

**Assimilation Effects beyond the Labor Market:
Time Allocations of Mexican Immigrants to the U.S.**

Andres J. Vargas
Department of Economics
Texas Tech University

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Introduction

- The bulk of research on the integration of immigrants to the U.S. Economy has primarily focused on the labor market assimilation process.

Questions

How do Mexican immigrants patterns of time use compare to that of U.S. natives?

What happens to the amount of time immigrants devote to other activities as they assimilate to the labor market.

Two Types of Assimilation

- *Intra-generational*: Years since migration.
- *Intergenerational*: Compares Second and Third generations of immigrants to non-Hispanic natives

Introduction

- We are doing this analysis within a household production framework.
- Within this framework, the size and direction of the husband and wife differences in wages and marginal products in the household determine their patterns of time use.
- Changes in wages and marginal products in the household as the immigrant couple assimilates into the U.S. economy might strengthen or weaken the incentives for specialization in the household altering their patterns of time use.

Data: American Time Use Survey Data Extract Builder (ATUS-X) Years 2003 to 2009:

- **We identify three generations of immigrants:**
 - **First:**
 - *Mexicans who migrated to the U.S. at age 16 or older.*
 - **Second:**
 - *Immigrants from Mexico who arrived when they were younger than 16*
 - *U.S. natives whose parents were Mexican immigrants.*
 - **Third and higher:**
 - *U.S. natives, with U.S. native parents whose ethnic identification is Hispanic of Mexican origin.*
- **We define two comparison groups:**
 - *Non-Hispanic Whites (NHW)*
 - *Non-Hispanic Blacks (NHB)*

Estimation Sample

- We restrict the sample to married couples in which both members are between 16 and 64 years of age.

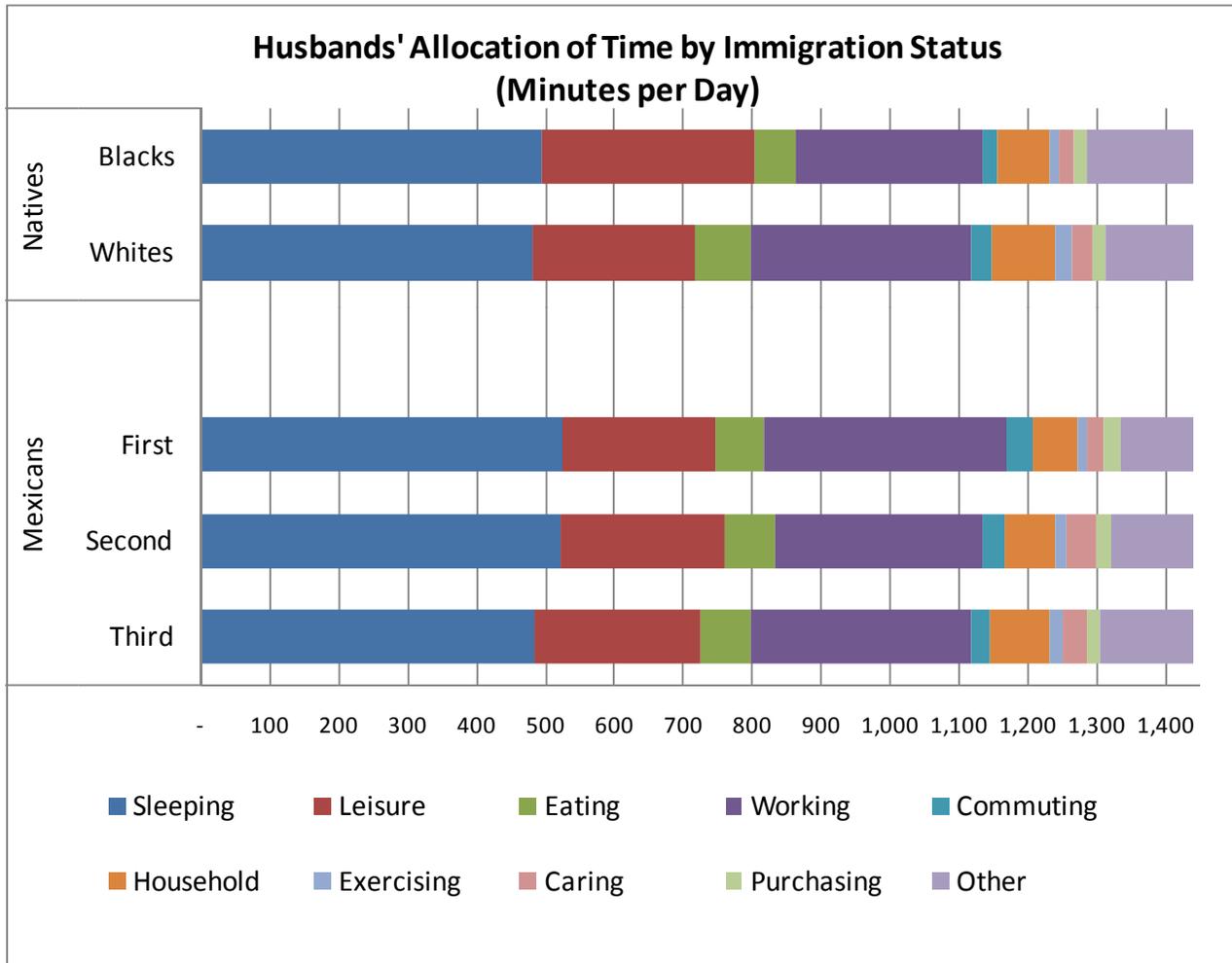
Number of Observations

Immigration Status	Males	Females	Total
NHW	13,003	14,565	27,553
NHB	1,234	1,211	2,453
First	926	887	1,821
Second	558	600	1,159
Third	360	441	797
Total	16,083	17,704	33,787

Activities Considered

- **Market Work**
 - *Working*
 - *Commuting*
- **Household Work**
 - *Household Activities*
 - *Caring for and Helping Household Members*
 - *Consumer Purchases*
- **Personal Care and Leisure**
 - *Sleeping*
 - *Eating and Drinking*
 - *Socializing, Relaxing, and Leisure*
 - *Sports, Exercise, and Recreation*
- **Other**

