM model, period and cohort are also treated as random effects (level-2) variables, while age is considered a fixed effects (level-1) variable. In the full model, control variables are also included as fixed effects. Despite O'Brien's (2017) conjecture that treating period and cohort effects as random may constrain their linear trend to be near zero, it is unlikely that these two effects on Japanese perceptions of foreign countries would follow a strictly linear pattern under the influence of diplomatic events. Therefore, the HAPC-CCREM model remains appropriate for use in this study.

4. Empirical findings

4.1 An overview of age, period, and cohort effects

We must first analyse the descriptive trends in perceptions of neighbouring countries, as in Table 1. The results indicate notable distinctions among the three effects. The age effect demonstrates a clear pattern, with individuals exhibiting increasingly negative perceptions as they grow older, while the period and cohort effects present more complex dynamics, which we explore in greater detail in subsequent sections.

4.2 Age effects on Japanese perceptions

Figure 1 presents graphical illustrations of the age, period, and cohort effects. Several conclusions regarding the age effect can be drawn from Figure 1. First, the values for attitudes towards China, Russia, and the U.S. slightly decline with increasing age, indicating that the attitudes of older individuals are somewhat more negative (–0.003* in the case of China, –0.009*** in the case of Russia

Table 1. Age, period, and cohort effects on attitudes towards major powers

	Attitudes Towards China		Attitudes Towards Russia		Attitudes Towards the US	
	1 Empty Model	2 Full Model	3 Empty Model	4 Full Model	5 Empty Model	6 Full Model
	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)
Fixed Effects (level-1)						
Age Effect						
Age group	−0.003* (0.001)	−0.003* (0.001)	−0.009*** (0.001)	−0.009*** (0.001)	−0.002*** (0.000)	−0.002*** (0.000)
Random Effects (level-2)						
Period Effect						
2007	0.360*** (0.060)	0.372*** (0.061)	0.003 (0.059)	0.011 (0.059)	−0.064 (0.048)	−0.048 (0.048)
2008	−0.019 (0.060)	−0.015 (0.061)			−0.244*** (0.048)	−0.238*** (0.048)
2009	0.275*** (0.060)	0.280*** (0.061)	0.034 (0.059)	0.035 (0.060)	−0.089 (0.048)	−0.079 (0.048)
2010	0.277*** (0.060)	0.281*** (0.061)	0.161** (0.060)	0.162** (0.060)	−0.032 (0.048)	−0.025 (0.049)
2011	0.373*** (0.062)	0.385*** (0.063)	0.256*** (0.062)	0.261*** (0.062)	0.412*** (0.050)	0.432*** (0.051)
2012	−0.005 (0.060)	−0.002 (0.061)	−0.003 (0.059)	−0.003 (0.060)	0.061 (0.048)	0.067 (0.049)
2013	−0.220*** (0.059)	−0.216*** (0.061)	0.146* (0.060)	0.145* (0.060)	0.053 (0.048)	0.059 (0.048)
2014	−0.252*** (0.058)	−0.257*** (0.059)	0.041 (0.058)	0.033 (0.058)	−0.001 (0.046)	−0.004 (0.047)
2015	−0.188*** (0.058)	−0.190*** (0.059)	−0.061 (0.058)	−0.067 (0.058)	0.031 (0.046)	0.029 (0.047)
2016	−0.104 (0.058)	−0.107 (0.059)			0.122** (0.046)	0.115* (0.047)
2017	−0.012 (0.062)	−0.014 (0.063)	0.070 (0.062)	0.067 (0.062)	−0.117* (0.050)	−0.117* (0.051)
2018	0.063 (0.058)	0.060 (0.059)	0.024 (0.058)	0.026 (0.058)	0.016 (0.046)	0.006 (0.047)
2019	−0.012 (0.058)	−0.018 (0.059)	0.011 (0.058)	0.013 (0.058)	0.013 (0.046)	0.001 (0.047)
2020	−0.216*** (0.058)	−0.223*** (0.059)	−0.136* (0.058)	−0.138* (0.058)	−0.332*** (0.046)	−0.345*** (0.047)
2021	−0.178** (0.058)	−0.186** (0.059)			0.093 (0.046)	0.081 (0.047)
2022	−0.141* (0.058)	−0.149* (0.059)	−0.546*** (0.057)	−0.545*** (0.058)	0.078 (0.046)	0.065 (0.046)
Cohort Effect						
1910–1929	0.196** (0.066)	0.199** (0.068)	0.004 (0.038)	0.004 (0.039)	0.011 (0.020)	0.011 (0.019)
1930–1934	0.084 (0.057)	0.087 (0.059)	0.060 (0.034)	0.062 (0.034)	0.004 (0.018)	0.006 (0.018)
1935–1939	0.019 (0.050)	0.020 (0.052)	0.053 (0.029)	0.055 (0.030)	−0.003 (0.017)	−0.002 (0.017)
1940–1944	−0.010 (0.045)	−0.008 (0.047)	0.015 (0.026)	0.016 (0.027)	−0.023 (0.016)	−0.021 (0.015)
1945–1949	−0.071 (0.042)	−0.070 (0.043)	−0.059* (0.025)	−0.056* (0.025)	−0.003 (0.015)	−0.002 (0.015)
1950–1954	−0.085* (0.039)	−0.086* (0.040)	−0.056* (0.024)	−0.056* (0.024)	−0.013 (0.015)	−0.013 (0.015)

