Health and Health Habits among Mexicans Immigrants to the United States: A Time Use Perspective

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Introduction

- A third of all foreign-born population and two-thirds of all foreign-born Hispanic people are from Mexico.
- The health status of such a large segment of the population has important repercussions on their economic well-being and that of their families and the areas they live.
- There is extensive scientific literature documenting the health status of Mexican immigrants but not its causes.
- This study contributes to the literature on the determinants of the health trajectories of Mexican immigrants from a time use perspective.

Questions

- *How do the eating and physical activity behaviors of Mexican immigrants change with time since arrival in the United States*?

- *How do these changes relate to modifications of their health status*?

Data

- **Health and Eating Module of the American Time Use Survey Data Extract Builder (ATUS-X)***
- Years 2006, 2007, and 2008
- **The sample includes:**
  - ***First generation Immigrants:*** Mexicans who migrated to the U.S. at age 16 or older.
  - ***Three comparison groups:***
    - Non-Hispanic Whites
    - Non-Hispanic Blacks
    - Mexican who migrated as children and US-born Mexicans

* Katharine G. Abraham, Sarah M. Flood, Matthew Sobek, and Betsy Thorn. 2008. American Time Use Survey Data Extract System: Version 1.0 [Machine-readable database]. Maryland Population Research Center, University of Maryland, College Park, Maryland, and Minnesota Population Center, University of Minnesota, Minneapolis, Minnesota.

Outcomes Considered

- **Health Status**:

  It is self-reported and measured on a scale of 1 to 5:
  1=excellent, 2=very good, 3=good, 4=fair, 5=poor

- **Health Behaviors:**
  - Primary Eating and Drinking
  - Secondary Eating
  - Secondary Drinking

  - Food Preparation and Cleanup
  - Grocery Shopping

  - Respondent Usually does the Meal Preparation
  - Respondent Usually does the Grocery Shopping

  - Sports, Exercise, and Recreation
  - Socializing, Relaxing, and Leisure

Descriptive Statistics

Health Status by Race/Ethnicity and Immigration Status ATUS, 2006-2008							
	Males				Females		
	No. Obs	Mean	Std. Err.		No. Obs	Mean	Std. Err.
Males							
Non-Hispanic Whites	8,569	2.38	0.01		10,857	2.37	0.01
Non-Hispanic Blacks	1,293	2.66	0.04		2,129	2.81	0.03
US-born Mexicans	798	2.61	0.05		916	2.71	0.05
Mexican Immigrants	409	2.89	0.06		532	2.99	0.05
Years Since Migration							
0-5	29	3.01	0.17		57	2.75	0.11
5-10	101	2.81	0.13		148	2.90	0.08
10-15	68	2.74	0.13		99	2.82	0.11
15-20	60	2.89	0.17		93	2.92	0.10
20-30	95	2.90	0.13		71	3.34	0.17
30-60	56	3.13	0.21		64	3.66	0.13

Source: Author Calculations (ATUS-X)

Note: Health Status is self-reported and measured on a scale of 1 to 5: 1=excellent, 2=very good, 3=good, 4=fair, and 5=poor

Estimation Strategy

$$H_{it} = \beta' X_{it} + a_1 \mathrm{YSM}_{it} + a_2 (\mathrm{YSM}_{it})^2 + FIRST + K_t + u_{it}$$

Where for individual *i* in year *t*:

H: Health Status or Health Habits

X: age, age^2, education, marital status, number of adults, number of children, children 6 and younger, employment status, full time indicator, overtime indicator, hourly wages, family income level, MSA size, and region.

YSM, YSMSQ: years since migration (equal to 0 for natives)

FISRT: first generation indicator for respondent.

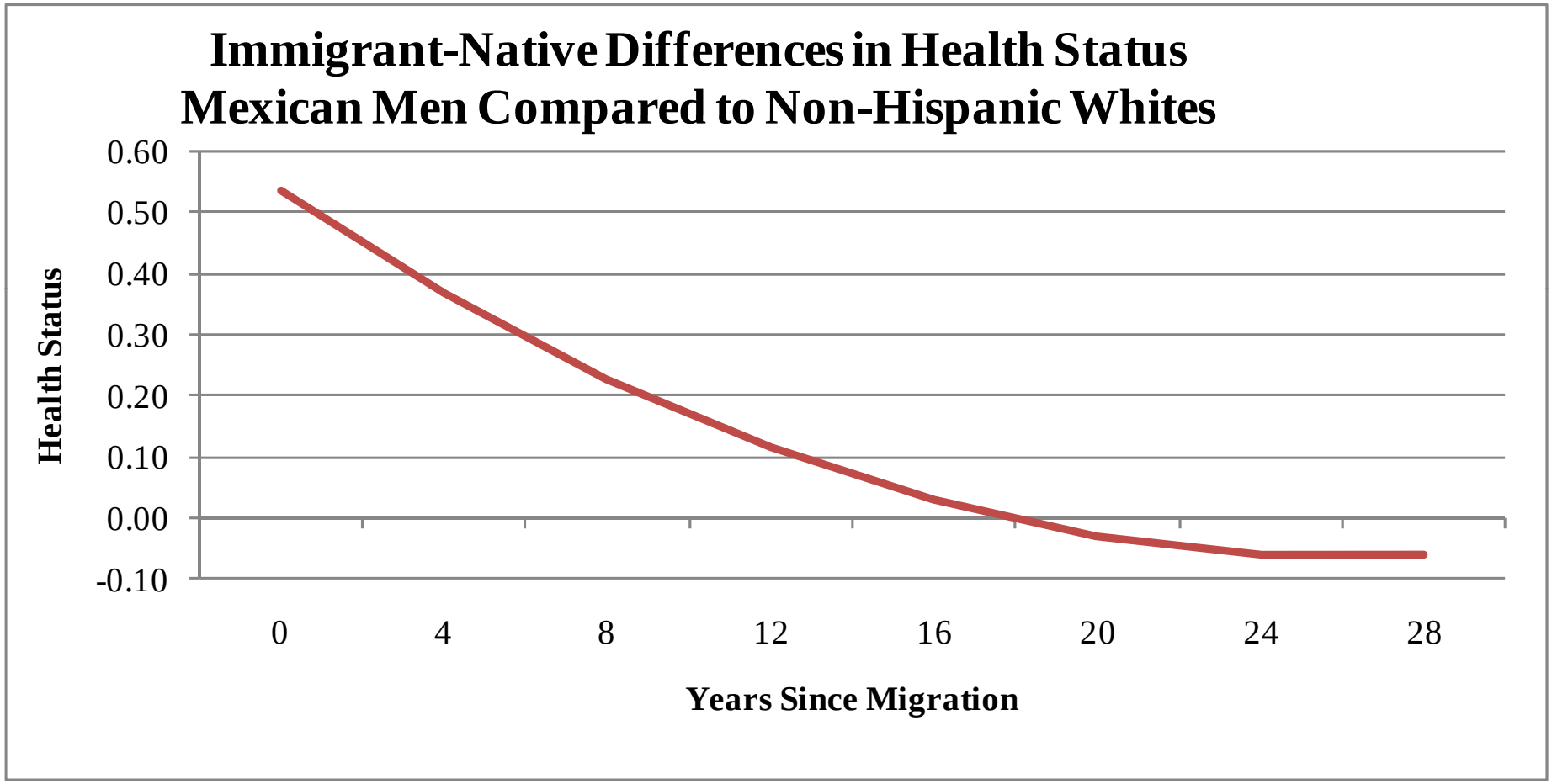
k: year fixed effect.

