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Fertility of First-Generation Japanese Immigrant Women in Seattle: The Influence of Ken Affiliation, Residential Location, and Employment Status

Akiko Nosaka and Donna Lockwood Leonetti

Abstract *This study examines the variation in fertility patterns of first-generation Japanese immigrant women based on data originally collected in Seattle, WA in the 1970s. Quantitative and qualitative analyses reveal that women achieved relatively high fertility via different strategies depending on their ken affiliation (a ken is a prefecture, the first level of geographic administration in Japan, and immigrants from the same ken often mutually support one another). Some women had high fertility because they resided in Central Seattle in a dense community of Japanese immigrants. Others realized high fertility by limiting their employment, regardless of residential location. An interpretation of this difference is that women's access to, and reception of social support differed according to their ken affiliation.*

Introduction

Reproduction is considered a bio-cultural issue in anthropology because it is influenced by both biological and cultural variables. On one hand, when human females reproduce, pregnancy and breastfeeding are biologically based (Wood 1994). They also experience declining fecundity in their late thirties and eventually experience menopause, which marks the end of their reproductive ability to become pregnant (Sievert 2006). On the other hand, the frequency of pregnancies and how long and intensively a woman breastfeeds are significantly influenced by cultural meanings and practices.

Fertility, actual childbirth, is affected by additional socio-cultural variables. For example, how many children people have and the timing of those births are largely influenced by cultural expectations, social policies, and one's accessibility to technology (see Greenhalgh 1988; Townsend 1997; Krause 2005). Such influences result in distinct patterns cross-culturally. Individuals in a group share similar characteristics in terms of the number of children per family, the timing of first births, and/or the amount of time separating births between children. At the same time, there is also variation within a given cultural group because people embrace different fertility strategies according to their socio-economic resources and/or availability of support (see Hawkes, O'Connell, and Blurton-Jones 1997; Nosaka 2009).

Viewed in terms of biological constraints, cultural influences, and the effects of social assets, the fertility of immigrant women is an interesting topic to examine. When women migrate to new social settings where they face differing conditions, they are most likely to adjust their fertility strategies in contextually appropriate ways. Many studies have examined how the fertility of immigrants as a group differs from that of the host country as a whole, how the host country's policies have influenced

immigrant fertility, and/or how fertility of immigrants has changed as a result of assimilation into the host culture (see Krishnan and Krotki 1992; Moss, Stone, and Smith 1993; Kahn 1994; Alonso and Luna 2005; Sargent 2005; Waller, Berrington, and Raymer 2014 for examples). Relatively few studies, however, have closely investigated how and why the fertility strategies of women in a specific immigrant group vary according to socio-familial conditions and/or backgrounds (see Leonetti and Newell-Morris 1982b; Espenshade and Ye 1994; Ren 2009; Nosaka and Chasiotis 2010 for examples).

This study examines the fertility of first-generation Japanese immigrant women in the United States (U.S.) and how their fertility patterns and strategies appear to have differed in certain respects. It draws specifically on data originally collected by a project that investigated the social and demographic characteristics of Seattle's Japanese American population in the mid-1970s (see Leonetti and Newell-Morris 1982b). This particular project collected the data from three generations of women referred to as Issei, Nisei, and Sansei. The Issei represent first generation Japanese immigrants who came to the U.S. before 1925; they all lived in Seattle prior to World War II, were interned in concentration camps during World War II, and resettled in Seattle before 1950. The Nisei represent the American-born children of the Issei. The Sansei, in turn, are the American-born children of the Nisei.

The study presented here focuses on the data from the ninety-eight Issei women in the original study's sample. Despite the economic and cultural importance of having children in the U.S., the fertility of Seattle's Issei women varied greatly—some had many children, others had few. This study investigates some of the factors associated with the high or low fertility of these women, with a particular interest placed on their ken affiliation. Ken are Japanese administrative prefectures, and people from the same ken formed "Kenjin-kai," prefectural people's associations, which functioned as social support networks (Hosokawa 2002:156). Besides a woman's ken, other important factors that also influenced her fertility include her residential location and employment status.

