The lives of Japanese-Americans in the World War II era

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Introduction

Since 2020, structural racism and anti-Asian sentiment[1] have each become more broadly acknowledged in the United States. In accordance with what Asian American community groups have been calling for, for decades, there is a desire to understand inequities among distinct Asian American groups rather than grouping them into one monolith.[2-6] One crucial way to understand the health inequities of today is to examine historical injustices and their lasting impact on population health across the life course and generations.[7-9]

In 1942, 120,000 people of Japanese descent – mostly U.S. citizens - were forcibly removed from their homes by the U.S. government and incarcerated in remote camps. World War II era incarceration was a distinctive event in the lives of Japanese-Americans that was not paralleled in the experience of other Asian-American groups living in the United States at the time. The impact of incarceration on the well-being of Japanese Americans is important to understand in its own right, because of the unlawful violation of civil rights. While there was a formal compensation and reparation program in the 1990s for still-living survivors of War Relocation Authority (WRA) camps, this program provided a universal ($20,000) lump sum to all claimants, and did not individually assess the effects. Moreover, while World War II era Japanese incarceration is a relatively well known event in American history, there has been relatively little social science scholarship on long-term social and health impacts on individuals.

More broadly, studying Japanese-American incarceration can usefully contribute to wider social science literature on early-life events and later life health, and understanding the specific impact of incarceration. European-focused scholarship has usefully exploited changing wartime conditions during World War II as natural experiments that can impact health many years later.[10] The Dutch "Hunger Winter of 1944-45" has received the most attention.[11] Studies of the long-term impact of being a prisoner of war (POW) in World War II, Korea, and Vietnam have shown a range of effects on later-life health.[12] Restricted dietary conditions for POWs and violent treatment during captivity contribute to later-life cardiovascular problems, and post-traumatic stress lasting decades. Yet, studies of POWs have also shown significant resilience particularly when social networks during incarceration were strong.

A related literature examines the health effects of criminal incarceration in modern societies. Incarceration in general in the U.S. is associated with increased risk of chronic health and mortality after returning to the community.[13] While WRA camps were not identical to modern criminal incarceration there are important similarities in being deprived of civil liberties, placed under close surveillance, and living in crowded communal conditions. Japanese American incarceration specifically has been associated with poor health outcomes in unpublished data[14] and with political disengagement that worsened the longer someone was incarcerated.[15] Researchers have estimated health effects of incarceration by comparing the Japanese Americans in Hawaii (low incarceration rates) to Japanese Americans in California (high incarceration rates).[16]

Following the experience of being cast as the enemy by their own U.S. government, many Japanese Americans responded by increasing their efforts to assimilate, for instance by giving their children more Americanized names after the attack on Pearl Harbor.[17] This widespread effort to not dwell on the experience contributed to the current dearth of information about how this mass incarceration of U.S. citizens affected those who were incarcerated.

To understand the effects of incarceration on the life course trajectories, we need to understand the demographic, social, and socioeconomic characteristics of people of Japanese descent prior to

World War II. We will do this by linking the publicly available list of Japanese internees to the publicly available 1940 Full Count Census data, using modern record-linkage techniques. Thus, the paper makes two related and important contributions. First, it describes the pre-incarceration conditions of the population. Links to the full-count census data for 1940 will facilitate further record linkage to the 1930 and 1950 censuses that will be completed by IPUMS as the 1950 full-count census data is soon released for social science research. Second, we provide the first-ever comprehensive analysis of the social and economic position of Japanese-Americans in 1940 throughout the United States, including Hawaii.

Methods

We draw on newly available individual-level data from full-count American censuses, and records compiled in the administration of WRA camps.

1940 Full Count Census data

The 1940 census was one of the most sophisticated and detailed censuses in the history of American census taking, and offers unparalleled insight into the social and economic circumstances of the population at the end of the Great Depression. It was both the first census conducted using modern statistical sampling methods, *and* the last census to ask the entire population many important questions about social and economic variables. Thus, it is particularly useful for examining the characteristics of a relatively small population, such as the mainland population of Japanese descent and birth, in comparison with other groups in the country. Because the entire population was asked questions about education, employment, and income the 1940 census allows measurement of household characteristics that some later censuses, most notably 1950, do not. The data from Hawaii are in a slightly different format because Hawaii did not become a state until 1959. Therefore, in the 1940 Census Hawaii residents received a special schedule for territories rather than the schedule for the contiguous mainland states. The existing—and widely used—1940 census sample does not include Hawaii (or Alaska). This means that up until now, analyses of 1940 Census data have excluded Hawaii residents. Still, the methods and variables between 1940 U.S. states and territories are largely comparable.