(*Continued*)

Table 1. (*Continued*)

	Attitudes Towards China		Attitudes Towards Russia		Attitudes Towards the US	
	1 Empty Model	2 Full Model	3 Empty Model	4 Full Model	5 Empty Model	6 Full Model
	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)
1955–1959	−0.050 (0.038)	−0.056 (0.039)	−0.041 (0.024)	−0.042 (0.024)	0.008 (0.015)	0.004 (0.015)
1960–1964	−0.053 (0.037)	−0.057 (0.038)	−0.000 (0.024)	−0.003 (0.025)	0.014 (0.015)	0.011 (0.015)
1965–1969	−0.072 (0.038)	−0.075 (0.039)	0.011 (0.025)	0.007 (0.026)	0.026 (0.016)	0.025 (0.016)
1970–1974	−0.105** (0.038)	−0.110** (0.039)	−0.002 (0.024)	−0.004 (0.024)	−0.001 (0.015)	−0.002 (0.015)
1975–1979	−0.081* (0.041)	−0.084* (0.042)	−0.033 (0.026)	−0.036 (0.027)	−0.012 (0.016)	−0.012 (0.016)
1980–1984	−0.130** (0.044)	−0.134** (0.046)	−0.049 (0.028)	−0.051 (0.028)	−0.028 (0.017)	−0.028 (0.016)
1985–1989	−0.053 (0.048)	−0.058 (0.050)	0.010 (0.029)	0.008 (0.030)	0.006 (0.017)	0.005 (0.017)
1990–1994	0.020 (0.055)	0.016 (0.057)	−0.007 (0.034)	−0.010 (0.034)	0.004 (0.019)	0.004 (0.018)
1995–1999	0.104 (0.060)	0.105 (0.062)	0.045 (0.036)	0.050 (0.037)	−0.001 (0.019)	−0.001 (0.019)
2000–2004	0.287*** (0.067)	0.310*** (0.069)	0.049 (0.039)	0.057 (0.040)	0.010 (0.020)	0.014 (0.020)
Covariance Parameter Estimates						
Period	0.046 (0.017)	0.048 (0.018)	0.037 (0.016)	0.038 (0.016)	0.028 (0.010)	0.028 (0.011)
Cohort	0.015 (0.006)	0.016 (0.007)	0.002 (0.001)	0.002 (0.001)	0.000 (0.000)	0.000 (0.000)
Residual	0.469 (0.006)	0.468 (0.006)	0.454 (0.006)	0.452 (0.006)	0.426 (0.005)	0.421 (0.005)
Control Variables in Fixed Effects	No	Yes	No	Yes	No	Yes
Sample Size	12864		9771		12887	

Note: *** $P < 0.001$, ** $P < 0.01$, * $P < 0.05$.

and –0.002*** in the case of the U.S.). While the statistical significance suggests that H1 cannot be easily dismissed, the age effect is much weaker than prior studies emphasised. If, as in previous studies, only age and period are considered in the model without accounting for cohort effects, the importance of age may be overestimated. Second, favourability regarding China and the U.S. is generally lower than that regarding Russia. This is likely because Japan-Russia relations are relatively 'distant', as Bukh (2021) suggests. Third, after controlling for gender, education, and region of residence, the predicted values of attitudes towards both China and Russia increase, while those towards the U.S. decrease, compared with those without the controls, indicating the influence of socio-economic factors on the observed age effect. We observe a significant difference between the full model and the empty model when predicting attitudes towards the U.S., and this difference increases with age. However, the difference is relatively minor when predicting attitudes towards China and Russia. These findings suggest that socio-economic factors are more influential when considering perceptions of the U.S.