Background

The migration of Japanese people to the U.S. began in the mid-1880s, about twenty years after the Meiji Restoration in 1868, which marked the end of the country's feudal system during which foreign interactions were extremely limited. Initially, one main destination for migrating Japanese was Hawaii, but there was a significant increase in the number migrating to the U.S. mainland after the Chinese Exclusion Act of 1882, which created a demand for cheap labor. A major wave of Japanese migration to Seattle, Washington began in the 1890s. Although both Japanese men and women arrived in the Seattle area, most of them were young, unmarried men from the prefectures of southwestern Japan. They were primarily wage laborers and founded their residences near their business district where the rents were cheapest, and they were able to provide working-class whites with services including restaurants, barber shops, and hotels (Miyamoto 1984:10–11; Yanagisako 1985:3). In the late 1890s and beginning of 1900s, Seattle was growing as a frontier community, which conveniently became dependent on the variety of small-scale services provided by Asian immigrants.

FERTILITY OF FIRST-GENERATION JAPANESE IMMIGRANT WOMEN IN SEATTLE

In general, most Japanese migrant laborers had originally planned to return to Japan after accumulating enough wealth (Bonacich 1973; Fugita and O'Brien 1991:53). Many of them, however, decided to stay as they became adjusted to American life. Consequently, Japanese immigrants in Seattle started marrying and having families, but the number of Japanese women was still limited early on. In 1907, the Japanese and the U.S. governments made the Gentlemen's Agreement, which terminated Japanese labor migration to the U.S. This agreement ironically invigorated the Japanese community in Seattle because it still allowed for the immigration of the spouses and children of those already living in the U.S. (Miyamoto 1984:11; Yanagisako 1985:3). Consequently, more marriages were arranged between the U.S. and Japan than before, resulting in the immigration of a significant number of Japanese wives.

Correspondingly, the Japanese residential area in Seattle physically expanded. In the early 1910s, Japanese residences were concentrated within several blocks around their business center district. In less than ten years, this community expanded to over twenty blocks (see Figure 1). This expansion was largely the result of the U.S. entry into World War I in 1917, which led to an influx of labor needed for a dramatic increase in ship-building activities in Seattle. Subsequently, there was an increase in demand for retail businesses and services, and Japanese immigrants quickly took on such occupations (Schmid 1944:136; Yanagisako 1985:3).

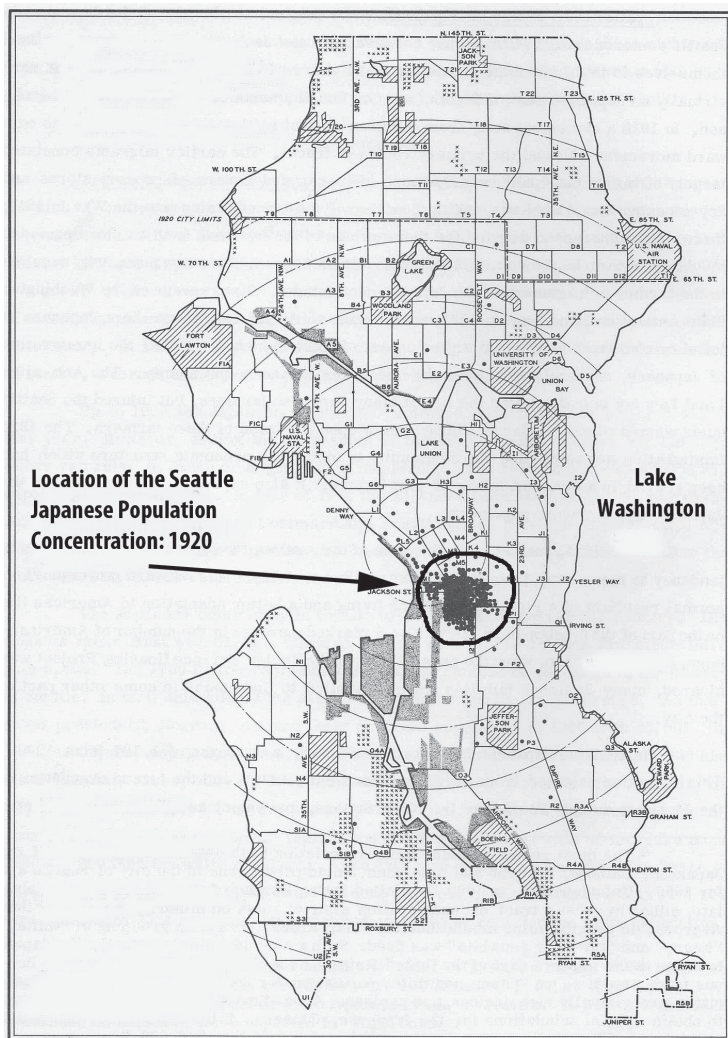


Figure 1. Map of the Central Seattle area where the Japanese residents were concentrated in 1920. (Map adapted from Schmid and McVey, Jr. 1964, Figure 1.)

