

The Latino Mortality Paradox Revisited: Is Acculturation Bad for Your Health?

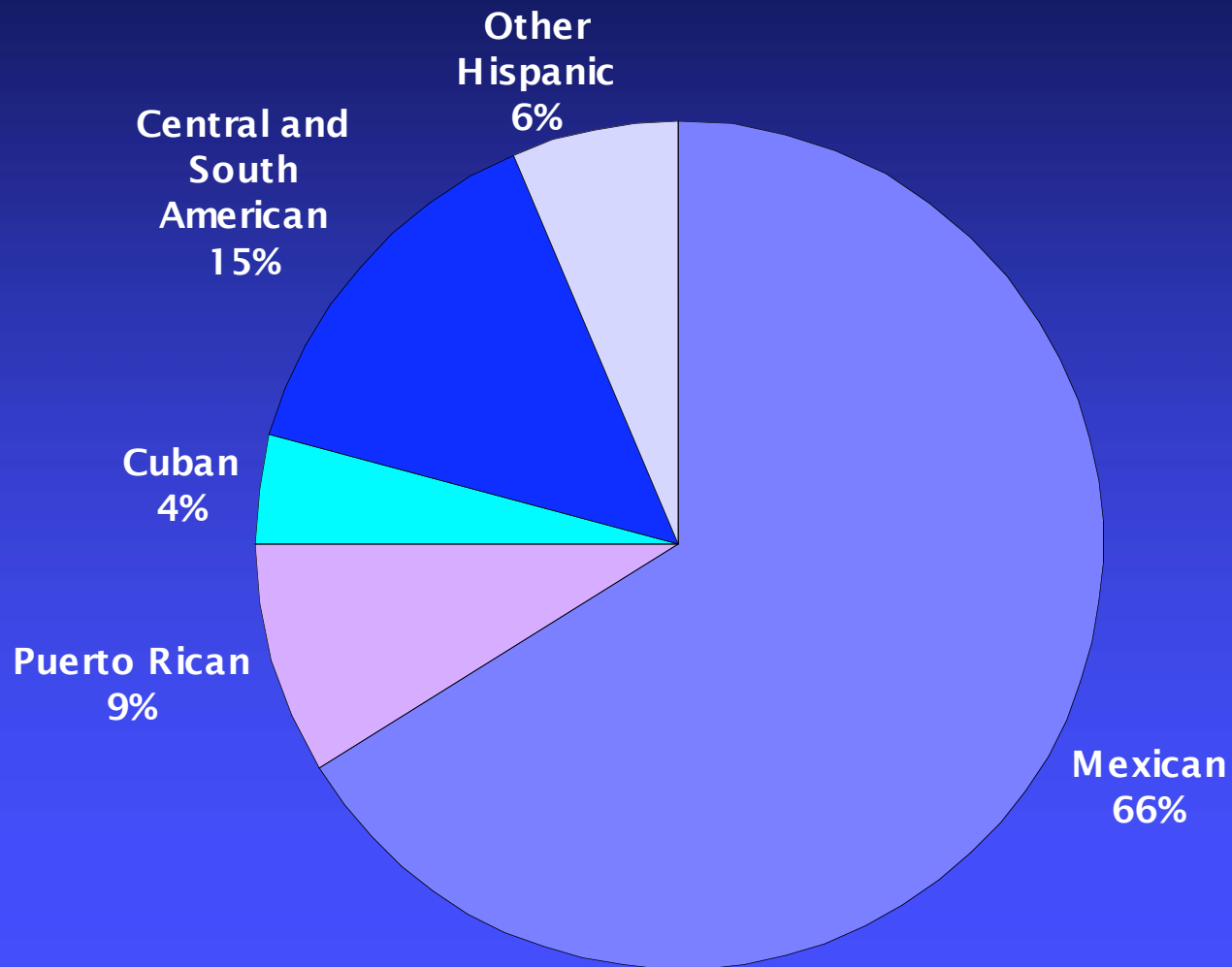
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Purpose

- The Latino Mortality (Epidemiologic) Paradox
 - ◆ Brief overview: Sociodemographic characteristics of Latinos in the U.S.
- Hypotheses regarding the paradox
- Health behaviors and acculturation
 - ◆ Key issues and applications
- Directions for future research