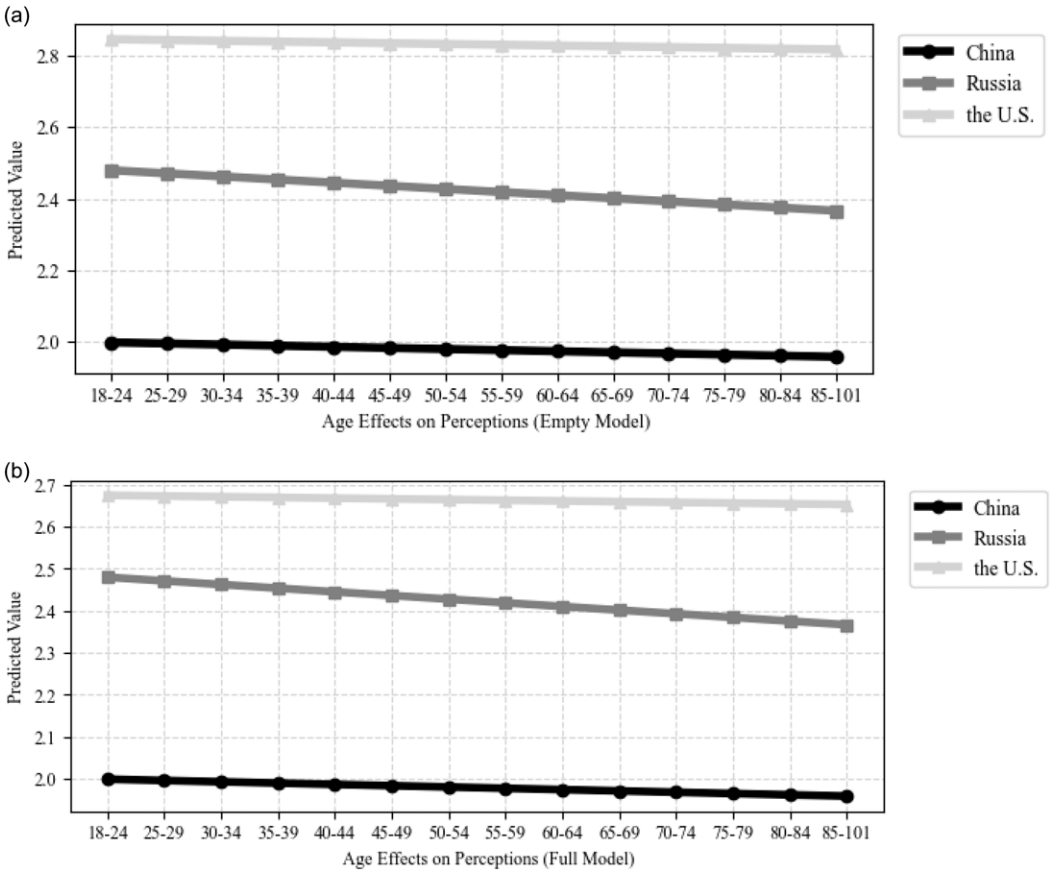

Figure 1. Age effects on attitudes towards major powers.

4.3 Period effects on Japanese perceptions

The results in Table 1 and Figure 2 indicate the period effects on the three countries. First and foremost, global-level events such as the global financial crisis and the outbreak of the COVID-19 pandemic transiently worsened Japanese attitudes towards all three countries. Compared with preceding and subsequent years, attitudes in 2008 and 2020 were particularly negative, which strongly supports the validity of H2a.

While all three countries show fluctuations in favourability over time, the underlying causes differ considerably. As noted in the Diplomatic Bluebook (Gaiko Seisho), such changes in public sentiment often follow important regional developments. For instance, after Prime Minister Wen Jiabao visited Japan in April 2007 and Prime Minister Taro Aso visited China in April 2009, the levels of likability towards China improved in subsequent Japanese surveys (conducted in May 2007 and May–June 2009, respectively). Conversely, territorial disputes around the Senkaku Islands (Diaoyu Islands) and the Ogasawara Islands between September 2012 and September 2014 led to a significant deterioration in attitudes, as reflected in the surveys conducted in March 2013, April 2014, and April 2015. Similarly, the enactment of the Coast Guard Law in February 2021 had a similar negative impact. In summary, political and diplomatic activities between China and Japan significantly influenced Japanese public attitudes towards China within a few months, strongly supporting the validity of our H2b.