There was, however, an increase in anti-Japanese immigrant sentiment. In 1921, the state of Washington signed the Anti-Alien Land Law, in which foreign-born Japanese could no longer lease or own land. To go around the law, some Japanese established land-holding corporations, and others used white intermediaries or put them in the names of their U.S.-born children who were citizens (Hosokawa 2002:102–103). Escalating crowdedness, anti-Japanese sentiment, and damage to businesses prompted some Japanese to move out of Seattle in search of better opportunities elsewhere. The Immigration Act of 1924 basically terminated further Japanese immigration. For the next forty years until enactment of the Immigration Act of 1965, there were few new Japanese immigrants, and overall this period resulted in a reduction in the size of the Japanese business district.

The 1921 Land Law and 1924 Immigration Act made it much more significant for Japanese immigrants to have children. While the first-generation immigrants, the Issei, were influenced by the traditional Japanese family ideology of procreation, they now perceived a greater socio-economic importance and incentive for having children because it was increasingly difficult for them to maintain or advance their status. Compared to their immigrant parents, their children (Nisei) were granted United States citizenship at birth and faced few legal barriers. In addition, they were able to speak English fluently. The Nisei still experienced institutional and interpersonal discrimination, but as citizens they had a clear hope for the future (Ichibashi 1932:336–358; Hraba 1979:332; Miyamoto 1984:12; Hosokawa 2002:188).

Although the Great Depression damaged their businesses and anti-Japanese sentiments and discrimination continued, Japanese immigrants generally experienced a respectable level of upward mobility. By the mid-1930s, more than seventy percent of Japanese immigrant workers in Seattle had either established independent small businesses (e.g., hotels, restaurants, barber shops, and laundries) or had non-working-class occupations (e.g., clerks, teachers, salesmen, and public officials) (Miyamoto 1984:13). Their residential area also expanded beyond their business district (Schmid 1944:47). In the early 1940s, however, they had to relinquish those businesses and occupations, and leave their homes because of the “evacuation” of Japanese Americans during the World War II (Yanagisako 1985:4). The vast majority of Japanese, both citizens and resident aliens, living in Washington, Oregon, and Alaska, were interned in the Minidoka War Relocation Center in Idaho between 1942 and 1945; some were first sent to a camp in Puyallup, Washington before going to Minidoka. Others were sent to Tule Lake, California (Leonetti and Newell-Morris 1982a:23). By the time of World War II, few Issei women were still reproducing, and they finished having children during the war or within a few years after it ended.

After the war, many Japanese did not return to the areas where they had lived before internment (Fugita and O’Brien 1991:9). The U.S. government also encouraged their geographic dispersion (Myer 1971:132–135). For the case of the Seattle Japanese community, however, many families moved back. It was estimated that sixty to seventy percent, close to four thousand seven-hundred individuals, returned to Seattle by 1946. The city also became home to about six hundred Japanese immigrants who had lived elsewhere before the war (Miyamoto and O’Brien 1947:149–151). The community regained a demographic structure similar to that

of the prewar period and was able to bring back a number of prewar organizations, including churches and voluntary associations (Leonetti 1976:61).

It was not easy, however, to re-establish their standard of living. There was a housing shortage, and many Japanese “resettled in the lower-class, central-area neighborhood, a return to the isolated and concentrated residential pattern of the 1930s” (Leonetti and Newell-Morris 1982a:24). This housing shortage in turn led to a dispersion of Japanese people into areas that had not been previously occupied by them (Miyamoto and O’Brien 1947:151). Moreover, it was a constant challenge to earn a decent income. This was especially the case for the Issei, the majority of whom were reaching their late forties and early fifties; indeed, many of them were “forced back into the unskilled, low-paying jobs in which they had started out in America” (Yanagisako 1985:5).

As the Issei aged, the economic and social power holders in the Seattle Japanese community fell increasingly into the hands of the second generation, Nisei. It should be noted that the Nisei struggled from strong racial discrimination for more than a decade after the war. Also, many of them were unable to obtain jobs commensurate with their levels of education (Varon 1967:815–816). Despite these stumbling blocks, Japanese Americans gradually and steadily worked their way into white-collar jobs, and accordingly, they started to move into predominantly White, middle-class, suburban residential areas in Seattle between 1950 and 1970 (Leonetti 1976).

