Chapter 15

Linkage to Early Life Census Records – United States

An attempt will be made to link all US-born probands, foreign-born probands who immigrated to the United States prior to 1930, and their siblings to publicly available U.S. Census manuscript records. Census manuscript records are available online via Ancestry.com and in the National Archives for all U.S. Censuses from 1790 to 1930.

The purpose of the census linkage is three fold:

First, census linkage will be used to assess the accuracy of the reported age of probands and their siblings. Accurate age reporting is critical for studies of long lived individuals. Yet it is well known that age misreporting is common among elderly U.S. residents. Previous research has shown that in the absence of a birth certificate an early life census record provides highly valuable information for age verification. We can also assess the quality of age reporting on census records based on information for probands who have a birth certificate.

Second, the census linkage will provide information on the number of Proband's siblings in the household at the time of the census and will allow us to compare this information with the information obtained from the Pedigree Information form.

Third, census manuscript records contain information on demographic and socio-economic characteristics of the probands' family of origin, which will complement the phenotype measures obtained via proposed data collection instruments. Early childhood characteristics of the probands can also be compared to those of the entire birth cohorts to which the probands belong. This comparison will use publicly available data from Census Public Use Micro Sample Data files (PUMS) and will provide insights to whether the childhood conditions of the probands differ from those of other members of their birth cohorts.

Table 1 summarizes information available from early life census manuscript records for all individuals enumerated in the Proband's household.

The census linkage will be carried out at the Population Studies Center (PSC) of the University of Pennsylvania where project affiliated staff have previous experience with census record linkage. Information needed for the linkage is collected for probands and their siblings in Panel 2 – Socio-Demographic Information.

Trained research assistants will conduct the linkage following protocols developed in prior linkage studies carried out at the PSC. Key information used for the linkage include names of parents, siblings and probands, Proband's place of birth, and Proband's place of residence prior to age 16. Age and year of birth are excluded as matching criteria because one of the purposes of the record linkage is the quality of age reporting. However, year of birth and age will be used to determine in which census the search will begin: the census closest to the time when the individual should have been age 10 if age reporting is accurate. If a match is not located in the first census that is searched, individuals will be searched in more than one census whenever possible. The ability to search in more than one census improves linkage success. Whenever possible, we will obtain information on early life conditions for probands and their siblings when they were between ages 0-10. Searches will be first conducted utilizing online manuscripts records available from Ancestry.com. When an online match cannot be found, microfilm records of census manuscripts available in the National Archives in Philadelphia will be inspected to ensure that no potential matches are missed.

Table 1: Information recorded on the census manuscript, 1920 and 1930 U.S. Censuses.

Characteristics	Census 1920	Census 1930
Socio-demographic Characteristics		
Name	X	X
Address	X	X
Relationship to the head of the family	X	X
Place of birth	X	X
Mother tongue	X	X
Sex	X	X
Race	X	X
Age at last birthday	X	X
Marital status	X	X
Age at first marriage		X
Year of immigration to the U.S.	X	X
Naturalized citizen or alien resident	X	X
Year of naturalization	X	
Ability to speak English	X	X
Education ¹	X	X
Occupation	X	X
Industry of employment	X	X
Current employment status		X
Type of employment: employer, salary or wage worker, or working on own account	X	
Veteran status		X
Housing characteristics		
Home owned or rented	X	X
If rented, free or mortgaged	X	
Value of home if owned, or monthly rental if rented		X
Radio set		X
Does the family live on farm		X

 $^{^{1}}$ a) whether the individual has attend school at any time since September 1st 1919 (1920 Census) and September 1st 1929 (1930 Census); b) whether the individual can read and write.