1950 Full Count Census data

The 1950 Census manuscripts have been released and are available in a machine-readable format consistent with IPUMS full-count and sample data. *At the time of writing (November 2024),we are resolving issues with under-identification of the Japanese population in this dataset due to issues with the machine recognition of one-character abbreviations for racial groups*. Because the 1950 census sample does not contain data from Hawaii, its description of the Japanese-American population after WWII is incomplete. We will incorporate a cross-sectional analysis of the Japanese-American population in 1950 to examine population-level changes in social and economic circumstances.[1]

National Archives Record Group 210: Records of the War Relocation Authority (WRA), 1942-1946

The War Relocation Authority (WRA) has a publicly available list of all Japanese Americans incarcerated during World War II. This includes information from residents of California, Oregon, and Washington to ten relocation centers – Tule Lake (CA), Manzanar (CA), Minidoka (ID), Central Utah (UT), Granada (CO), Colorado River (AZ), Gila River (AZ), Heart Mountain (WY), Rohwer (AR), and Jerome (AR). The data includes previous address, birthplace and parents' birthplace, education and parents' education, and occupation, and is grouped by family. The data do not include information on those born

[1] Individual-level record linkage to the 1950 census will not be feasibly completed by PAA. This forward linkage will be straightforward to complete in the future.

into incarceration.[18] In the WRA data, last names were truncated at 10 letters, first names were truncated at 8 letters, and only the middle initial was collected. Data were initially collected on an Individual Record "Form WRA 26". From there, coders checked the forms for consistency and categorized free response items. They were instructed:

> "Coding of the Individual Record (Form WRA 26) is an extremely important task. Our objective is to have the work done as accurately as possible. Great care has been taken to obtain complete and accurate information on the Individual Record forms which you will be coding. Hence the responsibility upon those who code is great, since inaccuracy in coding will make ineffective all the care taken into obtaining accurate information for the Individual Record"

Coders checked within family units for consistency in names, previous addresses, religion, and family identifier. The coders also sorted the occupations listed by internees into standard occupational groups.

Linking 1940 Full Count Census data to Internee lists

Linking external datasets like the Internee list to full count, publicly available Census data has recently become a viable process using full-family information.[19] There are individual identifiers as well as family identifiers, which will further help with linking to households in the 1940 Census. One unpublished description of linking WRA lists with full count Census data achieved a 57% match rate without including those who lived in Hawaii in 1940.[20] With the latest procedures developed by IPUMS, data of similar quality to the WRA List achieved a 78% match rate to the 1940 Census,[21] and we expect to achieve a similar match rate.

The WRA data truncated last names at 10 characters and first names at 8 characters. There are about 160 last names in the dataset (1.8%) which appear to be 10 characters, and are a mix of last names that are truly 10 characters long and last names that have been truncated. Prior to linking the WRA data to the 1940 Census, our co-author who is a native Japanese speaker will fill in what are the likely missing letters to complete the truncated last names. Despite these issues, linkage of the WRA data to the census is a straightforward process using modern record-linkage methods developed for historical sources.[22] Reflecting that "internment" was targeted at Japanese-Americans, the size of the population in the WRA data and the 1940 census is similar, reducing the computational demands of record linkage that occur when the individuals of interest must be found within a significantly larger census population.

In brief, we link people between the WRA and 1940 data by measuring the similarity of characteristics that should not change, or change predictably: names, ages, birthplace, parents birthplaces. To simplify linkage, we assume the composition of family groups changes minimally between 1940 and 1942. Specifically, if we observe 12- and 10-year-old siblings with their parents in internment records, we expect that in 1940 we will 10- and 8-year-old siblings with those parents two years earlier. We undertake record linkage by measuring the name- and age- similarity of family groups in the WRA data with families in the 1940 census. For each family group in the WRA data, we identify a group of families in the 1940 census for whom names, ages, and age differences suggest they could be the same individuals. We manually review and adjudicate which (WRA, 1940) pairing is most likely to be correct link for a sample of 300-500 cases. This training data is then used to predict links within the complete set of 109,400 WRA records.

Analysis

After we link these two datasets, we will first give a comprehensive description from 1940 of the lives of those who would be incarcerated two years later. We will compare those who were incarcerated to Japanese and Japanese Americans who were not incarcerated. We will also make this comparison between Hawaii residents who were incarcerated (N~2,000) versus not (N~160,000), as those who were incarcerated from Hawaii were distinct from those who were incarcerated from the mainland U.S. In the

table below we show a range of key socio-economic variables we will be able to compare across the mainland and Hawaiian population, and after record linkage, between the free and incarcerated.

	Mainland United States c. 123,000 (1940)			Hawaii c. 160,000 (1940)		
	Total	Incarcerated ~109,000	Not incarcerated	Total	Incarcerated ~2,000	Not incarcerated
Citizenship						
Citizen if foreign born	2%			0.5%		
Birthplace						
United States	36%			76%		
Japan	63%			24%		
Education (25+ y.o)						
< High school	69%			Not asked in census of Hawaii		
High school	22%					
Some college +	9%					
Occupation (men)						
Farming	16%			5%		
Farm laborer	21%			17%		
White collar	8%			10%		
Prof/Manager	14%			10%		
Wage income	$597			Not asked in census of Hawaii		
Home owner	19%			21%		
Married (21+ y.o)	59%			67%		

Discussion: Our paper will document the Japanese-American population on the eve of World War II, giving a first-ever comprehensive quantitative description of the population, as existing census samples omitted Hawaiian census samples. Record linkage to the WRA lists of Japanese-Americans who were incarcerated will allow us to show how the predominantly West Coast population that was incarcerated differed from smaller Japanese-American communities in other parts of the country. Prior scholarship on Japanese-Americans in this era has relied on census and survey data that could not distinguish between people living on the West Coast or in other regions.