Methodology

The data evaluated for this study were originally collected by a study of Seattle’s Japanese-American women that was conducted in the mid-1970s by three anthropology graduate students, one of whom is this article’s second author (see Yanagisako 1985:265). In order to trace changes in fertility and socio-economic status over their life histories, face-to-face interviews were conducted with the Issei, Nisei, and Sansei women who were residing in Seattle.

Here, this study uses only the data on the ninety-eight Issei women in the original study sample. All those women were married at least once (this includes women who divorced and/or re-married because of divorce or the death of a husband).¹ The mean age at first marriage was 20.95 (standard deviation 2.88; range sixteen to twenty-eight). Their fertility levels were divided into three categories: high, average, and low. The average number of live-births among the sample was 4.143, and therefore, average fertility was defined as four live-births (see Table 1). High fertility was defined as more than four live-births; low fertility was defined as less than four. Overall, the sample contained thirty-five women with high fertility, twenty-three women with average fertility, and forty women with low fertility, including four childless women.²

Those women were also divided into two categories, major or minor, with respect to the Japanese prefectural ken from which they came. The majority of them (eighty-two out of ninety-eight) came from the same ken as their husbands because many marriages were arranged via local networks. The Japanese in Seattle had a strong mutual aid ethic; this was especially strong among those from the same ken, and there was a tendency for concentrations “of people from the same prefectures in Japan at the same places, and in the same lines of work” (Miyamoto 1984:20–25). This meant that when immigrants came from the ken that had many

Table 1. Women's Characteristics: Fertility, Ken Affiliation, and Residential Location (n=98)

Characteristics	Frequency (%)
Fertility (Live-Birth)	
High (>4)	35 (35.7)
Average (=4)	23 (23.5)
Low (<4)	40 (40.8)
(mean 4.14; standard deviation 2.21; range 0 to 13)	
Ken Affiliation	
Major	48 (49.0)
Minor	50 (51.0)
Residence	
Central	46 (46.9)
Non-Central	52 (53.1)

fellow immigrants in Seattle, they were able to receive substantial support. Also, immigrants from the same ken were more likely to mutually support one another to retain work, and consequently, some level of connection developed between certain types of work and ken affiliation. For example, the barbers tended to be people from Yamaguchi-ken, and the majority of those in the restaurant business were from Ehime-ken (Miyamoto 1984:20). Therefore, some immigrants with certain ken affiliations had a distinct advantage and access to assistance to more effectively pursue their life strategies. Following Miyamoto's work (1984), this study included Hiroshima, Okayama, Wakayama, Yamaguchi, Kumamoto, Fukuoka, and Ehime as the ken that provided strong internal support, and has labeled them "major ken," while others are labeled "minor ken." In the study sample, there were forty-eight women who came from major ken and fifty from minor ken. A t-test indicated no statistically significant difference between them in terms of mean fertility.

This study examines how women's fertility differed between the two categories of women (major ken versus minor ken), with respect to their residential location and employment status. In general, when women (and their husbands) have good supporting networks, we can expect that they will be more likely to have (additional) children, leading to high fertility; such networks can be a source of childcare assistance, which can lessen parental burden. Typically, support from their close family members is the ideal (see Paxson 2005; Nosaka 2009), but many Issei women did not have native family members living in the U.S. Therefore, support from other Japanese immigrants must have been valuable, and living in a concentrated community of Japanese immigrants provided one with good support. In particular, we assume that women from major ken were likely to receive significant support from others with the same ken affiliation, as if they were family.