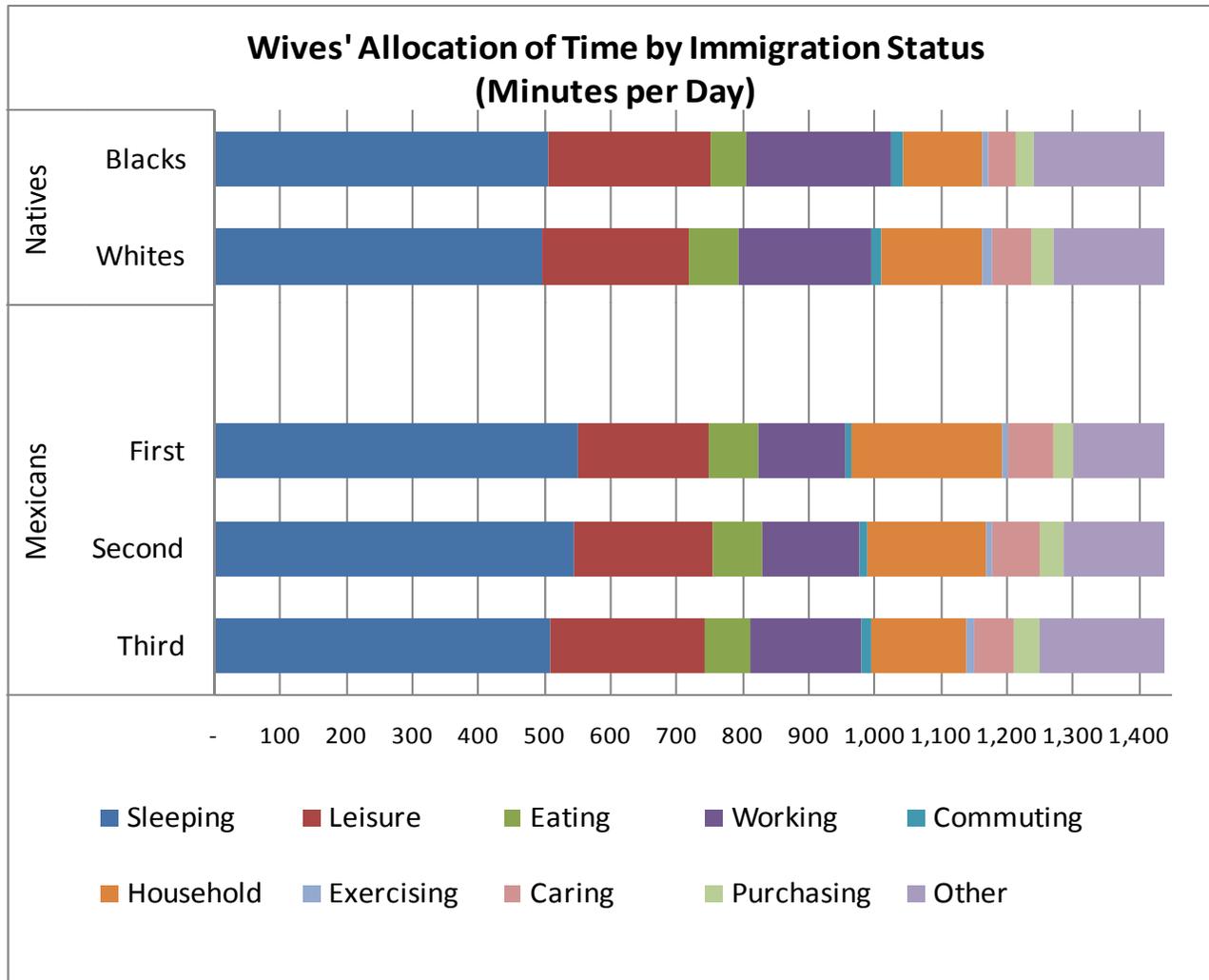
Descriptive Statistics



Husbands spend:

- 8 hours and 11 minutes sleeping,
- 5 hours and 12 minutes working on the market,
- 4 hours and 10 minutes enjoying leisure and
- 1 hour and 19 minutes working on the household.
- These activities account for 79% of the amount of time available in the day.

Descriptive Statistics



Wives Spend:

- 9 hours and 41 minutes sleeping
- 4 hours and 42 enjoying leisure activities
- 3 hours and 53 minutes on market work,
- 3 hours and 46 minutes to household work,
- These activities account for 75% of their allocation of time during the day.

Estimation Strategy

$$A_{it} = \beta' X_{it} + a_1 YSM_{it} + a_2 (YSM_{it})^2 + FIRST + SPFIRST + SECOND + SPSECOND \\ + THIRD + SPTHIRD + K_t + u_{it}$$

Where for individual i in year t :

A: minutes spent doing a particular activity

X: age, age², education of husband and wife, number of adults, number of children, children 6 and younger, urban, region.

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

FIRST, SPFIRST: first generation indicator for respondent and spouse.

SECOND, SPSECOND: second generation indicators.

THIRD, SPTHIRD: third or higher generation indicator.

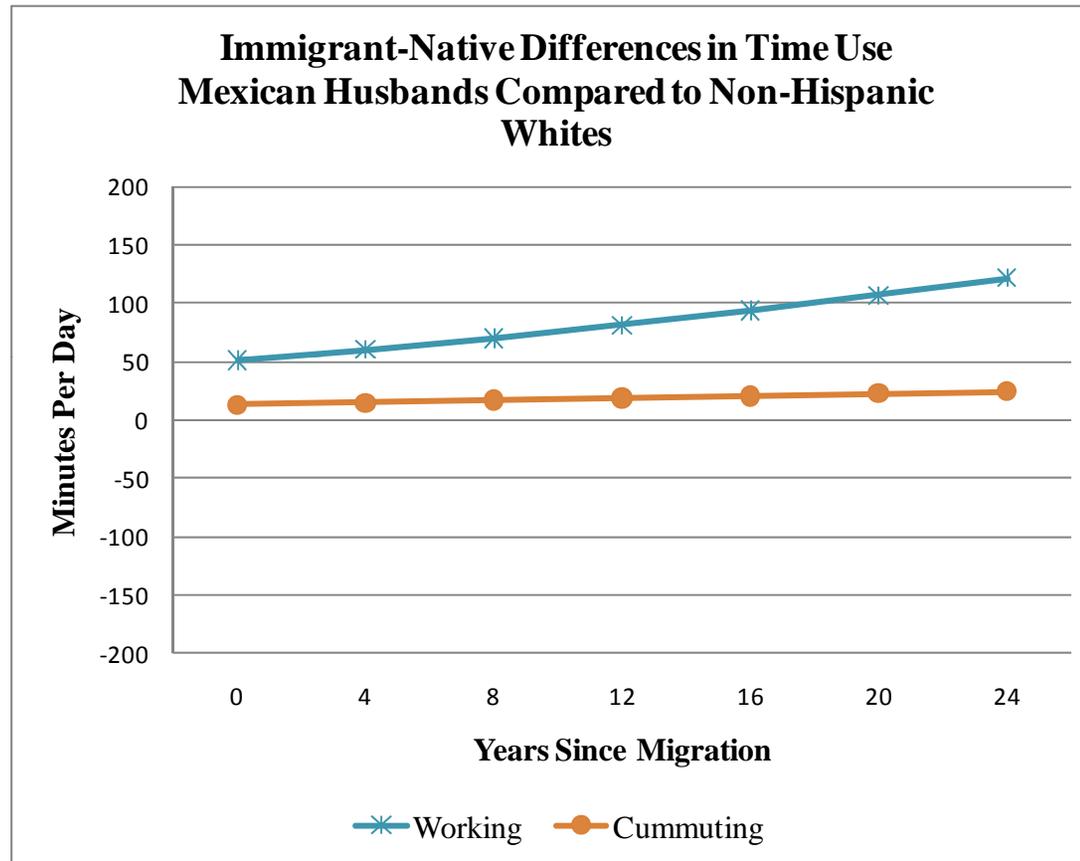
k : year fixed effect.