Our paper will also demonstrate the feasibility of using modern record-linkage techniques for minoritized populations with non-English names. We will report on adjustments that may need to be made to record-linkage algorithms when linking Anglicized representations of non-Western names. A strength of the data that we are using is that both sources—census and WRA lists—identify family groups allowing more confident identification of individuals.

References

1. Gover AR, Harper SB, Langton L. Anti-Asian hate crime during the COVID-19 pandemic: Exploring the reproduction of inequality. *American journal of criminal justice*. 2020;45(4):647-667.
2. Abuelezam NN. Collecting and Reporting Accurate Data on Race and Ethnicity Are Necessary to Achieve Health Equity. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. 2022;
3. Rubin CL, Hires B, Sauma D, Yau Y. Asian American Research in the Post-Atlanta Era: Driving Community-Engaged Research That Is More Meaningful, Responsive, and Actionable for Local Communities. *Broadly Engaged Team Science in Clinical and Translational Research*. Springer; 2022:183-191.
4. Yi SS, Kwon SC, Suss R, et al. The Mutually Reinforcing Cycle Of Poor Data Quality And Racialized Stereotypes That Shapes Asian American Health: Study examines poor data quality and racialized stereotypes that shape Asian American health. *Health Affairs*. 2022;41(2):296-303.
5. Yi SS. Taking action to improve Asian American health. American Public Health Association; 2020. p. 435-437.
6. Muramatsu N, Chin MH. Battling structural racism against Asians in the United States: call for public health to make the "Invisible" visible. *Journal of Public Health Management and Practice*. 2022;28:S3-S8.
7. Adkins-Jackson PB, Chantarat T, Bailey ZD, Ponce NA. Measuring structural racism: a guide for epidemiologists and other health researchers. *American journal of epidemiology*. 2022;191(4):539-547.
8. Hardeman RR, Homan PA, Chantarat T, Davis BA, Brown TH. Improving The Measurement Of Structural Racism To Achieve Antiracist Health Policy: Study examines measurement of structural racism to achieve antiracist health policy. *Health Affairs*. 2022;41(2):179-186.
9. Jones CP. Seeing the Water: Seven Values Targets for Anti-Racism Action. Harvard Medical School. Accessed 4/16/2021,
10. Kesternich I, Siflinger B, Smith JP, Winter JK. The effects of World War II on economic and health outcomes across Europe. *Review of Economics and Statistics*. 2014;96(1):103-118.
11. Schulz LC. The Dutch Hunger Winter and the developmental origins of health and disease. *Proceedings of the National Academy of Sciences*. 2010;107(39):16757-16758.
12. Kang HK, Bullman TA, Taylor JW. Risk of selected cardiovascular diseases and posttraumatic stress disorder among former World War II prisoners of war. *Annals of epidemiology*. 2006;16(5):381-386.
13. Massoglia M, Pridemore WA. Incarceration and health. *Annual Review of Sociology*. 2015;41:291-310.
14. Jensen GM. *The experience of injustice: Health consequences of the Japanese-American internment*. University of Colorado at Boulder; 1997.
15. Komisarchik M, Sen M, Velez Y. The Political Consequences of Ethnically Targeted Incarceration: Evidence from Japanese-American Internment During WWII. 2020;
16. Saavedra MH. Early childhood conditions and mortality: Evidence from Japanese American internment. *Available at SSRN 1932111*. 2013;
17. Saavedra M. Kenji or kenneth? pearl harbor and japanese-american assimilation. *Journal of Economic Behavior & Organization*. 2021;185:602-624.
18. FAQ - Records about Japanese Americans Relocated During World War II Record Group 210 (2019).
19. Ruggles S, Fitch CA, Roberts E. Historical census record linkage. *Annual review of sociology*. 2018;44:19-37.
20. Shoag D, Carollo N. The causal effect of place: Evidence from Japanese-American internment. 2016;

21. Roberts E, Warren JR. Family structure and childhood anthropometry in Saint Paul, Minnesota in 1918. *The History of the Family*. 2017;22(2-3):258-290.
22. Helgertz J, Price J, Wellington J, Thompson KJ, Ruggles S, Fitch CA. A new strategy for linking US historical censuses: A case study for the IPUMS multigenerational longitudinal panel. *Historical Methods: A Journal of Quantitative and Interdisciplinary History*. 2022;55(1):12-29.