Heterogeneity of Latino Groups



Source: Current Population Survey, March 2000

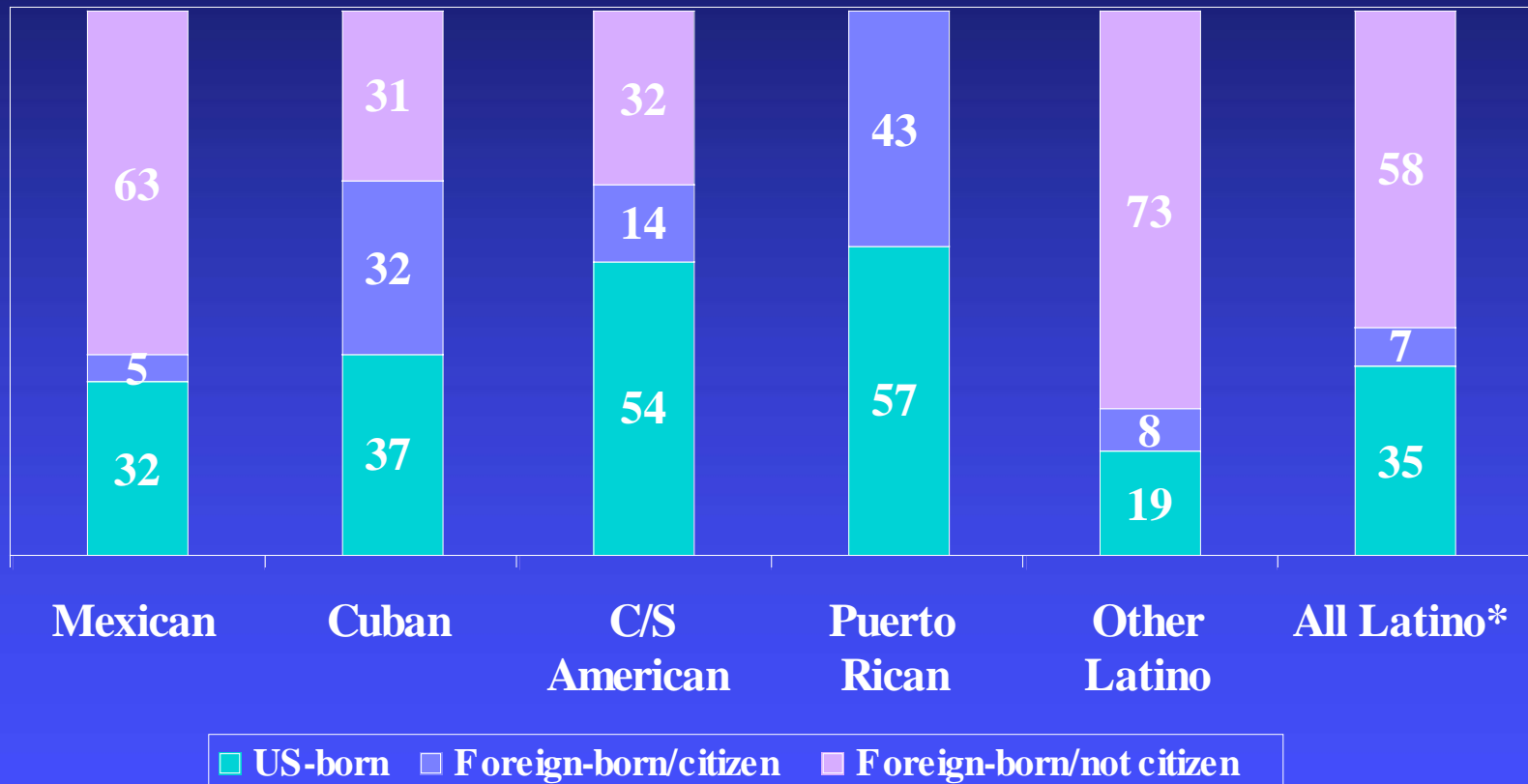
Age Differences (median)

Mexican American	24.4
Puerto Rican	28.0
Cuban	41.4
Central and South American	29.9
Other Latino	29.1
Non-Latino white	37.9

Source: US Bureau of the Census, CPS March, 2000

Nativity Status: Latinos

(in percent)