- I do not include cohort of arrival effects in the regression because I only have 3 years of data and I can only define cohorts of arrival in five year intervals.
- This limits my ability to separately identify cohort and assimilation effects .

Estimation Strategy

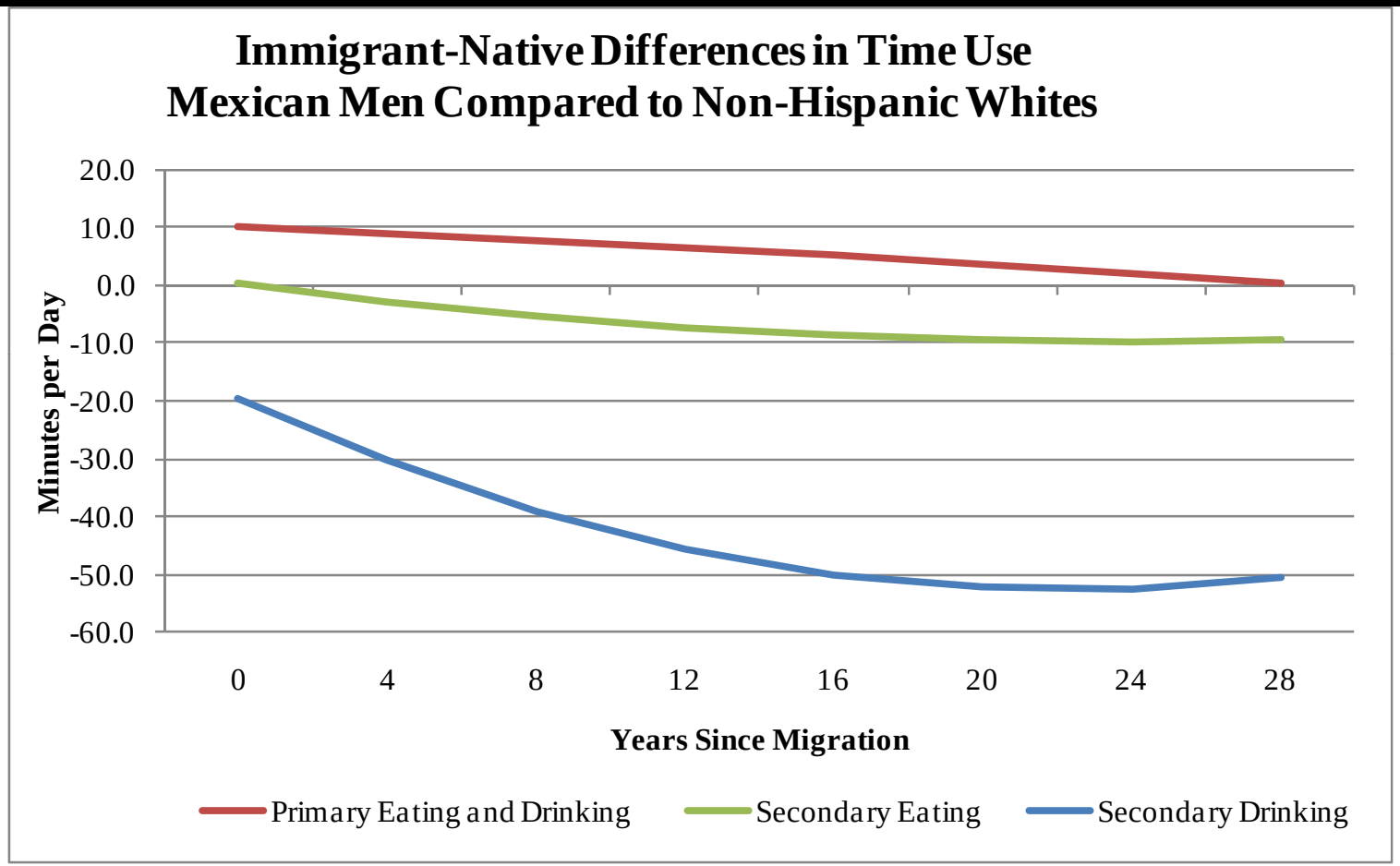
- For each outcome of interest, I estimate the previous equation separately for Mexican men and women, using NH whites, NH blacks, and US-born Mexicans as reference groups.
- I use ordinary least squared (OLS) regressions for self-reported health status and minutes per day spent on a particular activity.(Stewart 2009).
- I use logistic regressions when analyzing the binary indicators of whether the person usually does the food shopping or the meal preparation.
- Standard errors are computed by Successive Difference Replication methods using Health and Eating Module weights.
- There are ten outcomes of interest and and 6 regressions per outcome, for a total of 60 regressions.