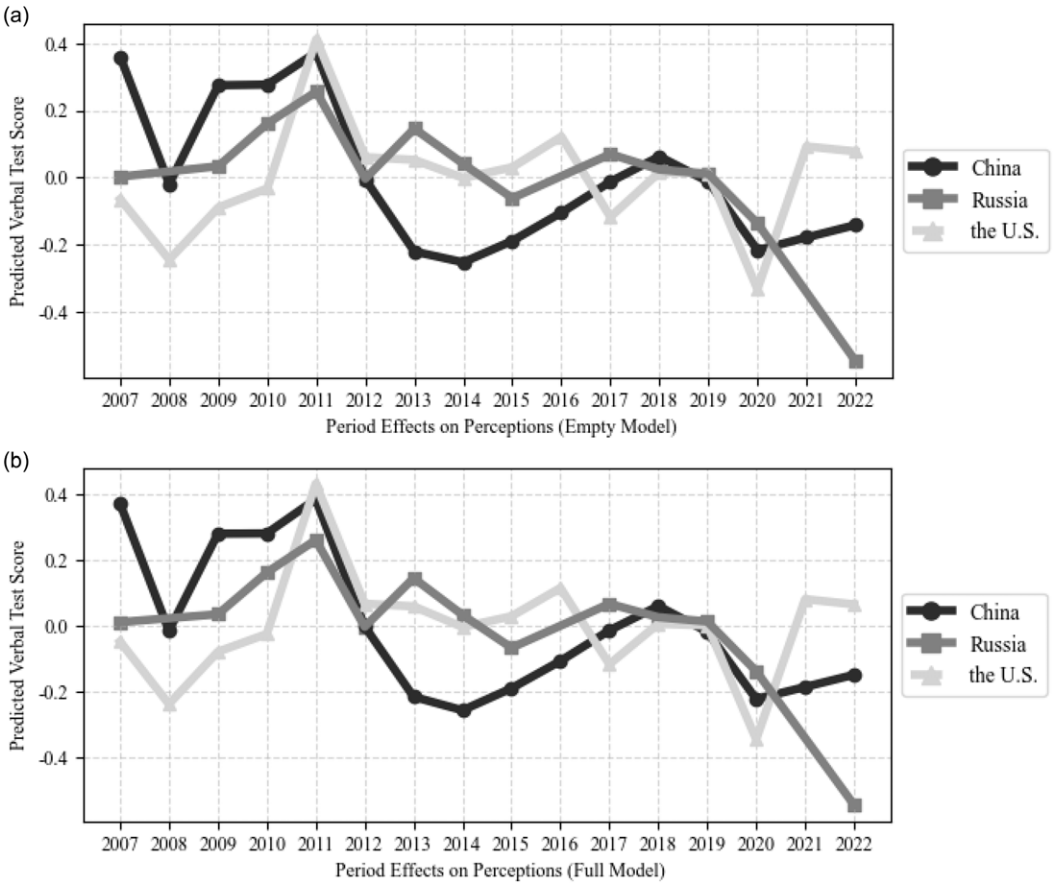

Figure 2. Period effects on attitudes towards major powers.

Perceptions of Russia exhibit similar trends. Significant changes in attitudes towards Russia occurred in 2010, 2011, 2013, 2020, and 2022. Following the visits to Moscow by Foreign Ministers Katsuya Okada (December 2009), Seiji Maehara (February 2011), and Yoshiro Mori (February 2013), public attitudes improved in the subsequent 2010, 2011, and 2013 surveys (0.161**, 0.256***, 0.146* in Model 3, and 0.162**, 0.261***, 0.145* in Model 4, respectively). However, these improvements were less significant compared with the case of China, probably due to the lower level of diplomatic interaction. The Russia–Ukraine war (February 2022) also led to significant deteriorations in Japanese public attitudes towards Russia (–0.546*** in Model 3, and –0.545*** in Model 4, respectively). In sum, the results for Russia also support our H2b.

The U.S. case also supports our hypothesis. Following Abe Shinzo's visit to Washington in March 2016, which emphasised regional security and support for the TPP, Japanese public attitudes towards the U.S. improved significantly in 2016 (0.122** in Model 3 and 0.115* in Model 4). However, attitudes sharply worsened in 2017 (–0.117* in both Model 3 and 4) after President Trump withdrew from the TPP. Similar to the cases of China and Russia, Japanese public favorability toward the U.S. increased following U.S. assistance in response to the 3.11 earthquake. Thus, these results clearly confirm H2b.

In addition, most of the lines representing the full and empty models overlap, indicating that demographic factors such as gender, educational attainment, and region of residence had little influence on attitudes towards these three countries. The stability of period effects further confirms that these socio-economic factors are relatively insignificant.