Estimation Strategy

- We estimate the previous equation using OLS and Tobit regression models.
- We use weights based on the 2006 weighting methodology.
- Standard errors are computed by Successive Difference Replication methods.
- For each activity, we estimate the previous equation separately for Mexican husbands and wives, using non-Hispanic whites and blacks as reference groups
- We concentrate on 9 activities and 4 regressions per activity, for a total of 36 regressions.

Intra-generational Results: Table 4.a

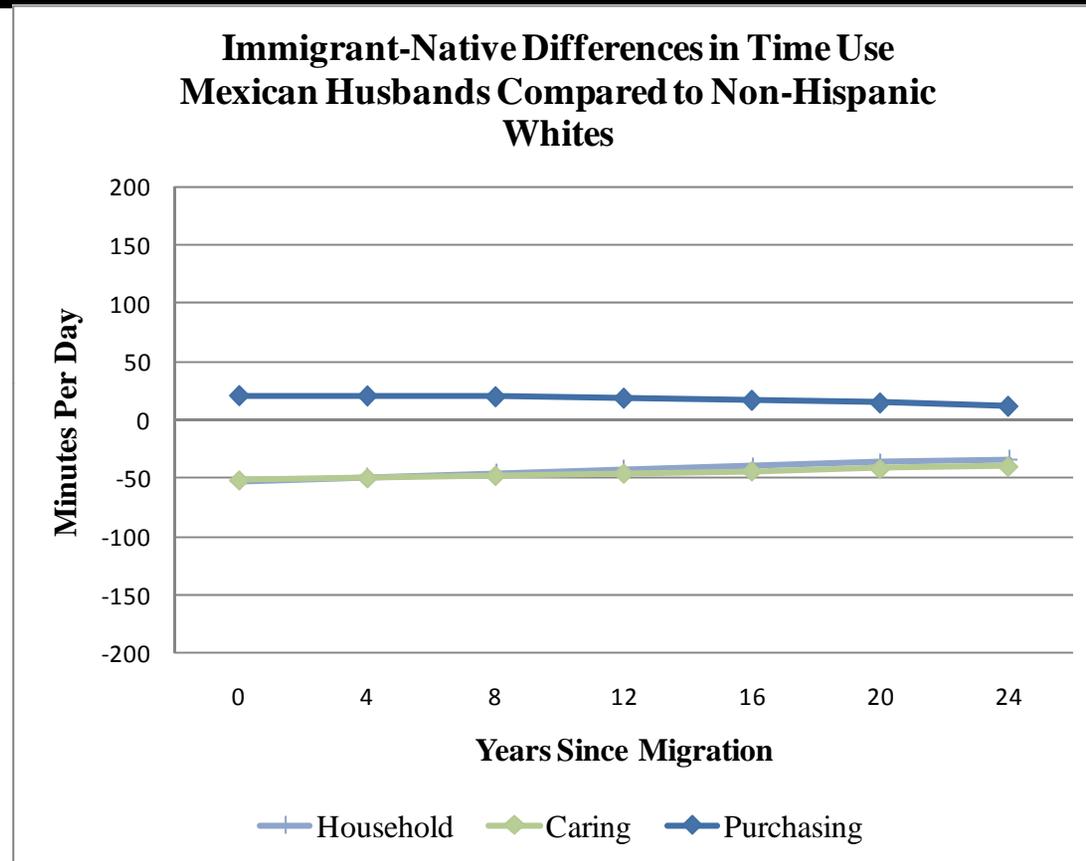
Years since Migration Effects : Husbands relative to NHW



- **At arrival:** No statistical differences in the time allocated to market work or commuting.
- **After 24 years:** Work on the market and commute 121 and 25 minutes more, respectively.

Intra-generational Results: Table 4.a

Years since Migration Effects : Husbands relative to NHW

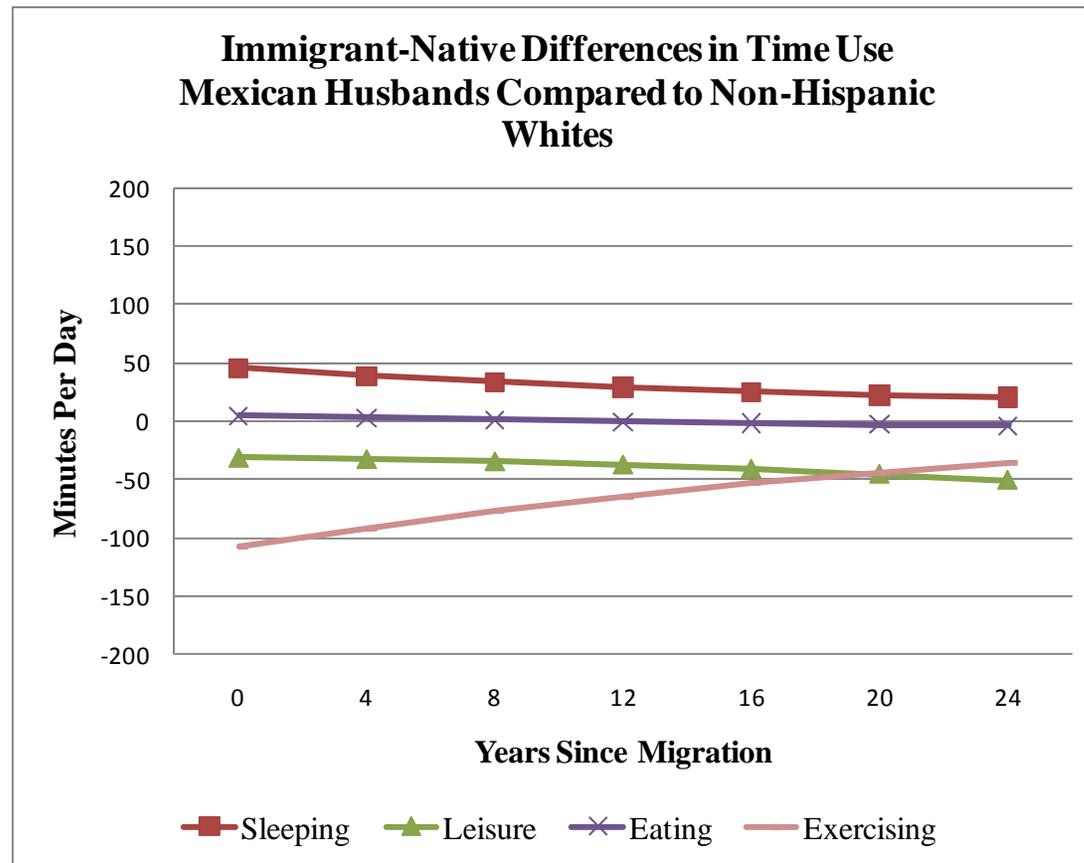


•**At arrival:** 52 and 51 minutes less to household work and care for household members, in that order. 21 more minutes to purchasing.