Results: Table 5
Years since Migration Effects : Men relative to NHW



- Poorer health status at arrival. Approximately half a standard deviation (0.53 pt).
- The gap closes and becomes insignificant after 12 years in the country

Results: Table 5
Years since Migration Effects : Men relative to NHW

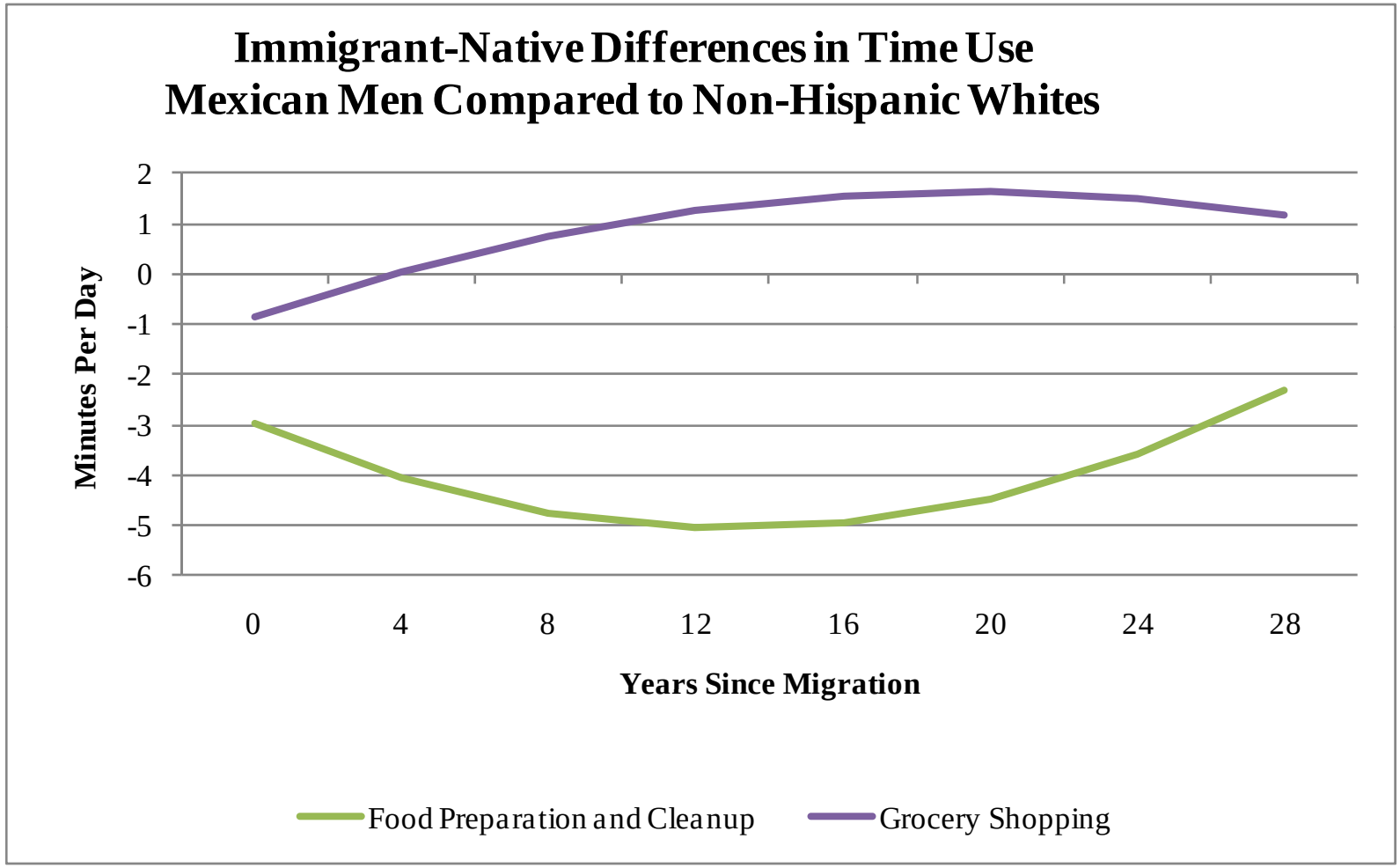


•At arrival they devote 9 minutes more in primary eating and drinking and the same amount of time to secondary eating and drinking.

•Gap in primary eating a drinking closes after 12 years.