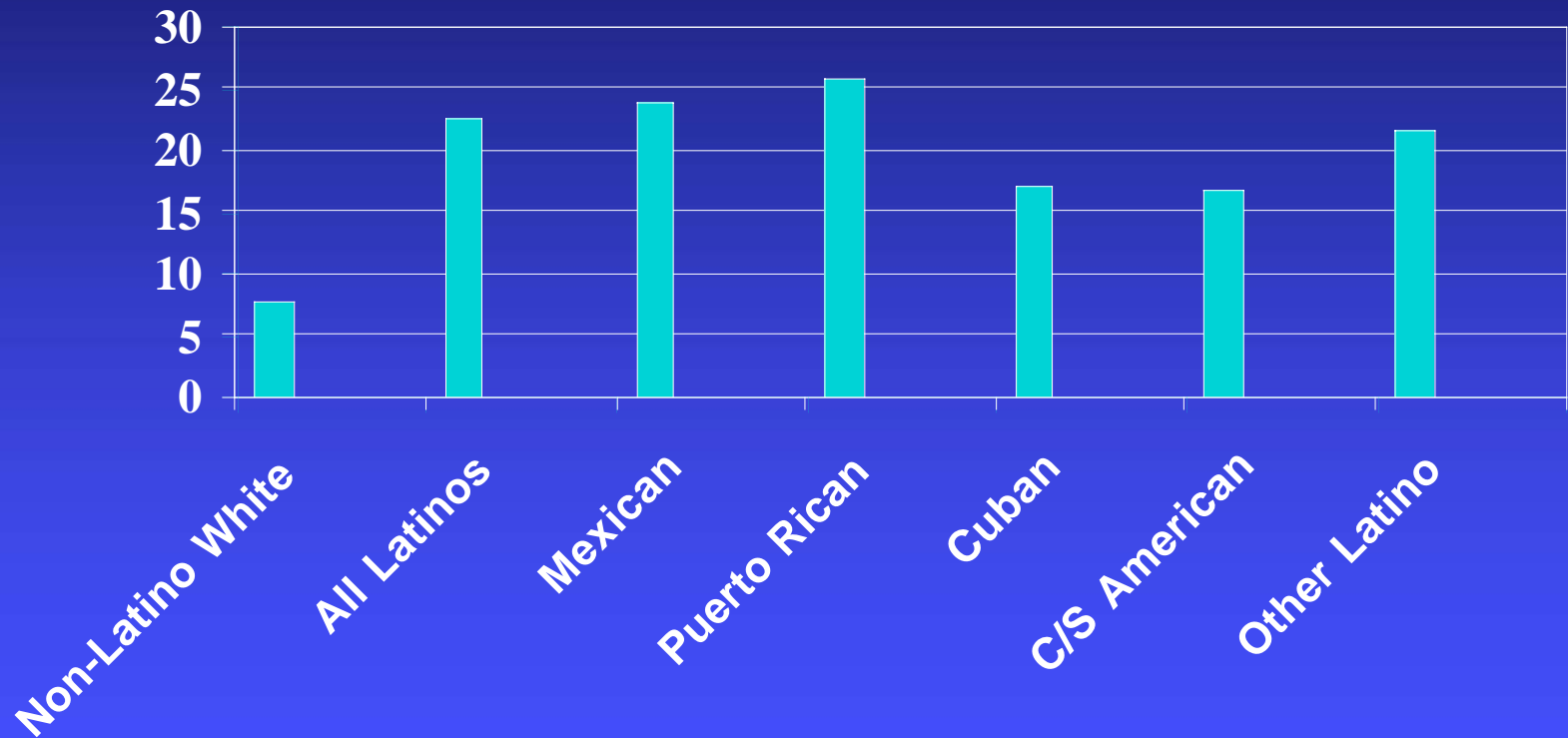


Source: US Bureau of the Census, Current Population Reports, 1998

Source for Puerto Rican: Table 10.1. March 1996 CPS: Nativity by Race-ethnicity

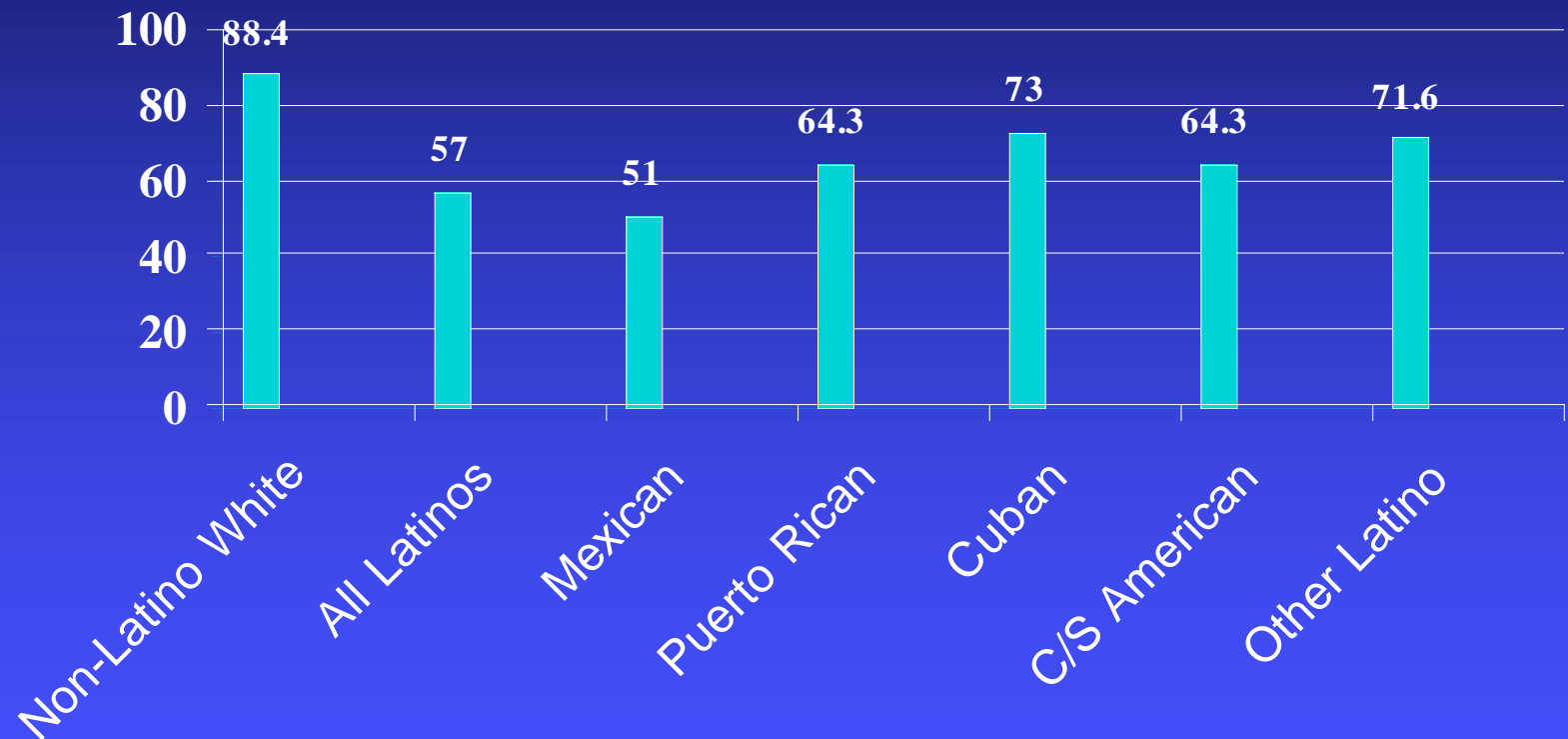
*Figures for "All Latino" exclude Puerto Ricans