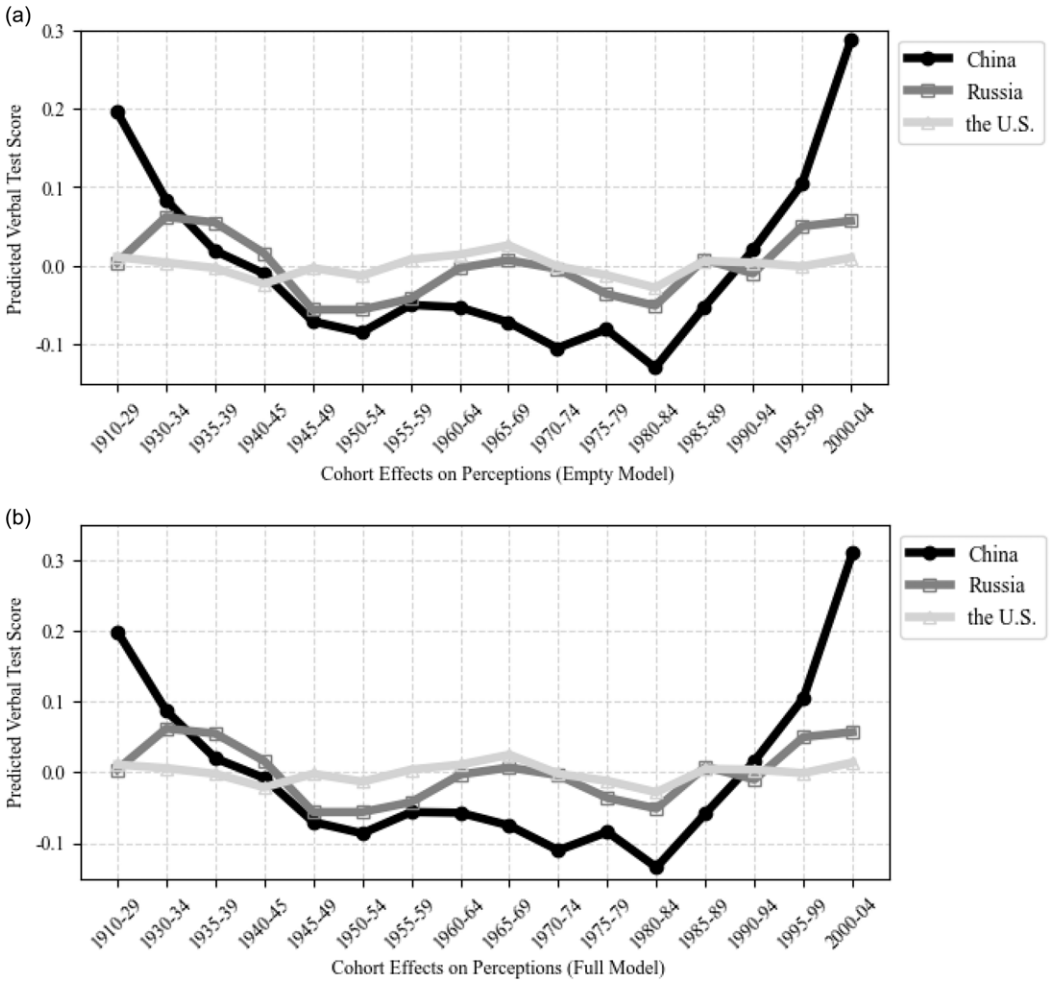

Figure 3. Cohort effects on attitudes towards major powers.

4.4 Cohort effects on Japanese perceptions

In this section, we aim to verify which of the aspects pertaining to our hypotheses, i.e., global, regional, or domestic events or individual contact, exerts a greater influence on cohort differences. Our analysis of Table 1 and Figure 3 reveals a clear three-step trend in attitudes towards China, Russia, and the U.S. In the case of the U.S., we find no significant cohort differences, suggesting that events related to Japan–U.S. relations, including those discussed by Iokibe (2008) and Yoshimi (2007), have not generated strong or lasting collective memories. This finding suggests that, in the case of the U.S., neither H3a nor H3b is supported.

In contrast, cohort effects are clearly visible in the cases of China and Russia. The cohort of people born before 1939 holds more positive views towards China, and those born before 1945 hold more positive views towards the Soviet Union (Russia), marking the first stage. The second stage includes the cohorts born between 1940 and 1989, who exhibit more negative views towards China, and those born between 1945 and 1994, who show more negative views towards the Soviet Union (Russia). In the third stage, those born after 1990 develop increasingly favourable attitudes towards China, while those born after 1995 demonstrate the same towards Russia. This trend is evidently linked to the Cold War, as the most significant political event following World War II. Thus, H3a in these two cases is generally supported.

Nevertheless, the regional diplomatic events hypothesis (H3b) seems less convincing when considering this trend. According to this hypothesis, the signing of the Japan-China Joint Communiqué in 1972 and the Soviet–Japanese Joint Declaration in 1956 – two of the most significant diplomatic events between Japan and China and Japan and Russia, respectively, after the war – should have directly improved public sentiment. However, in Models 1 and 2 of Table 1, the coefficients for cohorts born between 1955 and 1959 remain negative, although slightly higher than those for the previous cohort (–0.050 in Model 1, –0.056 in Model 2). Similarly, although the coefficients for cohorts born between 1940 and 1944 in Models 3 and 4 are positive, the values are significantly lower than those for the previous cohort ($0.015 < 0.053$ in Model 3, $0.016 < 0.055$ in Model 4). These events, therefore, did not appear to form part of the collective memory of the Japanese public. Thus, we find no significant causal relationship between diplomatic events and long-term public attitudes, leading to the rejection of H3b.

Compared to diplomatic events, domestic incidents, particularly negative events occurring in China and the Soviet Union (Russia), have a noticeable impact on Japanese perceptions. In the case of China, the 1950–1954, 1970–1974, 1975–1979, and 1980–1984 cohorts exhibit significantly negative attitudes. The Great Proletarian Cultural Revolution erupted in 1966, when those in the 1950–1954 cohort were in their adolescence. The subsequent evaluations of this event significantly worsened Japanese perceptions (–0.085* in Model 1, –0.086* in Model 2), especially among left-wing groups (Berton and Atherton, 2018). Similarly, the student demonstrations in the late 1980s and the Third Taiwan Strait Crisis in the mid-1990s prompted reflections in Japan regarding the differing values between the two countries (Onodera, 2021). Analogously, no significant incidents relevant to Japan–Soviet relations occurred in the 1960s; however, the Soviet Union's Communist path began to foster distrust among Japan's left wing. The armed intervention in Czechoslovakia led to a peak in this distrust, eliciting fierce condemnation from the Japanese Communist Party, a group with substantial voting support at the time (–0.059* in Model 3, –0.056* in Model 4). Thus, compared with diplomatic events between the two countries, severe domestic issues within one country appear more likely to provoke negative sentiments among the other country's citizens. Thus, H3c is validated.