•**After 24 years:** 33 and 39 minutes less to household work, care for household members, in that order. No difference in purchasing.

Intra-generational Results: Table 4.a

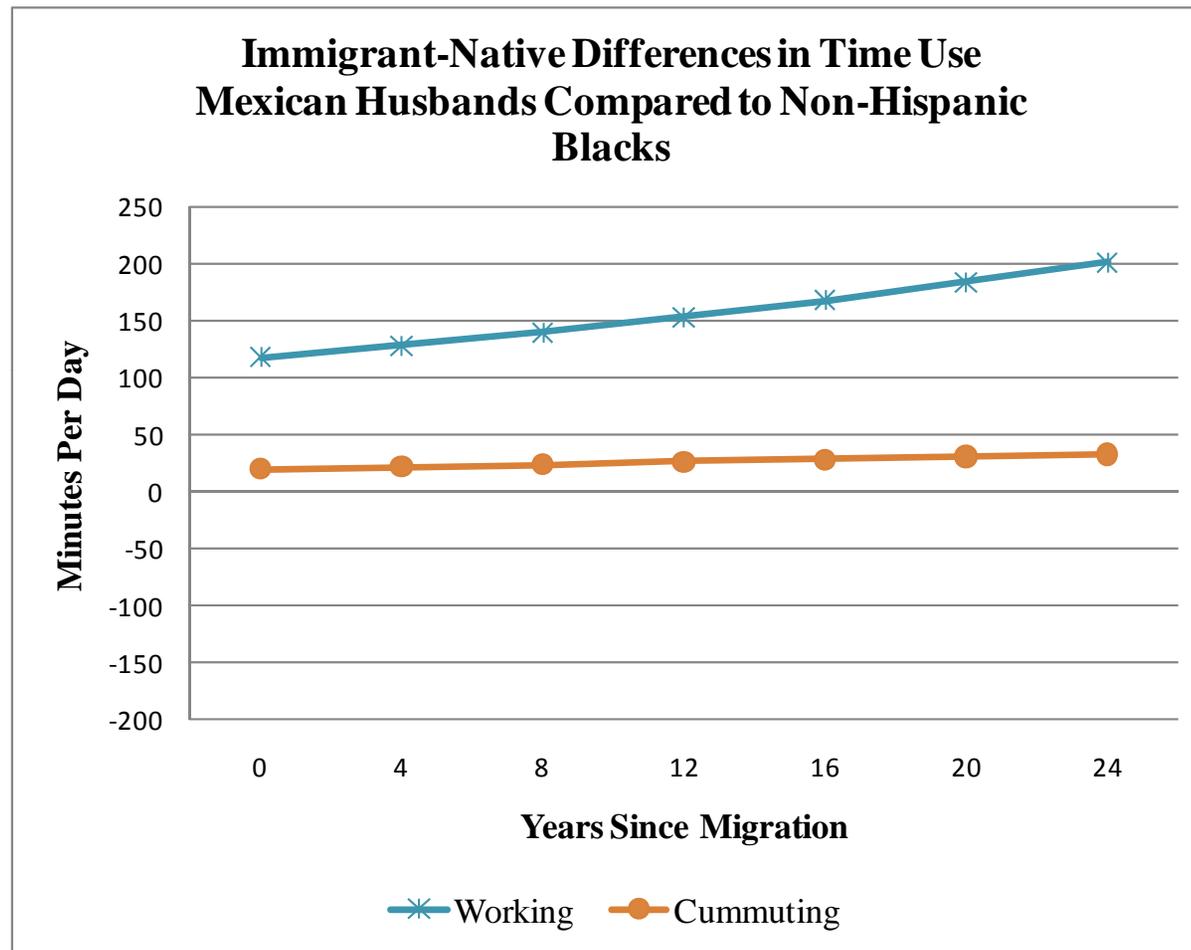
Years since Migration Effects : Husbands relative to NHW



- **At arrival:** 107 and 31 minutes less to exercise and leisure, in that order. 45 minutes more to sleep. No difference in eating.
- **After 24 years:** No differences in the amount of time spent eating and exercising. Sleep 20 minutes more and enjoy 50 minutes less leisure time.

Intra-generational Results: Table 4.b

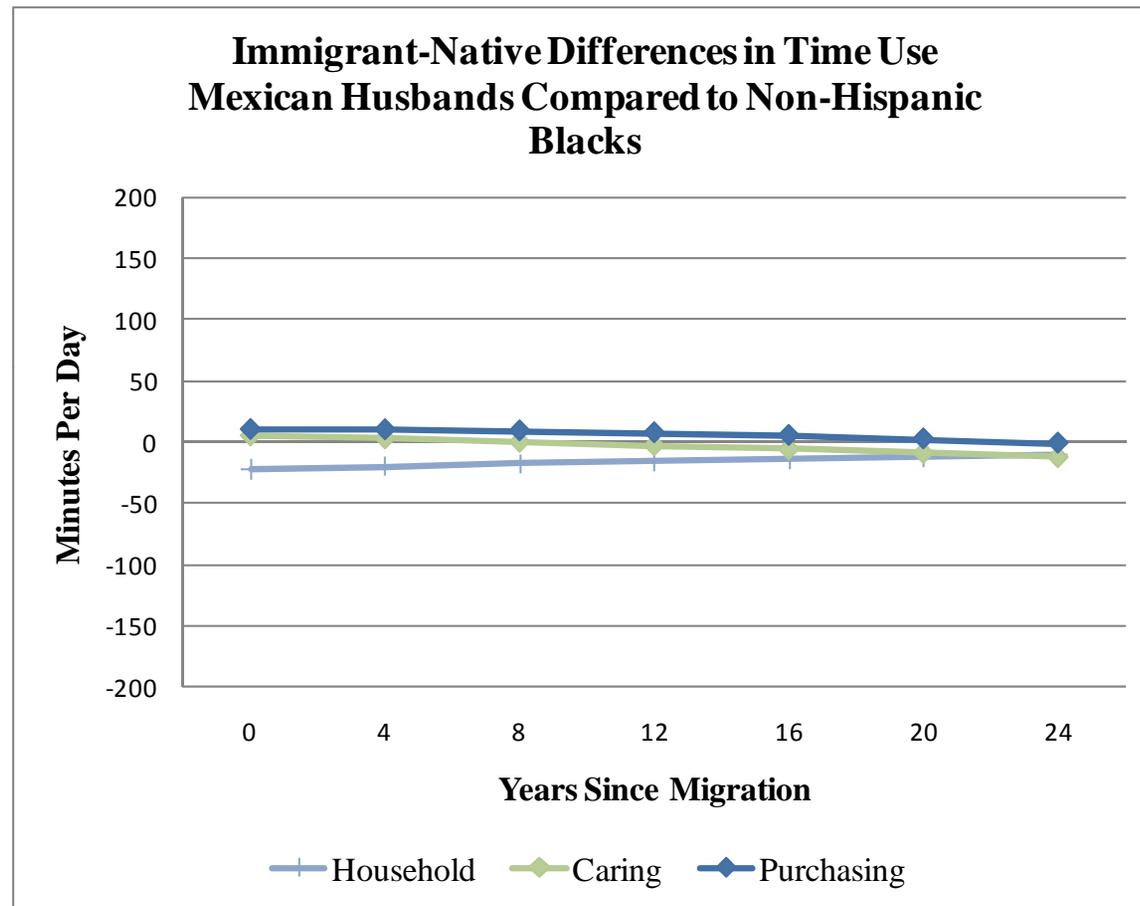
Years since Migration Effects : Husbands relative to NHB