Percent of Families Living Below Poverty Level



Source: US Bureau of the Census, CPS March, 2000

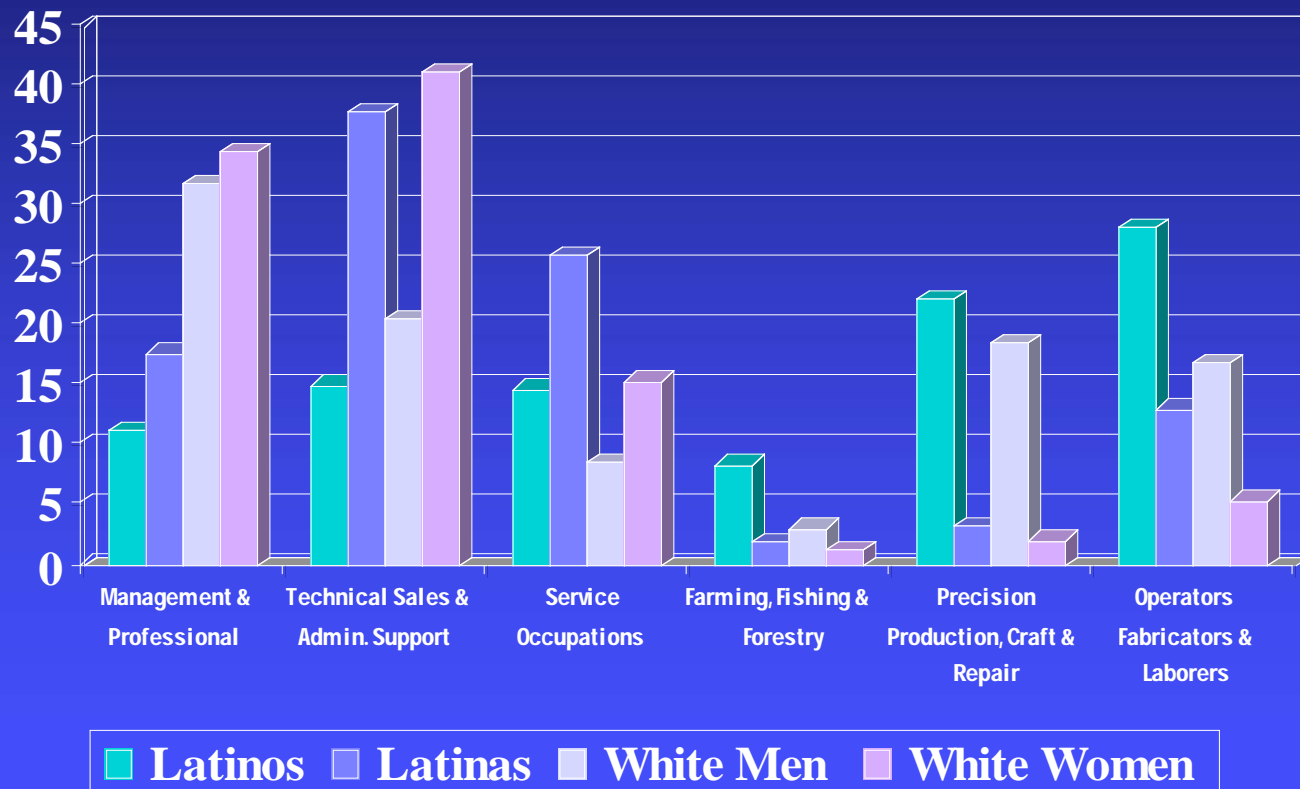
Education: High School or More (Percent of persons age ≥ 25 years)