Intergroup contact can also lead to positive effects. In the case of China, civil communication reached its highest level in the late 2010s. From 2015 to 2019, Chinese visitors to Japan exceeded 30 million, several times higher than in any other period (Immigration Services Agency, 2024). In this context, the 2000–2004 cohort (the youngest group) exhibits the most positive and pronounced attitudes towards China (–0.287*** in Model 1, 0.310*** in Model 2). However, the effectiveness of the intergroup contact largely depends on two conditions. First, global and domestic situations must be relatively stable. Although the number of Chinese visitors increased rapidly from 1970 to 1989, as mentioned above, the Cold War and China's domestic issues prevented any improvement in Japanese perceptions. Second, the extent of contact must be substantial. For instance, although the number of Russian visitors nearly doubled from 1990 to 1994, the perceptions of the relevant cohort did not significantly improve due to their relatively low proportion (137,065, only 0.7% of total foreign visitors). The IC effect cannot be completely dismissed, but other important factors often limit its impact. Thus, H3d is validated under specific circumstances.

5. Robustness analysis

After completing the regression analysis, it becomes imperative to perform robustness checks to affirm the validity and reliability of our results. One such robustness check involves redefining our critical independent variable using ten-year birth groups, following the approach of Sasieni (2012) and Morgan and Lee (2024). Despite some nuanced differences in levels of significance, the results from this robustness check closely mirror the primary findings given in Table 1 (to save space, the results are presented in Appendix Table A2).

First, the coefficients for the age groups sometimes remain slightly negative and are relatively unaffected by other social factors. Notably, this negative trend is more pronounced in the case of

Russia, where the coefficients show a steeper decline (–0.009*** compared with –0.002 and –0.002***). These age effects suggest that demographic structures are more prominent in shaping perceptions of Russia.

Second, the significance of the period effects remains almost consistent with the results in Table 1. The variations in values, which are all under 0.01, do not substantially impact the overall trend, confirming that the period effects, shaped by political and diplomatic activities, remain stable over time.

Third, the significance of the cohort effect varies between cases. For China, the P-values for the 1910–1929, 1950–1954, 1970–1974, 1975–1979, and 1980–1984 cohorts all exceed 0.05. This suggests that the periods must be carefully divided when assessing long-term trends in Japan–China relations. Nevertheless, the coefficient values continue to support our previous conclusions that the beginning and end of the Cold War had lasting effects on Japanese perceptions. For Russia, the P-values for the 1945–1949 cohort remain below 0.05, indicating a more consistent generational effect. These results, again, further validate the robustness of age, period, and cohort effects in shaping public attitudes. This pattern persists in the case of the U.S., where the cohort effect remains statistically insignificant.

6. Conclusion and discussion

Among the world's major powers, Japan presents a unique case for the study of international relations (Koyama and Buzan, 2019). Although Japan has maintained peace for the last eight decades, historical disputes and territorial conflicts continue to cast a long shadow over its relations with neighbouring countries. This highlights the importance of examining Japan's foreign perceptions in greater depth. To address this issue, many studies have discussed the roles of leaders, institutions, and international systems. Yet, the role of public opinion in shaping these perceptions, particularly about major powers, needs to be more sufficiently explored in the existing literature.

The formation of public opinion is closely related to temporal dynamics. On the one hand, individuals of different ages tend to hold distinct attitudes towards other countries. As the country with the oldest population in the world and a demographic structure skewed towards the elderly, Japan's foreign policy attitudes are expected to become increasingly conservative, especially regarding its neighbours. On the other hand, external events can swiftly alter public attitudes, either temporarily or permanently, reshaping collective memories and influencing favourability toward foreign countries across entire generations. Therefore, examining public opinion through the lens of these temporal factors offers valuable insights into the evolution of various foreign perceptions in Japan (Hom, 2020).