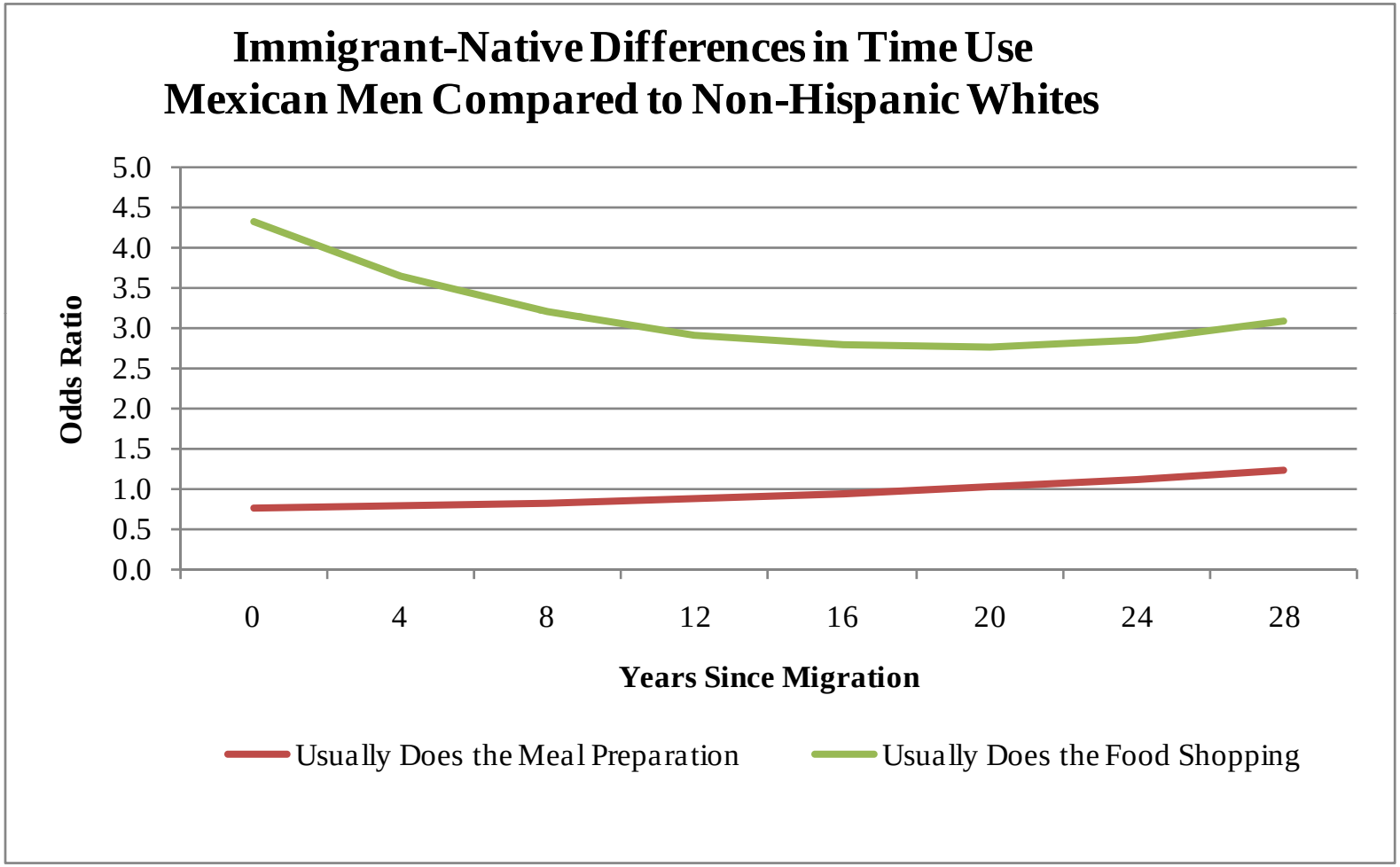
•After 16 years devote 9 and 50 minutes less to secondary eating and drinking, respectively.

Results: Table 5
Years since Migration Effects : Men relative to NHW



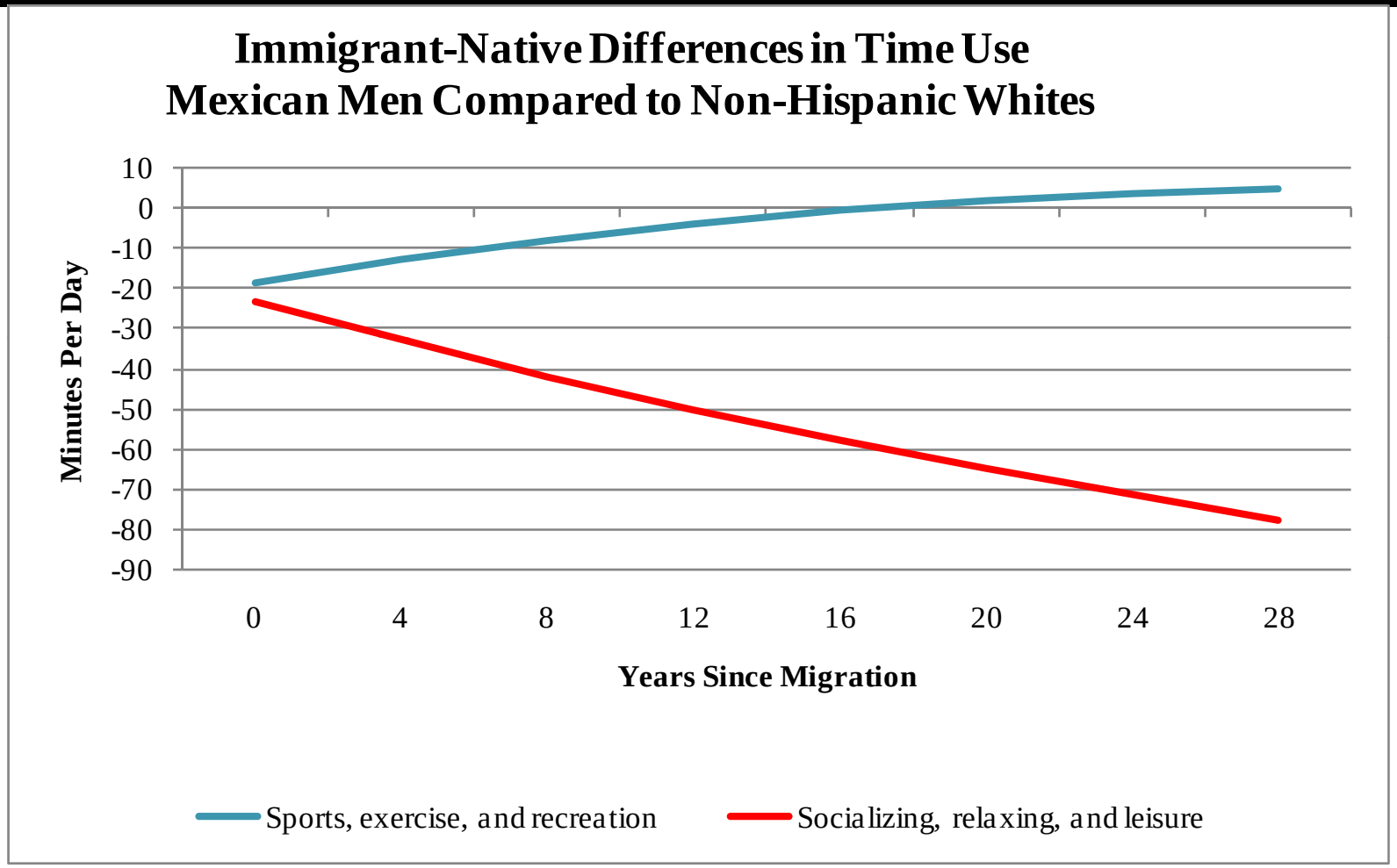
• There are no differences in the amount of time immigrant men devote to grocery shopping and food preparation, regardless of years since migration.