Source: US Bureau of the Census, CPS March, 2000

Occupations

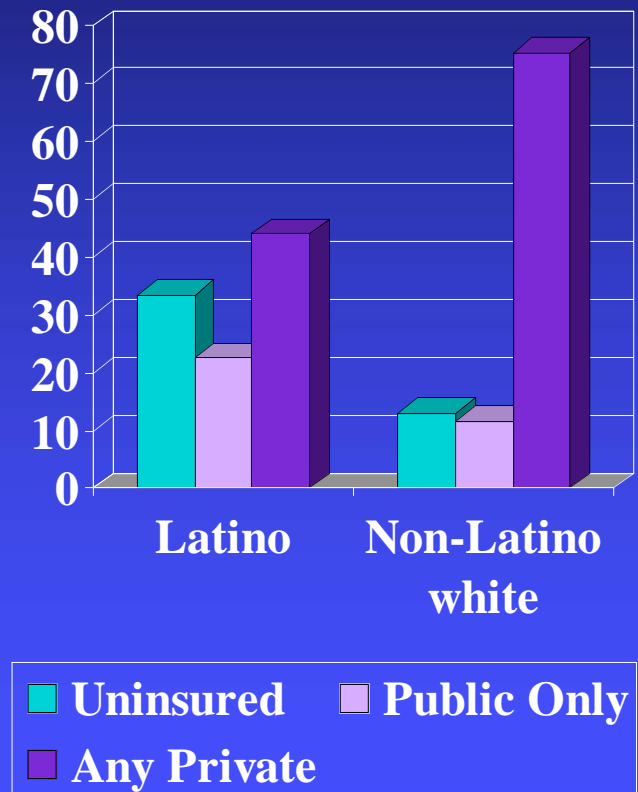
(Civilians age ≥ 16 years)



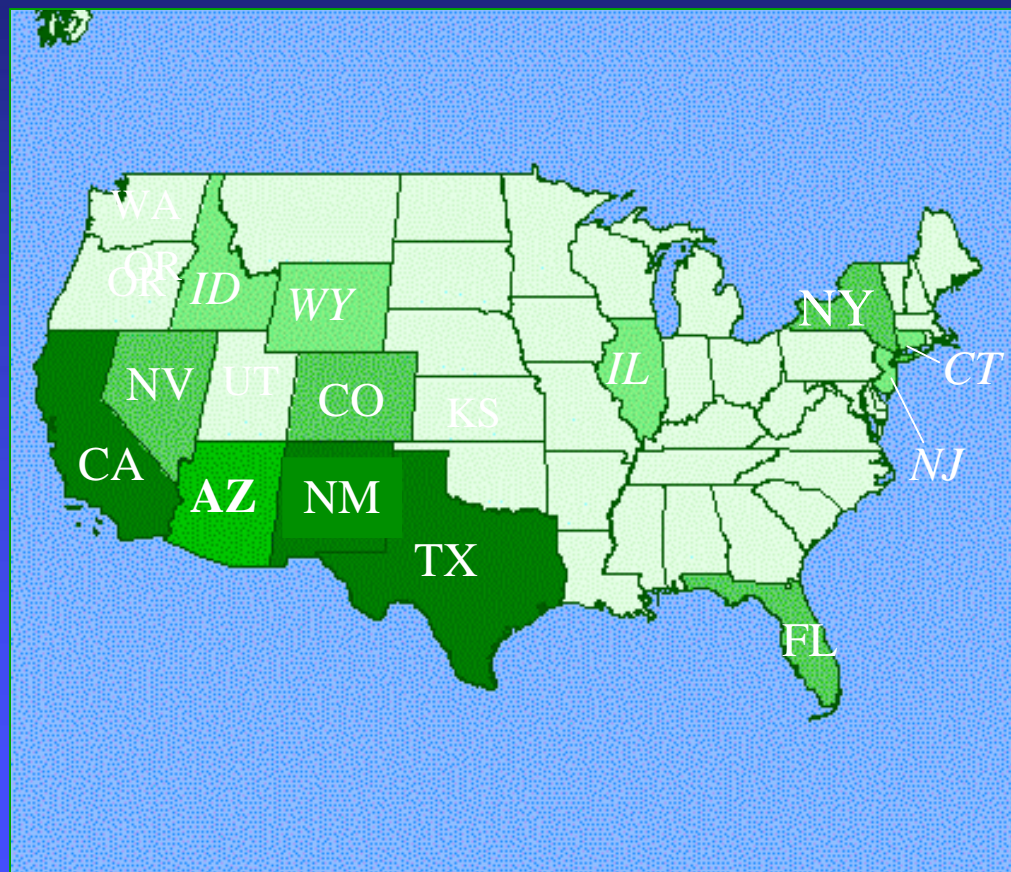
Source: US Bureau of the Census, CPS March, 2000

Access to Health Care: Health Insurance

- Latinos are more likely than whites to lack health insurance
- Gender and age
 - ◆ Latino males
 - ◆ young adults, children
- Health coverage varies by Latino group