Our study aims to address these gaps. In contrast to elite-driven explanations, we take a bottom-up approach based on favourability ratings to explain why Japanese foreign attitudes cluster systematically and meaningfully, as Kertzer and Zeitzoff (2017) and Kertzer (2022) have suggested. We also incorporate both individual-level and international factors into our analysis. To better capture the evolving nature of foreign attitudes, we establish a dynamic temporal framework that considers changes over time. To explain individuals' attitudes towards China, Russia, and the U.S., we examine their life stages and identify the experiences that shape their perceptions of foreign countries. By drawing on repeated cross-sectional survey data, we separate age, period, and cohort effects using the HAPC-CCREM methodology. Our empirical results reveal that although Japanese favourability towards three countries decreases with age, this influence is far smaller than previously imagined. Moreover, we find that favourability ratings shift immediately in response to global and regional events, as evidenced by the period effect. The cohort effect provides a more nuanced understanding: In the cases of China and Russia, global events and domestic crises can significantly reshape generational attitudes, while individual-level contact also plays a role; in contrast, bilateral diplomatic events exert only limited influence. Interestingly, these cohort effects are largely absent in the case of the U.S. These findings illustrate the complex and dynamic interactions that shape public perceptions, that is, the 'crossing of currents' in Japanese society.

While our study establishes a strong micro-level foundation for understanding Japanese perceptions of foreign countries, several limitations remain. We recognise that more advanced methods, such as the age–period–cohort interaction model, have been developed to improve the accuracy of life-cycle analyses (Lu and Luo, 2021; Luo and Hodges, 2020). As these methods gain broader acceptance in sociology, they could be applied to enhance research on Japan's international relations. Additionally, while our analysis has identified the types of events that can influence individual attitudes, the absence of event-specific questions limits our ability to determine how and to what extent these events shape public perceptions. Furthermore, compared to its comprehensive assessment of global attitudes towards China, Russia, and the U.S., Pew's GATS rarely inquires about Japan's perceptions of other important countries, such as North Korea and South Korea. This limitation prevents us from conducting a broader comparison of Japanese attitudes towards all of its neighbouring nations.

The findings of our study suggest other avenues for future research. First, the empirical results indicate that subjective attitudes towards foreign affairs are closely related to political socialisation. Examining how global, regional, domestic, and social events together influence individuals' perceptions would provide a valuable extension of our study, enabling us to better understand the mechanisms of international political psychology. Second, future research could explore how the temporal dynamics of foreign perceptions are shaped by the characteristics of the target countries, such as regime type, ideological alignment, and the intensity of economic ties. In addition, we solely focus on the Japanese population, but it would be valuable to investigate whether our conclusions hold for citizens of other countries, including both Western industrialised democracies and authoritarian states (Bell and Quek, 2018; Clary *et al.*, 2021; Weiss and Dafoe, 2019). Future research could also explore the application of micro-level methodologies to explain macro-level and long-term trends. Specifically, as the demographic structure ages, there is potential for a worsening of Japan's relations with its neighbours; and as cohort replacement occurs – where younger cohorts replace older cohorts with lower favourability towards China and Russia with higher favourability – there is potential for gradual improvement in Japan's relations with these nations.

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Appendix

Table A1. Descriptive statistics of the control variables

Variables	Options	Frequency (Percentage) on Attitudes Towards China	Frequency (Percentage) on Attitudes Towards Russia	Frequency (Percentage) on Attitudes Towards the U.S.
Gender	Female	6,008 (46.70%)	4,474 (45.79%)	5,991 (46.49%)
	Male	6,856 (53.30%)	5,297 (54.21%)	6,896 (53.51%)
Educational Attainment	Below University	7,621 (59.24%)	5,823 (59.59%)	7,633 (59.23%)
	University and Above	5,243 (40.76%)	3,948 (40.41%)	5,254 (40.77%)
Residence Region	Hokkaido and Tohoku	1,532 (11.91%)	1,173 (12.00%)	1,538 (11.93%)
	Kanto	4,472 (34.76%)	3,392 (34.71%)	4,487 (34.82%)
	Chubu	2,002 (15.56%)	1,505 (15.40%)	2,013 (15.62%)
	Kansai	2,222 (17.27%)	1,667 (17.06%)	2,211 (17.16%)
	Shikoku and Chugoku	1,219 (9.48%)	919 (9.41%)	1,218 (9.45%)
	Kyushu	1,417 (11.02%)	1,115 (11.41%)	1,420 (11.02%)

Table A2. Robustness checks on attitudes towards major powers

	Attitudes Towards China		Attitudes Towards Russia		Attitudes Towards the U.S.	
	1 Empty Model	2 Full Model	3 Empty Model	4 Full Model	5 Empty Model	6 Full Model
	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)
Fixed Effects (level-1)						
Age Effect						
Age group	−0.002 (0.001)	−0.002 (0.001)	−0.009*** (0.001)	−0.009*** (0.001)	−0.002*** (0.001)	−0.002** (0.000)
Random Effects (level-2)						
Period Effect						
2007	0.369*** (0.060)	0.380*** (0.062)	0.005 (0.060)	0.012 (0.060)	−0.062 (0.047)	−0.046 (0.048)

(*Continued*)

Table A2. (*Continued*)