Results: Table 5
Years since Migration Effects : Men relative to NHW



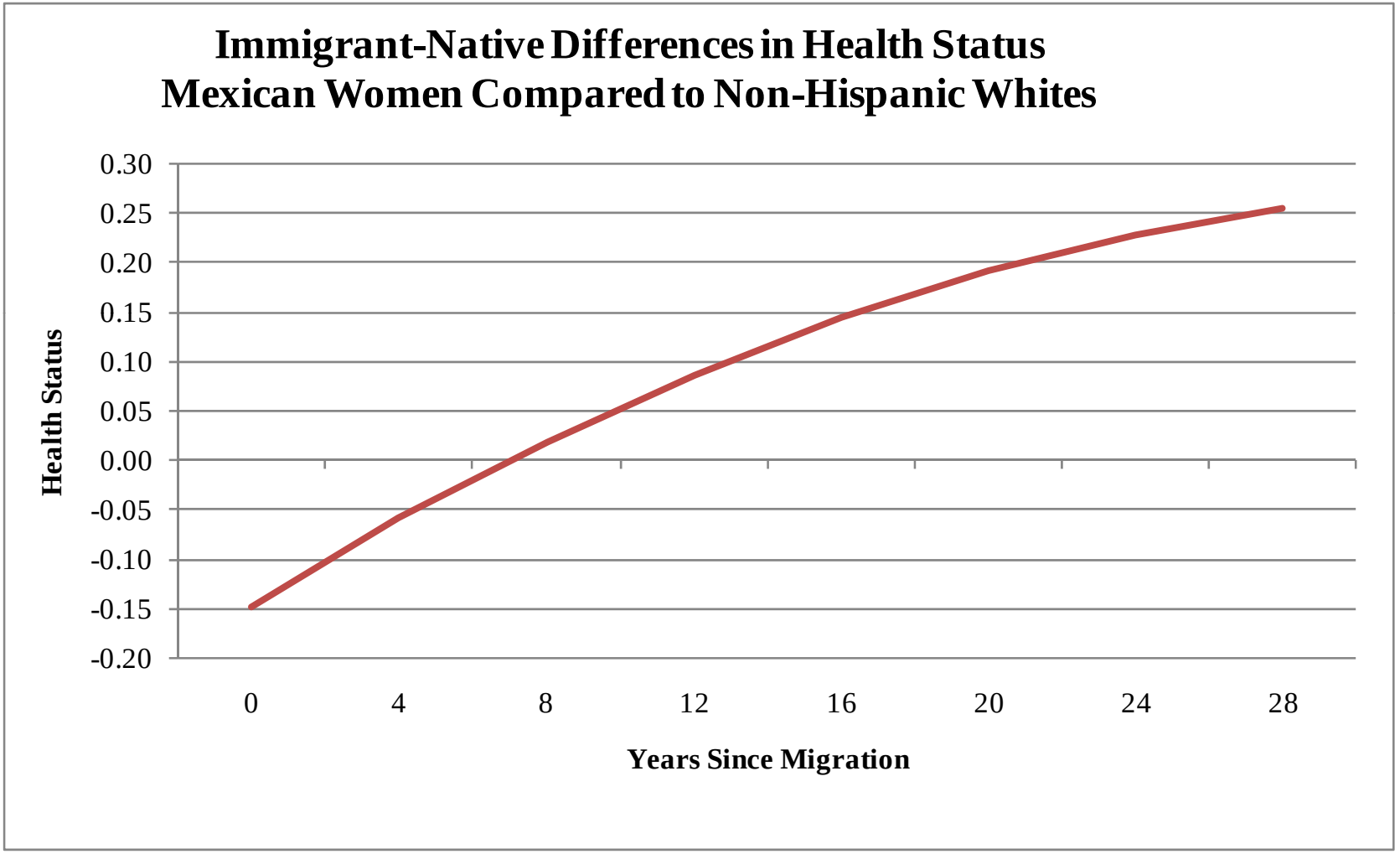
- No significant differences in the odds of usually doing the meal preparation.
- Immigrants have on average 4.3 times higher odds of usually doing the grocery shopping. Goes down with years in the country but remains significant.