Geographic Distribution



% of State
Population
Latino



Reasons for Sociodemographic Differences

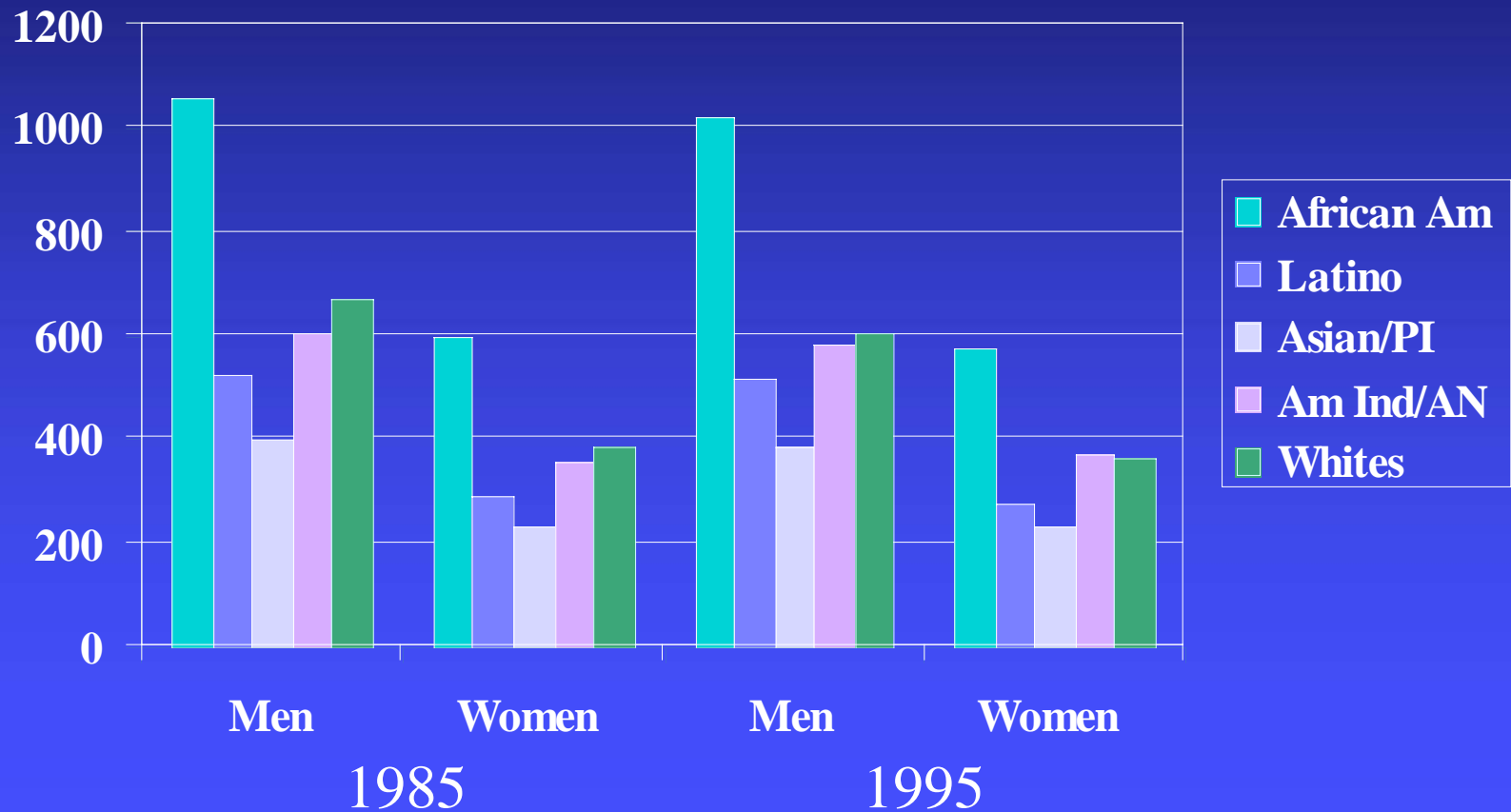
- Political factors
- Immigration
 - ◆ Reasons for immigrating
 - ◆ Patterns
 - ◆ History
- Economic factors
- Social factors

Latino Mortality: An Epidemiologic Paradox

- Inverse relationship between socioeconomic status and morbidity and mortality
- Relative to non-Latino whites, Latinos in the United States have a worse socioeconomic status profile
- Yet, Latinos have a lower all-cause mortality rate than do non-Latino whites

All-Cause Mortality (1985-95)

(Age-adjusted mortality rates per 100,000)



Source: NCHS (1997)

Hypotheses for the Paradox

- The lower mortality is
 - ◆ Genuine
 - ◆ Health behaviors
 - ◆ Social networks
 - ◆ Other protective factors
 - ◆ Artifact of migratory processes
 - ◆ The “salmon hypothesis”
 - ◆ The healthy migrant effect

Tests of the Hypotheses

- “Salmon bias” hypothesis
 - ◆ Plausibility of hypothesis: different groups
 - ◆ Cubans vs. Puerto Ricans
 - ◆ US-born Latinos: ties to the United States
- Healthy migrant hypothesis
 - ◆ Selection factors: not relevant to US-born