- **At arrival:** Devote 117 and 20 minutes more to market work and commuting
- **After 24 years:** 200 minutes more of market work and 32 minutes more of commuting time .

Intra-generational Results: Table 4.b

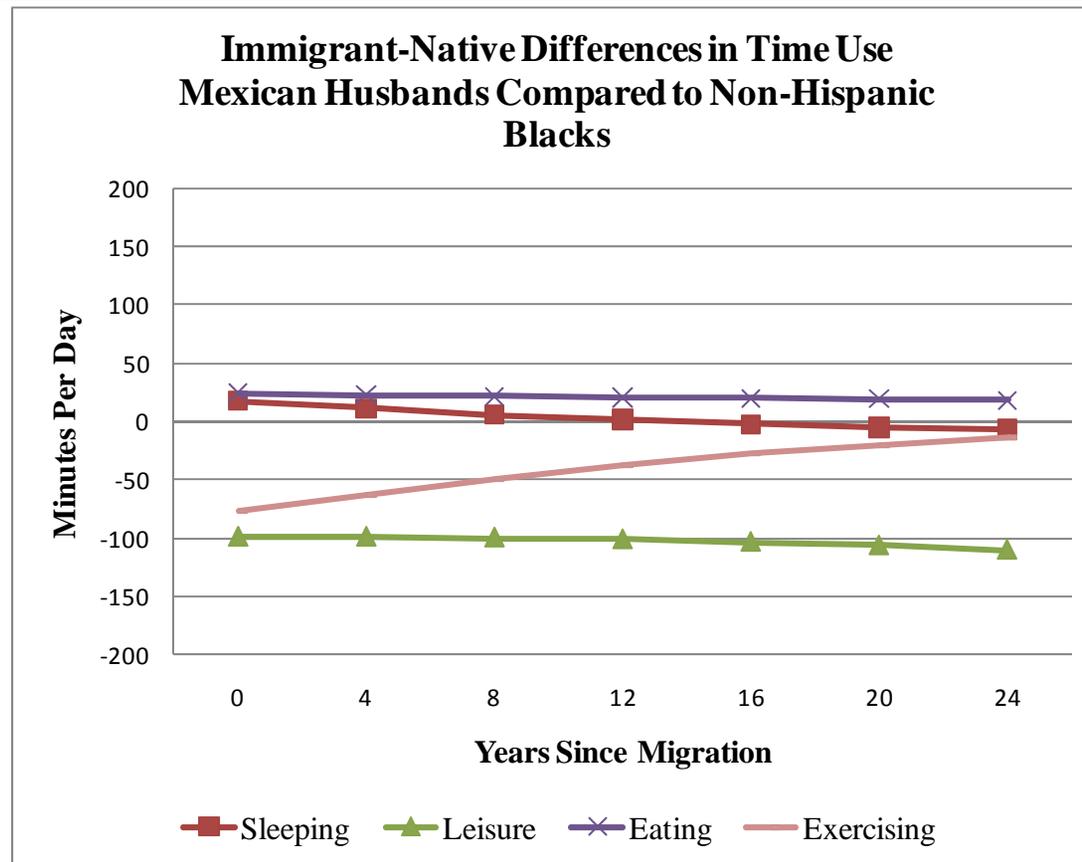
Years since Migration Effects : Husbands relative to NHB



- Equal amounts of time to household work, care for household members, and purchasing, regardless of their length of stay in the country.

Intra-generational Results: Table 4.b

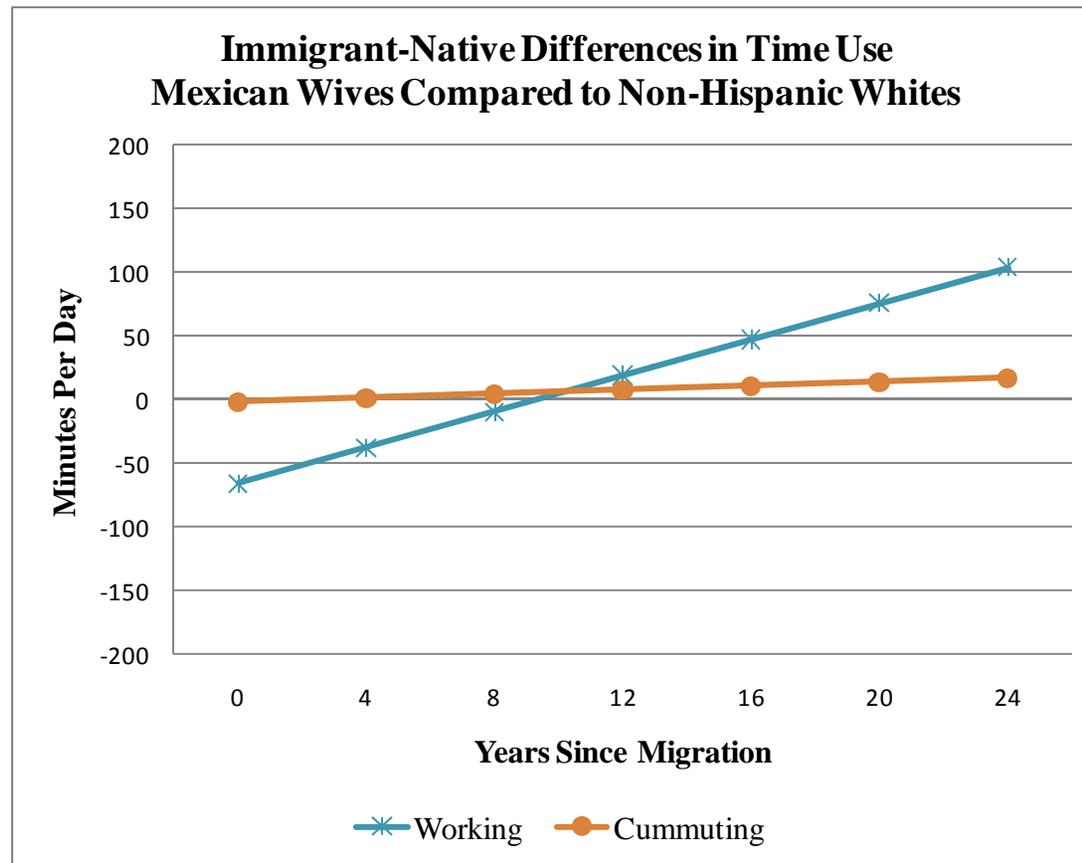
Years since Migration Effects : Husbands relative to NHB