Results: Table 5
Years since Migration Effects : Men relative to NHW



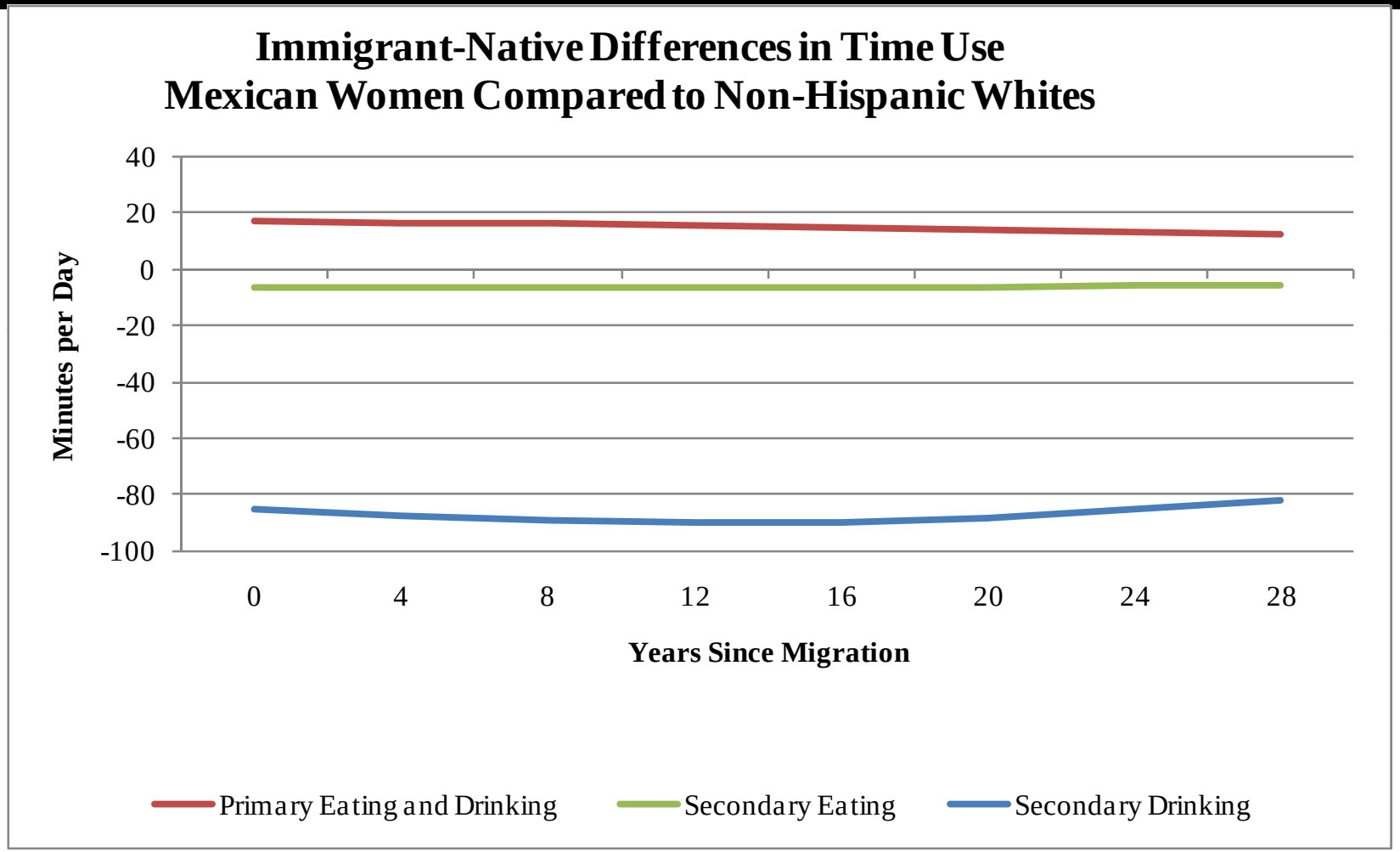
- 19 minutes less to sports, exercise, and recreation at arrival. Gap in exercise closes after 12 years,
- No significant differences in leisure at the time of arrival, but devote 71 min less after 24 years.

Results: Table 6
Years since Migration Effects : Women relative to NHW



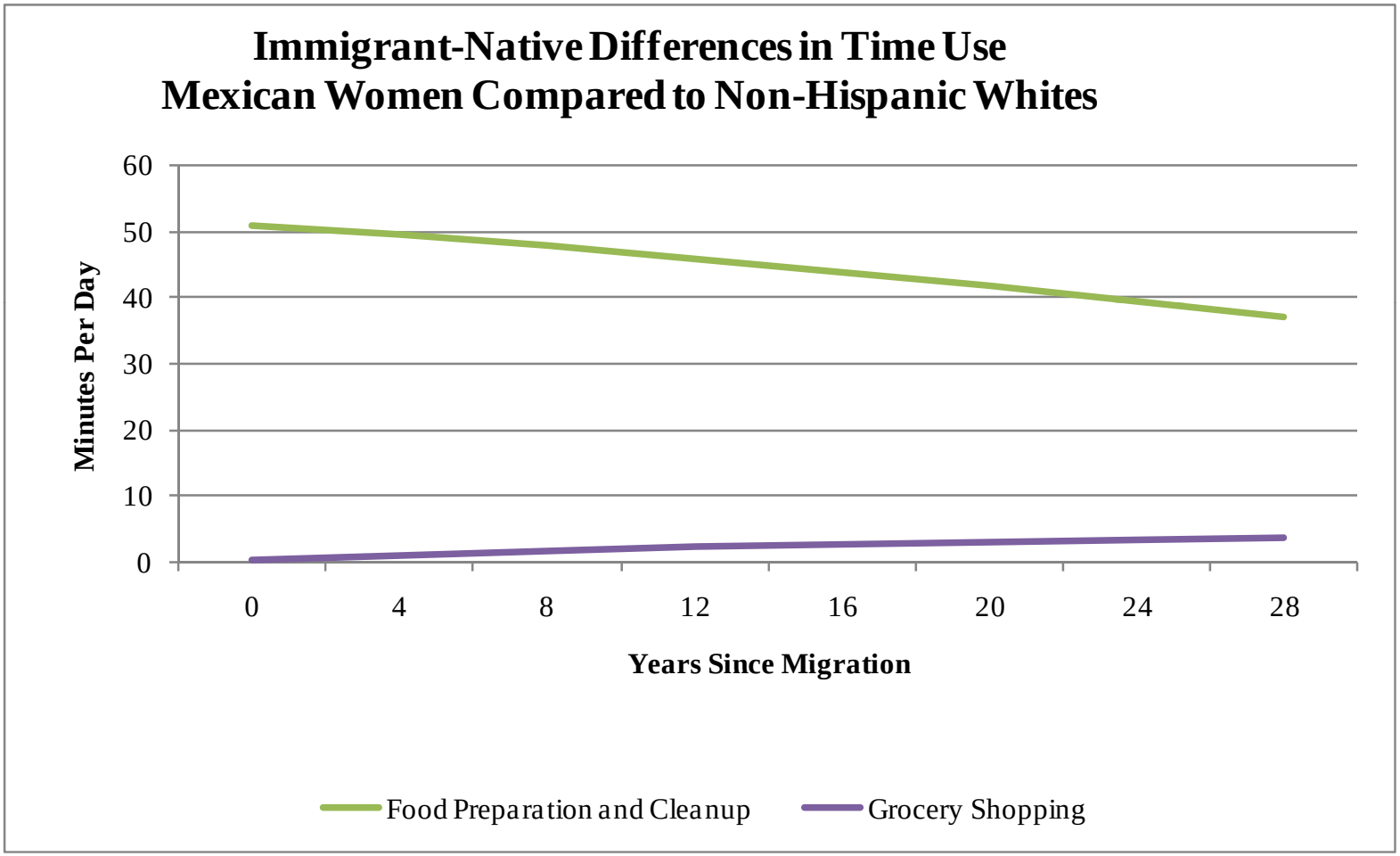
- Not significantly different at the time of arrival but deteriorates with time in the U.S.
- The difference becomes significant after 16 years in the country

Results: Table 6
Years since Migration Effects : Women relative to NHW



•17 minutes more to primary eating and drinking at arrival. It goes down with YSM
•7 and 85 minutes less to secondary eating and drinking, in that order. These gaps remain roughly constant with time in the US.