Mortality: Latinos compared with Non-Latino whites (Cox Prop. Hazards)

	<u>Men</u>	<u>Women</u>
Mexican American	.57	.60
Puerto Rican	.63	.45
Cuban	.53	.47
Central/South and Other Latino	.61	.56
All Latinos/Latinas	.59	.56

Source: Abraído-Lanza, Dohrenwend, Ng-Mak & Turner (1999)

Mortality: Analyses of US-born and Foreign-born (Cox Prop. Hazards)

	US-born: Latinos vs. whites	Foreign-born: Latinos vs. whites
Men		
25-44 years	.59 (.44, .80)	.80 (.44, 1.45)
45-64	.60 (.51, .71)	.50 (.32, .78)
≥ 65	.62 (.53, .72)	.62 (.48, .80)
Women		
25-44	.49 (.33, .73)	.66 (.32, 1.39)
45-64	.65 (.52, .79)	.52 (.30, .91)
≥ 65	.59 (.49, .71)	.57 (.42, .73)

Conclusion

- The salmon and healthy migrant hypotheses
 - ◆ Inadequate explanations
- Other factors account for the paradox

Generality of Mortality Paradox

- Mortality from different causes
 - ◆ Relative to whites, Latinos have higher rates of death from various diseases, including:
 - ◆ Diabetes
 - ◆ Certain types of cancer (e.g., cervical)
- Age and gender differences
- Varies by cause of death and Latino group
 - ◆ Diabetes complications
 - ◆ Mexicans vs. Cubans



On Paradigms and Paradoxes

Paradox and Health Disparities: Complex Issues and Paradigms

■ Social/structural factors

- ◆ Socioeconomic factors (SES), social capital
- ◆ Health care (e.g., access, quality)
- ◆ Racism

■ Individual-level factors

- ◆ Coping, mobilization of support systems

■ Cultural factors

- ◆ Attitudes, values, customs, beliefs, behaviors
- ◆ Level of acculturation

Other Hypotheses: Paradox

- Health behaviors and acculturation:
 - ◆ Latinos have more favorable health behaviors and risk factor profiles than do non-Latino whites
 - ◆ Health behaviors and risk factors become more unfavorable with greater acculturation

Do Latinos Have More Favorable Health Behaviors Compared With Non-Latino Whites?

- Controlling for age and SES, Latinos compared with whites are:
 - ◆ Less likely to
 - ◆ Smoke
 - ◆ Drink alcohol
 - ◆ Engage in leisure-time exercise activities
 - ◆ More likely to have a high Body Mass Index
- Health behaviors vary by gender
- Mixed evidence: health behaviors hypothesis

The Health Behavior and Acculturation Hypothesis

- Assumption: Health Behavior Hypothesis
 - ◆ Health behaviors reflect Latino cultural norms
- Among Latinos, do health behaviors worsen (become more risky) with greater acculturation?

Acculturation

- Acculturation
 - ◆ Process by which immigrants adopt the attitudes, values, customs, beliefs and behaviors of a new culture
- Assumptions of most models
 - ◆ Linear, directional: loss of original culture with greater acculturation
 - ◆ Conflict, anxiety
 - ◆ Original cultural devalued

Sources: Clark & Hofstess (1998), LaFromboise et al. (1993), Chun et al. (2003)

Alternation/Bicultural Models

- Possible to belong to two cultures
- Alternate between cultures
- Assumptions
 - ◆ Bidirectional, orthogonal relationships
 - ◆ Both cultures positive, valuable
 - ◆ not necessarily equally valued