Central Seattle was the location with the highest concentration of Japanese residences and businesses. A woman's residential location was specified using a binary code ("Central" or "Non-Central") based on whether she lived in the Central Seattle area during the following five age periods of her married life: twenty to twenty-four, twenty-five to twenty-nine, thirty to thirty-four, thirty-five to thirty-nine, and forty to forty-four. The analyses for age periods less than twenty years were not conducted because there were only ten women who married before age eighteen. For a married woman who moved during a given age period, the residence ("Central" or "Non-Central") that she lived in for the longest time during that five-year period was entered. A woman who was not yet married during an entire age period was treated as a missing case. A woman who married at some point during any age period was coded according to how long she was married during that age period. For instance, when a woman married at age twenty-six or twenty-seven, she was coded for the age period twenty-five to twenty-nine. In comparison, when a woman married at age twenty-eight or twenty-nine, she was treated as a missing case for the age period twenty-five to twenty-nine. Then, a count was made of the number of age periods that were coded "Central" for each woman. Accordingly, a woman whose count summed to 0, 1, 2, or 3 was coded "Non-Central;" a woman whose count summed to 4 or 5 was coded "Central." In short, the women whose residential code was designated as "Central" lived in Seattle's concentrated Japanese community for most of their reproductive years after marriage. A t-test revealed no statistically significant difference in the mean fertility between the women in the two residential categories.

Also, a woman's employment can lower fertility (see Jones 1981; Crafts 1989; Nosaka 2012). In general, when women are more fully employed, their fertility is more likely to be compromised. This might have been especially the case for immigrants who did not come from major ken, which meant that they had less access to ken-based support. Similar to the coding for residential location, a woman's employment status after marriage was coded according to the same five age periods: twenty to twenty-four, twenty-five to twenty-nine, thirty to thirty-four, thirty-five to thirty-nine, and forty to forty-four (see Table 2). A woman who did not work during a given five-year

Table 2. Women's Characteristics According to Employment Status Per Age Period (n=98)

Age Period	0 ^a (%)	1 ^b (%)	2 ^c (%)	Missing (%)
20–24	24 (24.5)	17 (17.3)	29 (29.6)	28 (28.6)
25–29	39 (39.8)	17 (17.3)	36 (36.7)	6 (6.1)
30–34	38 (38.5)	16 (16.3)	42 (42.9)	2 (2.0)
35–39	29 (29.6)	21 (21.4)	44 (44.9)	4 (4.1)
40–44	20 (20.4)	27 (27.6)	49 (50)	2 (2.0)

^aNo employment for that age period

^bPart-time employment for any duration or full-time employment for less than 2 years for that age period

^cFull-time employment for 2 or more years for that age period

period was coded 0 for that period. A woman who worked part-time for any duration, or worked full-time for less than two years during a five-year period, was coded 1. A woman who worked full-time for two or more years was coded 2. A woman who was either a student or had an unknown employment status was treated as a missing case.

To identify the strategies that Japanese immigrants used to achieved high fertility, both quantitative and qualitative analyses were used. To statistically assess factors associated with the relatively high fertility of those women, the analysis involved conducting ordinal-by-ordinal crosstab analyses, using SPSS software (statistic 24). In order to interpret those statistical results and examine how the results actually reflected, or did not reflect specific cases, the original life-history data, especially the additional information on a woman's fertility, residence, and employment history, were also closely reviewed.

Findings and Discussion

One main finding of this study is that the fertility of major ken women is associated with whether they resided in the Central Seattle area, but this is not true for their minor ken counterparts (see Table 3a and 3b). The cross-tabulation directional measures (for ordinal variables) indicate that when major ken women lived in Central Seattle for a significant amount of their reproductive years, they were likely to have more children ($p=.040$). In contrast, for minor ken women the association between the time living in this Central area and their fertility was not significant.

Table 3a. Residential Location in Relation to Fertility for Major Ken Women (n=48) [$p=.040$]

Fertility Level	Central Residence	Non-Central Residence	Total
Low	6	12	18
Average	7	2	9
High	14	7	21
Total	27	21	48

Table 3b. Residential Location in Relation to Fertility for Minor Ken Women (n=50) [Not Statistically Significant]

Fertility Level	Central Residence	Non-Central Residence	Total
Low	7	15	22
Average	7	7	14
High	5	9	14
Total	19	31	50

What is the pattern underlying how major ken women achieved relatively high fertility? The original life-history data indicate that these women who lived in the Central area during their later reproductive years were able to have more children. Specifically, major ken women who achieved high fertility were likely to be those who had children at or after age thirty-five, and in particular lived in the Central area during their thirties and early forties. Out of forty-eight major ken women, twenty-one women achieved a high fertility of five or more children, and ten of those women (47.6%) had children at or after age thirty-five. Of those ten women, eight lived in the Central Seattle area for the majority of their late twenties, thirties, and early forties; all them, except one, had at least one pregnancy during their late thirties and/or early forties while residing in Central Seattle.³ Conversely, there were eighteen major ken women who had low fertility (less than four live-births, including two childless cases), and only one gave birth to a child at or after age thirty-five. Thus, it appears that major ken women who had children in their later years were likely to have high fertility.