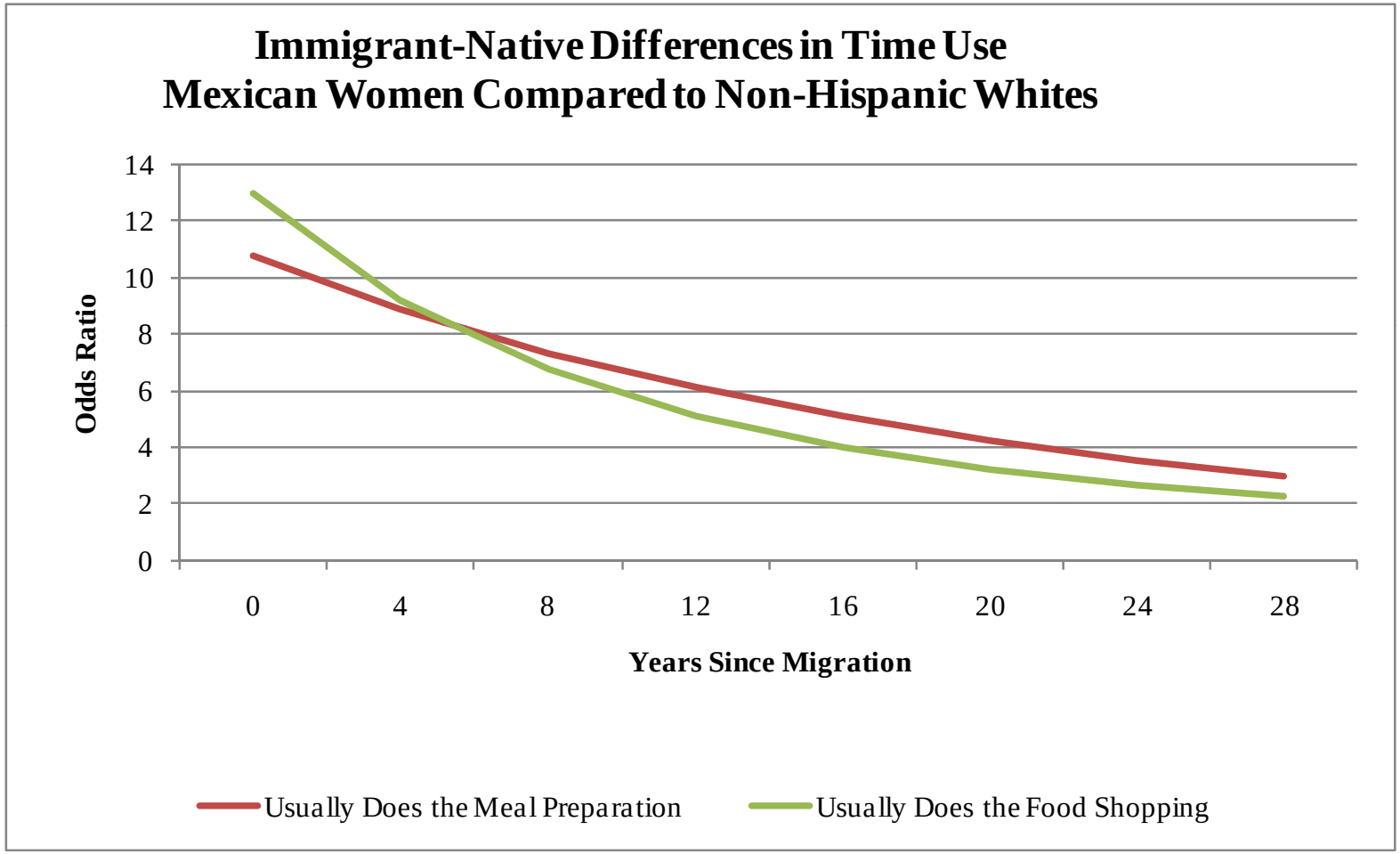
Results: Table 6
Years since Migration Effects : Women relative to NHW



•51 minutes more to food preparation and clean up at the time of arrival, but this gap closes slightly with years since migration.

•No significant differences in time devoted to grocery shopping.