Linear vs. Bicultural models

Acculturated



Unacculturated

High

Bicultural

Acculturated

New Culture



Unacculturated

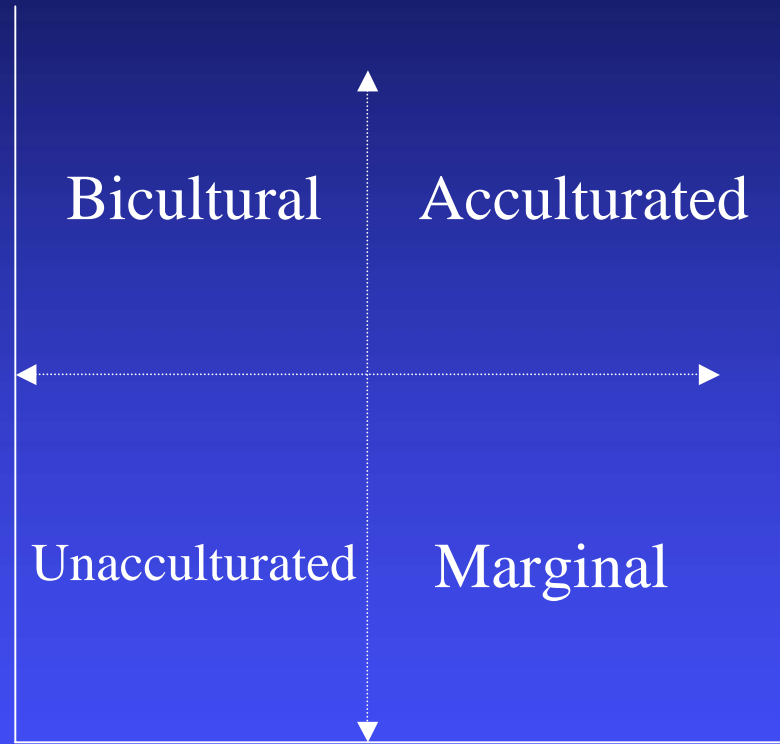
Marginal

Low

High

Low

Native Culture



The Problem of “Acculturation”: Theory and Measurement

- Language (use, comfort with): speak, read, think
- Length (proportion) of time in the U.S.
- Generation status, parents’ place of birth
- Ethnicity of past, current friends
- Ethnic composition of past, current neighborhood
- Behaviors, preferences
 - ◆ Music, radio, television, movies, books/newspapers, celebrating occasions, diet/food
- Unidimensional vs. multi-components measures

Unidimensional Measure: Language Use (Marín et al., 1987)

- In general, what language(s) do you
 - ◆ Read and speak
 - ◆ Speak at home
 - ◆ Think
 - ◆ Speak with friends
- 1 = Only Spanish
- 2 = Spanish better than English
- 3 = Both equally
- 4 = English better than Spanish
- 5 = Only English

Multi-component Measure

Cuellar et al. (1980): 20 items

- Language
- Self-identification
- Parents identification
- Ethnic origin of childhood and teen friends
- Current friends
- Music, TV, movie, food preferences
- Generation status
- Country in which raised
- Contact with Mexico
- Ethnic pride

Health Behavior/Acculturation Hypothesis:

Is Acculturation Bad for Your Health?

- Greater acculturation is associated with:
 - ◆ Increased rates of infant mortality, low birth weight
 - ◆ Overall cancer rates
 - ◆ High blood pressure
 - ◆ Adolescent pregnancy
 - ◆ Smoking, alcohol consumption, illicit drug use
 - ◆ Decreased fiber consumption
 - ◆ Depressive symptoms?

State of the Literature: Health Behavior/Acculturation Hypothesis

- Inconsistent support
- After controlling for SES and other demographic variables, acculturation among Latinos is associated with increases in some risky health behaviors and risk factors, such as:
 - ◆ Smoking
 - ◆ Alcohol intake
 - ◆ Body Mass Index
- Acculturation, however, is also associated with increased exercise and lower fat consumption, which are health protective behaviors
- Effects of acculturation on health behaviors differ by gender

Issues to Consider

- Is acculturation a proxy for other variables?
 - ◆ Exposure to adverse circumstances, stressful events
- Adjustment for confounding variables (e.g., SES)
- Age and gender differences
- Different indicators of acculturation
- Acculturation as a risk or protective factor?
 - ◆ Health-related and other beliefs, values, and behaviors
 - ◆ Effect may vary depending on outcome variable

Source: Abraído-Lanza, Armbrister, Flórez & Aguirre (2006)

Issues to Consider (cont'd)

- Do acculturation processes differ across groups (e.g., Cubans vs. Puerto Ricans)?
- Acculturating to what? Assumption: majority (white) American culture
- What is the role of socioeconomic status in acculturation?
- What is the impact (if any) of historical and political factors on acculturation processes?

Acculturation and Health

- Paucity of theoretical models
- Biculturalism and health is seldom examined
- Account for SES confounders
- Mediating mechanisms
 - ◆ Beliefs, values, behaviors
 - ◆ Structural constraints (e.g., access to health care)
- Comprehensive measures of acculturation
 - ◆ Values, customs, beliefs?

Latino Culture: Values, Customs, Beliefs

- *Respeto*
- *Cortesía*
- *Personalismo, Simpatía*
- *Personas de confianza*
- Familism
- Religiosity
- Fatalism vs. *Destino*

Thoughts on Fatalism

- Myths, stereotypes and misconceptions
- Fatalism vs. “*destino*”
 - ◆ What is fatalism?
 - ◆ How to measure it?
 - ◆ Health locus of control (external)
 - ◆ Powe scale – problematic items
 - ◆ Culture-specific construct?
 - ◆ Does fatalism affect health behaviors?
 - ◆ Is fatalism “good”?
- Need for theoretical models

Thoughts on Theoretical Models

- Can draw from existing theories, but...
- Models should integrate culturally-grounded values, beliefs and other relevant constructs (e.g., structural factors)
- Avoid the minority “bandwagon” effect

Future Research: The Paradox

- Generality of the paradox
- Acculturation: risk and protective factors
 - ◆ Role of ethnic enclaves
 - ◆ Social networks, social capital, access to cultural and other resources
 - ◆ Values and Behaviors: diet, parity, other factors
 - ◆ Health promoting (e.g., exercise) vs. disease detection behaviors (e.g., cancer screening)
 - ◆ Beliefs, values (e.g., “fatalism”??)
- Theoretical models
 - ◆ Resource vs. Deficit models