- **At arrival:** 99 minutes less to leisure and 77 minutes less to exercising
24 minutes more to eating. No difference in sleeping.
- **After 24 years:** Difference in leisure and eating times remain roughly constant.
The gap in exercising time disappears after only 8 years.

Intra-generational Results: Table 4.c

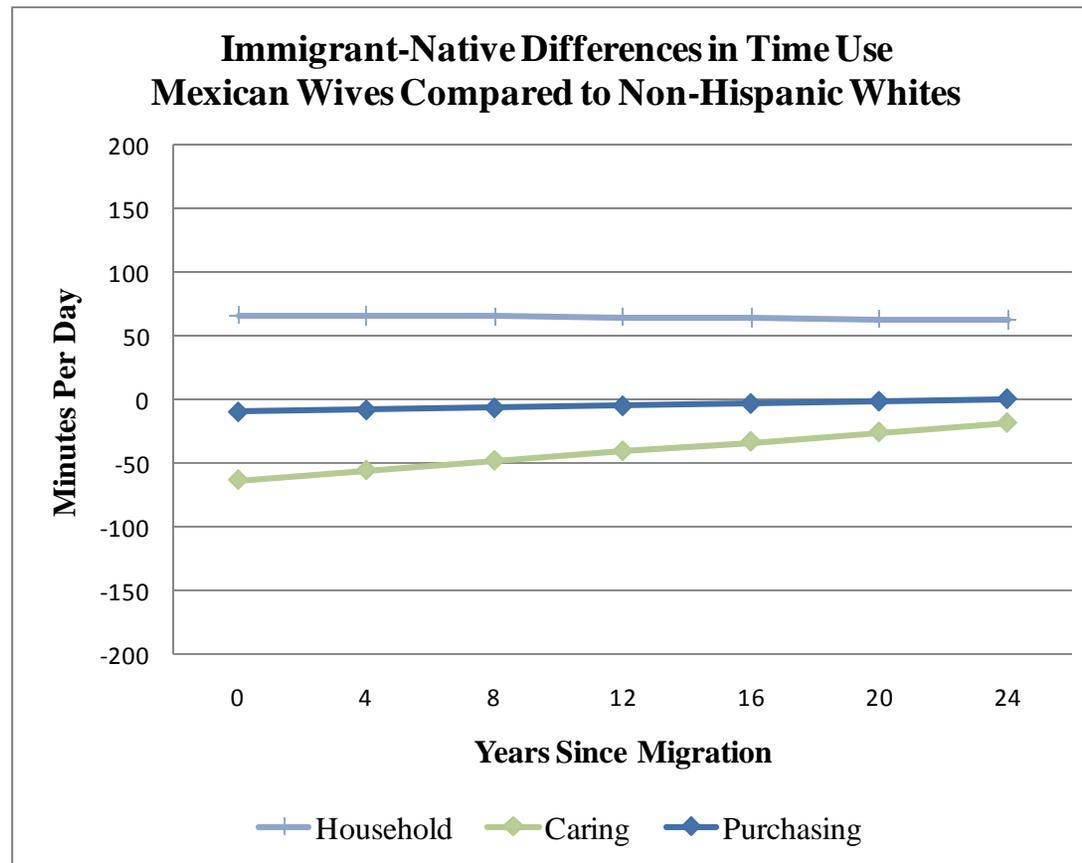
Years since Migration Effects : Wives relative to NHW



- **At arrival:** No statistical differences in market work or commuting.
- **After 24 years:** Work and commute 104 and 17 minutes more, in that order.

Intra-generational Results: Table 4.c

Years since Migration Effects : Wives relative to NHW

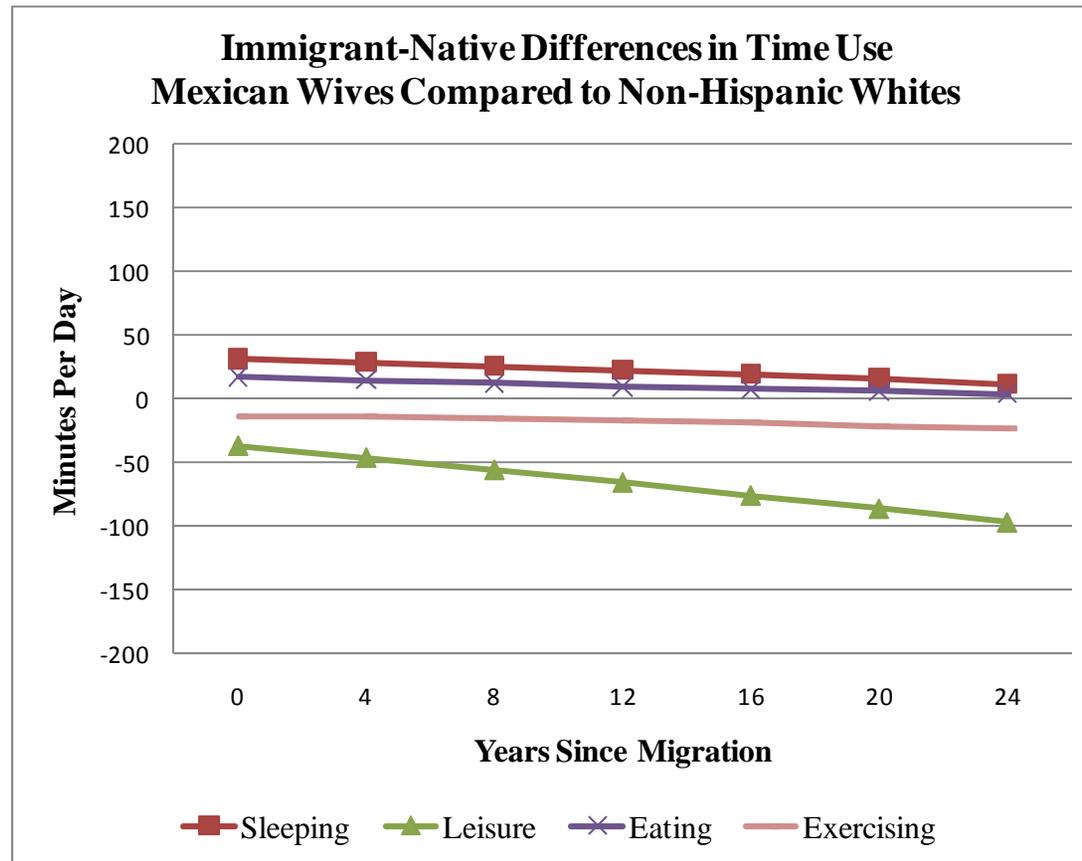


•**At arrival:** 50 minutes more to household work but 63 minutes less to the care of household members. No difference in purchasing.