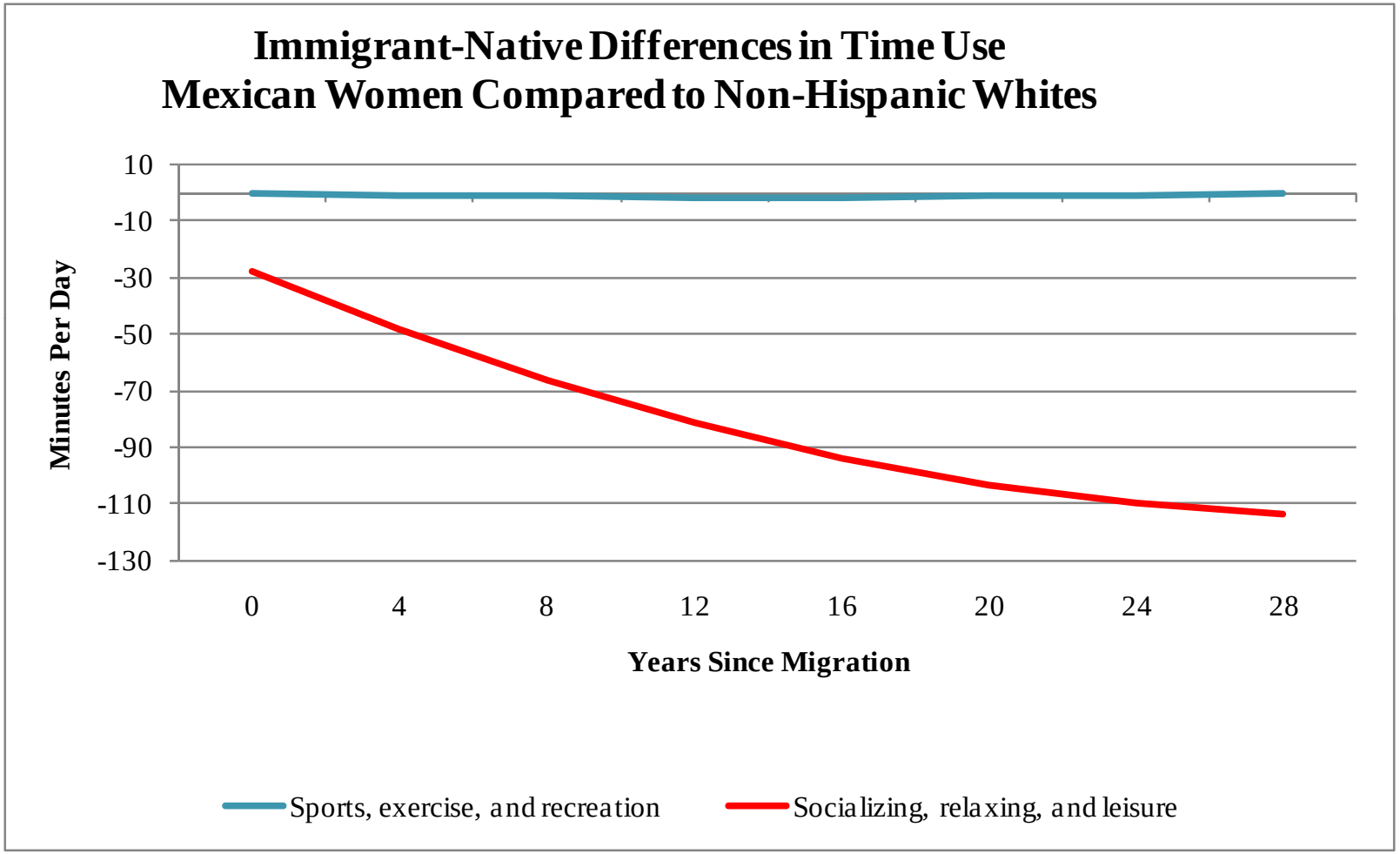
Results: Table 6
Years since Migration Effects : Women relative to NHW



• At arrival, immigrant have 11 times higher odds of usually preparing meals, and 13 times higher odds of usually doing grocery shopping.

•The gaps close but remain significant with years since migration.

Results: Table 6
Years since Migration Effects : Women relative to NHW



- No difference in the amount of time devoted to sports, exercise, and recreation.
- At arrival devote 30 minutes less to passive leisure activities. Gap increases to 110 minutes after 24 years in the country.

Years since Migration Effects : Mexican Immigrants relative to NHB and US born Mexicans

- **Men:**

•The results are qualitatively similar when using NH Blacks as a reference group.
•Foreign and US-born Mexican men have very similar health and health behavior patterns. Only exception is the amount of time devoted to socializing, relaxing and leisure.

- **Women:**

•The Health behaviors are qualitatively similar when using NH Blacks or US-born Mexicans as a reference group.
•Mexican immigrants report the same levels of health status than NH Blacks and US-born Mexicans, regardless of the amount of time the foreign born have been in the US.

Association Between Health Status and Health Behaviors

Association Between Heath Status and Healthy Habits Mexican Immigrants Compared to US Natives				
Self-reported Health Status	**Men**		**Women**	
Primary Eating and Drinking	-0.0004		-0.0007	***
	(0.0003)		(0.0002)	
Food Preparation and Cleanup	0.0001		-0.0003	*
	(0.0004)		(0.0002)	
Grocery Shopping	-0.0001		-0.0002	
	(0.0008)		(0.0004)	
Usually Does the Meal Preparation	0.0325		-0.0844	**
	(0.0322)		(0.0370)	
Usually Does the Food Shopping	-0.0480	*	-0.1360	***
	(0.0286)		(0.0387)	
Secondary Eating	-0.0004		-0.0004	*
	(0.0003)		(0.0003)	
Secondary Drinking	0.0002	***	0.0001	**
	(0.0001)		(0.0001)	
Sports, exercise, and recreation	-0.0007	***	-0.0016	***
	(0.0002)		(0.0002)	
Socializing, relaxing, and leisure	0.0005	***	0.0004	***
	(0.0001)		(0.0001)	
R-sq	0.1860		0.2230	
Source: Author Computations, ATUS-X				
Standard errors in parentheses				
* p<0.10, ** p<0.05, *** p<0.01				

Summary of Results: Men

1. Overall **evidence of healthy assimilation** for immigrant men

   i. Changes in behavior significantly associated with better health

      - Less time devoted to secondary drinking
      - Less time devoted to passive leisure activities.
      - More time devoted to sports exercise and recreation.

   ii. Changes in behavior significantly associated with poorer health

      - Reduction in the odds of usually doing the grocery shopping

Summary of Results: Women

1. Overall **evidence of unhealthy assimilation** for immigrant women

   i. Changes in behavior significantly associated with better health

   - More time devoted to secondary eating.
   - Less time devoted to passive leisure activities.

   ii. Changes in behavior significantly associated with poorer health

   - Less time devoted to food preparation and cleanup
   - Less time devoted to primary eating and drinking
   - Reduction in the odds of usually doing the grocery shopping
   - Reduction in the odds of usually doing the meal preparation

Thank You!