	Attitudes Towards China		Attitudes Towards Russia		Attitudes Towards the U.S.	
	1 Empty Model	2 Full Model	3 Empty Model	4 Full Model	5 Empty Model	6 Full Model
	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)
2008	−0.012 (0.060)	−0.008 (0.062)			−0.243*** (0.048)	−0.236*** (0.048)
2009	0.280*** (0.060)	0.285*** (0.062)	0.035 (0.060)	0.037 (0.060)	−0.088 (0.048)	−0.079 (0.048)
2010	0.281*** (0.060)	0.286*** (0.061)	0.161** (0.060)	0.162** (0.060)	−0.032 (0.048)	−0.025 (0.048)
2011	0.371*** (0.062)	0.382*** (0.063)	0.255*** (0.062)	0.260*** (0.062)	0.411*** (0.05)	0.43*** (0.051)
2012	−0.005 (0.060)	−0.002 (0.061)	−0.001 (0.060)	−0.002 (0.060)	0.061 (0.048)	0.067 (0.048)
2013	−0.219*** (0.060)	−0.215*** (0.061)	0.145* (0.060)	0.145* (0.060)	0.053 (0.048)	0.059 (0.048)
2014	−0.252*** (0.058)	−0.256*** (0.060)	0.042 (0.058)	0.035 (0.058)	−0.001 (0.046)	−0.004 (0.047)
2015	−0.189*** (0.058)	−0.192*** (0.060)	−0.061 (0.058)	−0.067 (0.058)	0.03 (0.046)	0.028 (0.047)
2016	−0.105 (0.058)	−0.109 (0.060)			0.122** (0.046)	0.115* (0.047)
2017	−0.016 (0.062)	−0.017 (0.063)	0.071 (0.062)	0.068 (0.062)	−0.117* (0.05)	−0.116* (0.051)
2018	0.059 (0.059)	0.056 (0.060)	0.023 (0.058)	0.025 (0.058)	0.016 (0.046)	0.006 (0.047)
2019	−0.016 (0.058)	−0.021 (0.060)	0.012 (0.058)	0.013 (0.058)	0.013 (0.046)	0.001 (0.047)
2020	−0.221*** (0.059)	−0.228*** (0.060)	−0.136* (0.058)	−0.139* (0.058)	−0.332*** (0.046)	−0.345*** (0.047)
2021	−0.184** (0.059)	−0.192** (0.060)			0.092* (0.046)	0.08 (0.047)
2022	−0.142* (0.059)	−0.149* (0.060)	−0.550*** (0.058)	−0.549*** (0.058)	0.077 (0.046)	0.064 (0.046)
Cohort Effect						
1934 and before	0.100 (0.063)	0.101 (0.065)	0.047 (0.038)	0.049 (0.040)	0.01 (0.019)	0.012 (0.019)
1935–1944	−0.017 (0.054)	−0.016 (0.055)	0.032 (0.032)	0.032 (0.033)	−0.022 (0.017)	−0.019 (0.016)
1945–1954	−0.088 (0.047)	−0.089 (0.048)	−0.068* (0.027)	−0.067* (0.028)	−0.013 (0.015)	−0.012 (0.014)
1955–1964	−0.051 (0.043)	−0.056 (0.045)	−0.029 (0.025)	−0.031 (0.026)	0.014 (0.014)	0.009 (0.014)
1965–1974	−0.080 (0.044)	−0.083 (0.045)	0.000 (0.025)	−0.004 (0.026)	0.016 (0.015)	0.015 (0.014)
1975–1984	−0.084 (0.048)	−0.086 (0.049)	−0.051 (0.029)	−0.055 (0.030)	−0.026 (0.016)	−0.026 (0.016)
1985–1994	0.002 (0.055)	0.000 (0.056)	0.001 (0.033)	−0.002 (0.035)	0.011 (0.018)	0.009 (0.017)
1995–2004	0.219*** (0.064)	0.230*** (0.066)	0.067 (0.040)	0.076 (0.041)	0.01 (0.02)	0.013 (0.019)

(*Continued*)

Table A2. (*Continued*)

	Attitudes Towards China		Attitudes Towards Russia		Attitudes Towards the U.S.	
	1 Empty Model	2 Full Model	3 Empty Model	4 Full Model	5 Empty Model	6 Full Model
	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)	Coefficient (Standard Error)
Covariance Parameter Estimates						
Period	0.047 (0.018)	0.049 (0.018)	0.037 (0.016)	0.038 (0.016)	0.027 (0.010)	0.028 (0.011)
Cohort	0.013 (0.008)	0.014 (0.008)	0.003 (0.002)	0.003 (0.002)	0.001 (0.000)	0.001 (0.000)
Residual	0.470 (0.006)	0.469 (0.006)	0.453 (0.006)	0.452 (0.006)	0.424 0.005	0.421 (0.005)
Control Variables in Fixed Effects	No	Yes	No	Yes	No	Yes
Sample Size	12864		9771		12887	

Note: *** $P < 0.001$, ** $P < 0.01$, * $P < 0.05$.

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