Interestingly, minor ken women showed a different pattern. On one hand, a small number of them achieved high fertility, reflecting a pattern similar to that of major ken women. Five of these cases had more than four children while residing in Central Seattle for an extended time (coded "Central"), and their high fertility was the result of giving birth to children in their latter reproductive years. On the other hand, a good portion of minor ken women did not achieve high fertility despite the fact that they gave birth to children at a relatively late age. There were twenty minor ken women who had children at or after age thirty-five, and eight of them had low fertility ($8/20=40\%$). This number is notably high, especially considering that there were twelve major ken women who experienced childbirth at or after age thirty-five and only two had low fertility ($2/12=16.7\%$).

One noteworthy characteristic of the eight minor ken women is their relatively late reproductive start; none of them had their first child before age twenty-five (their ages at marriage varied from twenty to twenty-eight). Among those women, four of them took more than three years to have their first child after marriage, and they all worked full-time during those years. Their late reproductive start was probably a consequence of working full-time in their twenties, eventually resulting in low fertility. In contrast, of the twelve major ken women who experienced childbirth at or after age thirty-five, nine of them had their first child before age twenty-five (their ages at marriage varied from seventeen to twenty-five). Thus, with respect to minor ken women, having children at or after age thirty-five was not a factor that led to high fertility; perhaps, their births at later ages were a product of late onset of reproduction.

Another question to consider is what factors influenced the fertility of minor ken women? It appears that their employment status showed more of a correlation to their fertility than was the case for major ken women (see Table 4). Crosstab analyses indicate that when minor ken women were more fully employed in their late twenties ($p=.050$), all of their thirties ($p=.043$, $p=.016$), and their early forties ($p=.046$), respectively, they were significantly more likely to have lower fertility. In comparison, such an association was only significant for major ken women in their late thirties ($p=.018$) and early forties ($p=.017$).

Table 4. Significance Values for the Association Between Employment and Fertility According to Age Period and Ken Affiliation

Age Period	Major Ken	Minor Ken
20–24	Not significant	Not significant
25–29	Not significant	0.050
30–34	Not significant	0.043
35–39	0.018	0.016
40–44	0.017	0.046

The difference based on ken affiliation leads to the implication that the full-time employment of minor ken women during their late twenties and early thirties might have kept them from having more children during those years. An examination of the original life-history data has revealed that there were eighteen minor ken women who worked full-time in their late twenties and early thirties, and including one childless case, eleven of them (61.1%) had low fertility; the others included five cases of average fertility and two cases of high fertility. This pattern shows that full-time employment during those early to middle reproductive years may have had a negative influence on fertility overall. An interesting finding is that among those eleven women with low fertility, only three of them had children in their early thirties and beyond, whereas nine had children in their late twenties. This means that many of the low fertility women stopped having children after their twenties, perhaps due to the burden of having to work full-time.

For example, one woman, who married at age eighteen and immigrated to the U.S. at age nineteen, worked part-time for the first five years of her married life during which she had two children. She started working full-time at age twenty-four and did not have any additional children. She continued to work full-time until she moved to the Minidoka camp at age forty-one. Another woman married and immigrated to the U.S. at age twenty-one and began a sewing school. While she was working full-time, she had two children at ages twenty-two and twenty-six, respectively. She continued to work without further children until she was forty-four when she too had to move to the Minidoka camp. Another similar case is a woman who married and immigrated at age twenty-one and began working full-time as a restaurant waitress during which time she had three children at ages twenty-two, twenty-four, and twenty-seven, respectively. Her full-time work continued until she moved to the Minidoka camp at age forty-five. These examples suggest that minor ken women who worked full-time in their thirties had more of a struggle reproductively. Although the significance value for the crosstab analysis of the relationship between a minor ken woman's employment status in their early thirties and their fertility was not remarkably strong ($p=.043$), the original life-history data supports the interpretation that their full-time employment during this age period had a crucial negative effect on the fertility.

The association can also be understood as relating to effective fecundability, which is defined as “the monthly or cycle-wise probability of conception that results in a live birth” (Holman and Wood 2001:18). It is probable that the effective fecundability of most Issei women was declining especially during their thirties, so those who did not have access to a strong, supportive community network were more directly influenced by this decline. The net result for these women, therefore, was that they had fewer children during their reproductive lives.