•**After 24 years:** Gap in time devoted to household work remains stable
No difference in caring and purchasing

Intra-generational Results: Table 4.c

Years since Migration Effects : Wives relative to NHW

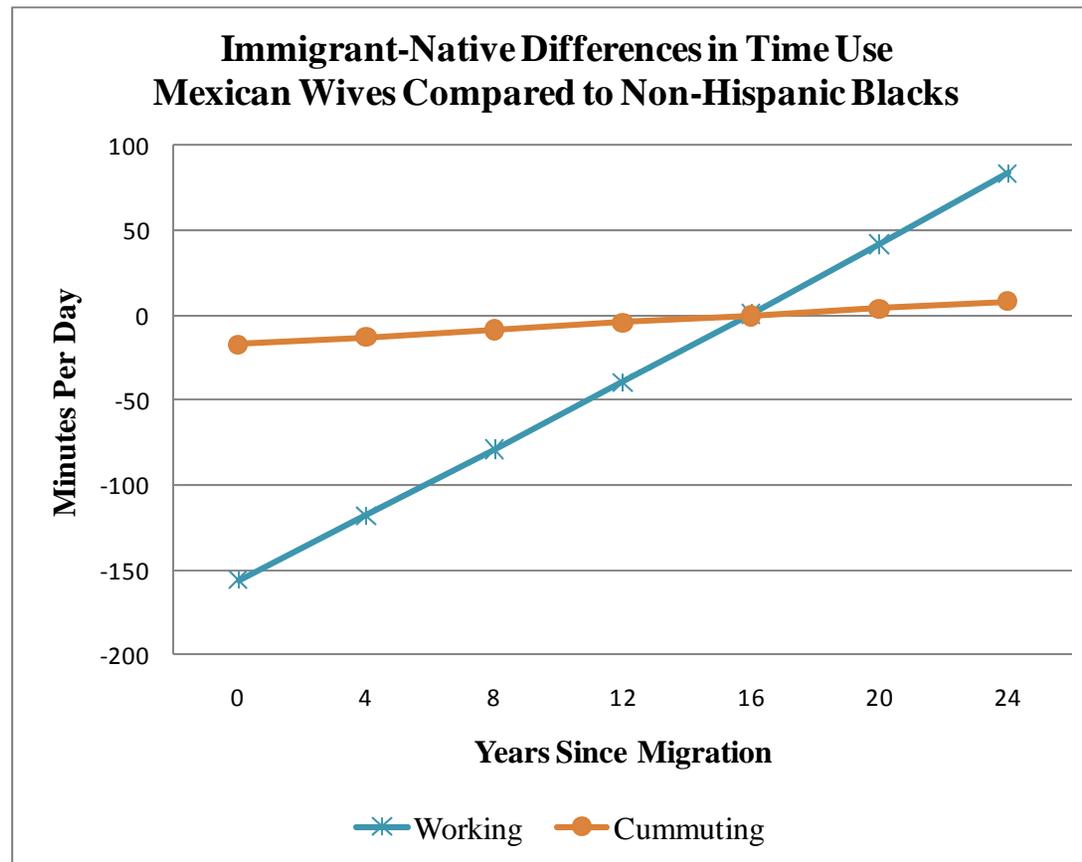


•**At arrival:** 32 minutes more sleeping, 17 minutes more eating, and 36 minutes less in leisure activities. No difference in exercising.

•**After 24 years:** No difference in exercising, sleeping and eating. Enjoy 96 minutes less of leisure.

Intra-generational Results: Table 4.d

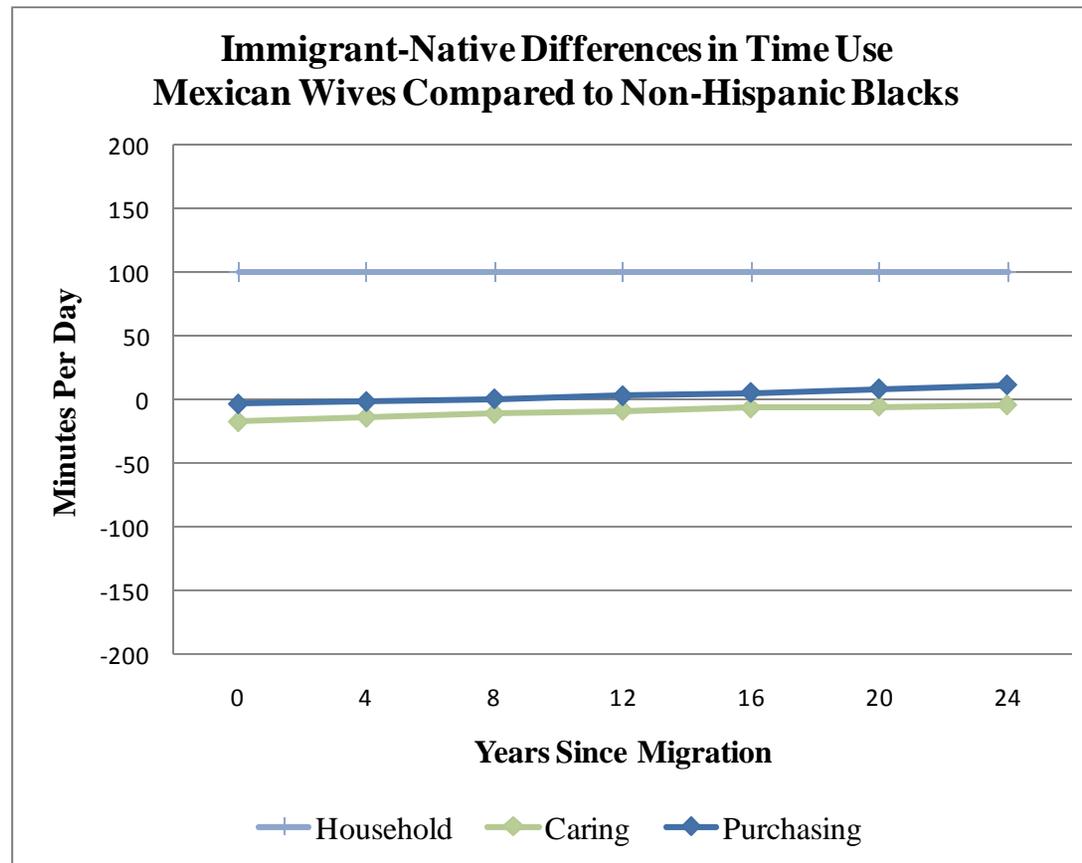
Years since Migration Effects : Wives relative to NHB