A close examination of the original life-history data has also revealed a pattern associated with high fertility for some of the minor ken women. As the crosstab results indicated, minor ken women who achieved high fertility were generally those who had little to no employment after they married. There were fourteen minor ken women who had more than four live-births, and ten of them (71.4%) had either no employment experience or very limited employment during their reproductive years regardless of their residential location. Also, interestingly, those fourteen women included five minor ken cases who achieved high fertility while living in Central Seattle during most of their reproductive years (up to their early forties, addressed above). None of these women worked full-time during their child-bearing years. For example, one with exceptionally high fertility did some part-time work in her twenties during which she had four children; she stopped working by age thirty and had four additional children. Another woman who had seven live-births only started working full-time after she had her last child at age thirty-seven. These cases indicate once again that a significant factor affecting the fertility of minor ken women was their employment status rather than where they lived.

Conclusion

The paths taken to achieve high fertility by major and minor ken women differed. Major ken women with high fertility were those who lived most of their reproductive lives in Central Seattle and continued to have additional children in their thirties and/or beyond. This finding supports the interpretation that major ken women were able to receive more effective support living in this Central community because of their ken affiliation. Therefore, it was easier for them to achieve high fertility. In comparison, the amount of time minor ken women spent in Central Seattle was not a factor related to their fertility. Some of those women might also have received community support, but it was not enough to have made a significant, positive contribution to their fertility.

A factor significantly influencing the fertility of minor ken women was their employment status. Those who worked little throughout their reproductive years, especially during their late twenties and early thirties, were the ones most likely to have achieved high fertility. Conversely, those who worked a lot had significantly fewer children. Hence, it seems that compared to major ken women, the access to community support for minor ken was more restricted, and therefore, their employment status affected their fertility more directly. This direct influence of employment on their fertility might have been particularly the case for those in their thirties during which their fecundity is expectedly on a progressive decline;

the data indicate that minor ken women who worked full-time in their thirties had significantly fewer children.

This study examined the fertility of Issei women by focusing on their ken affiliation, residential location, and employment status. There are, of course, other variables that may have influenced the fertility of those women. First, an experience with child-death, still-birth, or miscarriage might have affected the fertility and/or number of live-births achieved by some women. For example, some women who had to endure child-death might have ended up with a greater number of live-births in an effort to compensate for their losses. Also, the occupation and income level of a woman's husband and their overall household socioeconomic status might have significantly influenced their fertility, especially because those factors are likely to have influenced whether a woman had to work. If a woman's husband had a high income and the household economy was prosperous, she would not have to work. Moreover, their fertility might have also been influenced by broader social events, such as anti-Japanese immigration laws and movements, the Great Depression, and internment in the camps during WWII. Future studies should consider examining some of these aspects to widen and deepen our understandings of the life strategies of immigrant Issei women in the early twentieth century U.S.

Despite the need for future studies, this study has contributed to enhancing our anthropological understanding of immigrant fertility, focusing on the issue of how women from the same country pursued differing fertility strategies in the host country. Quantitative and qualitative analyses have revealed the overall patterns and individual variation characterizing the fertility among these women and provided an interpretation of those varying patterns with respect to their biological capacity and socio-cultural context.

NOTES

1. There were seven women who experienced divorce or death of a husband and did not remarry before age forty-five. Those women were included in the analyses because including or excluding them did not significantly change the statistical results.
2. Those four childless women were included in the low fertility category because there were no data on whether they and/or their husbands were infertile or had any particular conditions that contributed to their childlessness. Their respective marriage situations varied. One woman divorced when she was twenty-four years old after being married for four years, and she never married thereafter. Another woman's husband died when she was thirty-six years old after having been married for sixteen years, and she re-married at age forty-three. A third woman married at age twenty-six and continued to be married for thirty-five years to her husband, who died when she was sixty-one years old. The fourth woman married at age twenty-six, and then she and her husband separated when she was thirty-nine years old because they were sent to different camps during World War II. After the war, they were re-united and lived together until his death at which time she was fifty-three years old.

3. One exceptional case was a woman who had seven live-births. She was married at age twenty-five and lived outside the Central area for most of her late twenties and early thirties during which she had four children. She moved to the Tule Lake camp at age thirty-three and lived there until she was thirty-seven, and during those years she gave birth to three children. After the war, she moved to Central Seattle.

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