- **At arrival:** Work on the market 155 minutes less and commute 17 minutes less.
- **After 24 years:** Differences become insignificant after only 8 years in the country

Intra-generational Results: Table 4.d

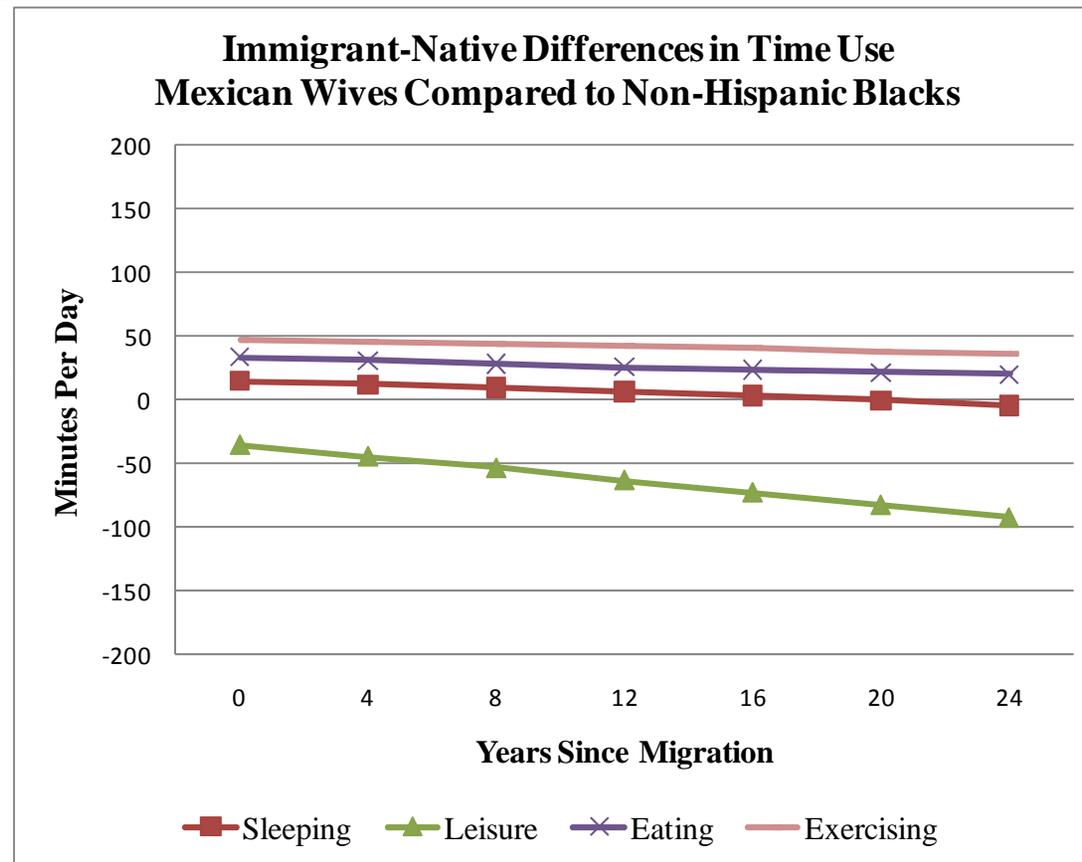
Years since Migration Effects : Wives relative to NHB



- **At arrival:** 100 minutes more on household activities.
No differences in caring for household members and purchasing.
- **After 24 years:** Difference in the amount of household work remains stable

Intra-generational Results: Table 4.d

Years since Migration Effects : Wives relative to NHB



- **At arrival:** 33 minutes more eating and 47 minutes more exercising, 35 minutes more in leisure activities. No differences in sleeping.
- **After 24 years:** Gap in eating time decreases but remains significant. Exercise time converges to the native levels after 20 years. 92 minutes less leisure.

Summary of Results

Intra-generational Assimilation

- At the time of arrival to the U.S., Mexican husbands work on the market the same time to NH Whites and more than NH Blacks.
- At arrival, Mexican husbands devote to household work less time than NH Whites and the same to NH Blacks.
- Newly arrived Mexican wives work more time on the household than NH natives, but they allocate the same time to market work than NH whites and less than NH Blacks
- As their American experience accumulates, immigrant husbands and wives allocate more time to market work and commuting.

Summary of Results

Intra-generational Assimilation

- The amount of time allocated to household activities remains stable with time in the U.S.
- At arrival, Mexican couples devote less time to care for other household members than NH whites, but they devote the same amount of time for this activity than NH blacks.
- The gap on the caring times narrows with years since migration.
- At the time of arrival, immigrant wives purchase for the same amount of time as NH natives ones, while Mexican husbands shop more time than NH whites and the same as NH Blacks.

Summary of Results

Intra-generational Assimilation

- Mexican couples sleep more than NH whites, but they devote the same amount of time for this activity than NH Blacks. The gap between Mexican and NH white couples narrows with years since migration.
- Immigrant wives eat for longer periods of time than NH natives, while Mexican husbands eat for the same amount of time than NH whites but for longer periods than NH blacks.
- At arrival, husbands exercise less than NH natives, whereas immigrant wives exercise a similar amount of time to NH Whites and more than NH Blacks. The gaps in the exercise become insignificant with years in the U.S.
- Mexican couples enjoy less leisure time than NH natives and that this gap widens with years in the U.S.

Thank You!

Intergenerational Effects: Husbands (Tables 3.a and 3.b)

- **Second generation Mexican Husbands:**

- **Relative to NH Whites:**

- 27 minutes less household work.
- 38 minutes less caring for household members.

- **Relative to NH Blacks:**

- 70 minutes less leisure.
- 20 minutes less eating.

- **Third generation Mexican Husbands:**

- **Relative to NH Whites**

- No differences

- **Relative to NH Blacks:**

- 69 minutes less leisure.
- 22 minutes less eating.
- 80 minutes more market work
- 27 minutes more caring for household members.

Intergenerational Effects: Wives (Tables 3.c and 3.d)

•**Second Generation Wives:**

•**Relative to NH Whites:**

- 35 minutes more household work
- 45 minutes less care for household members
- 19 minutes more sleep
- 30 minutes less exercise

•**Relative to NH Blacks:**

- 69 minutes more household work
- 21 minutes more eating
- 29 minutes less leisure

•**Third Generation Wives:**

•**Relative to NH Whites:**

- 25 minutes less caring for household members.
- 16 minutes more to eating

•**Relative to NH Blacks:**

- 25 minutes more household work
- 23 minutes less sleep