

# The Effect of Ethnic Density on Health:

## A Comparison of Vietnamese and Mexicans Living in Orange County

Eileen T. Walsh  
Berna M. Torr  
Department of Sociology  
California State University, Fullerton

# Goal of the study

- Examine the impact of residential ethnic density on differences in self reported health
  - Vietnamese in Little Saigon
  - Mexicans in Santa Ana
- Document whether the ethnic density effect, if present, is simply the result of socio-economic status.

# Health Disparities

- Ethnicity and socioeconomic status remain significant factors in unequal health outcomes
- Mexican and Vietnamese are disadvantaged in health outcomes and socio economic resources
- Individual-level determinants of health such as socio-economic status, lifestyle health behaviors, and access to care do not explain all of the health outcome disparities.

# Positive Effect of Ethnic Density On Health

- For many disadvantaged minorities, living in segregated neighborhoods with a high proportion of one's own ethnic group provides a protective effect, despite
  - more socioeconomic disadvantages and
  - more environmental stressors, a spatial context results in better health outcomes
- (Halpern 1993; Eschbach, et al., 2004; Finch, et al., 2004; Franzini, and Fernandez-Esquer, 2004; Patel, et al., 2003; Subramanian, 2005) ).

# Advantages of enclaves

- buffer discrimination,
- foster kinship ties,
- improve social cohesion (Lee and Ferraro, 2007; Smaje, 1995; Skerry, 2000)
- ease cultural transition (Portes, 1996)
- enhanced social capital through referrals to low paying jobs (Lopez and Stanton- Salazar 2001)
- alternative medicine (Menjivar, 2002; Weiss et al. 2005)

# Negative Effect of Ethnic Density on Health

- living in integrated neighborhoods away from those of one's group has shown to adversely effect health outcomes for some groups who face
  - Discrimination
  - Social isolation
  - Lack of networks for job referrals

# Differential Impact of Ethnic Density on Health

- relationship between ethnic density and health appears to hold for
  - Blacks,
  - Some Asians
  - Some Hispanic ethnic groups such as Mexican Americans in Chicago
  - but not for Puerto Ricans (Chang, 2006; Lee and Ferraro, 2007).

# Research Questions

- Does self-rated health of Vietnamese and Mexican vary by neighborhood ethnic density? Is the effect the same for both groups?
- How much of the differences by ethnic density is the result of individual level demographics and socio-economic status?
- How much of the differences is the result of individual level lifestyle behaviors?



# Data: 2007 OCHNA

- 2007 Orange County Health Needs Assessment
- Population based household interviews conducted by MACRO, International
- Oversampled Vietnamese
  - 571 Vietnamese, 270 Latinos
- Replicates CDC (BRFSS) & CHIS

# Little Saigon



# % Vietnamese in Little Saigon



Zip codes: 11% to 51%

56% of Vietnamese in OCHNA sample live in enclave

# Little Saigon





# Santa Ana



# Percent Mexicans in Santa Ana

Zip codes: 21% to 88%

50% of Latinos in OCHNA sample  
live in enclave



# Santa Ana: 27 square miles



# Methods

- We use multinomial logistic regression techniques to examine the effect of residential segregation on self rated health, net of other independent variables.
- Four Models



# Effect on Self Rated Health

- Model 1: Ethnicity and Enclave Residence
- Model 2: Controls for Demographics: age, gender, marital status, language preference
- Model 3: Controls for SES: Education, Homeownership, Income
- Model 4: Lifestyle: Smoker, Drinker

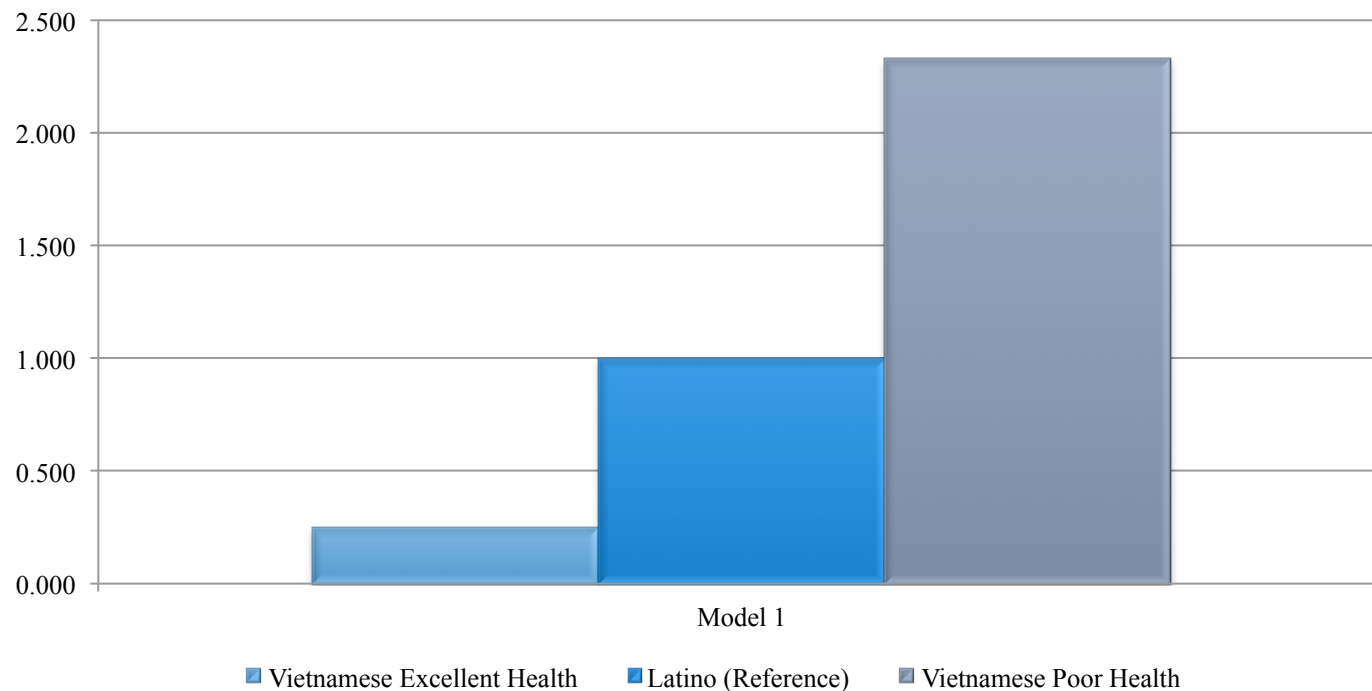
# Descriptive Statistics

- Vietnamese are in poorer health than Latinos

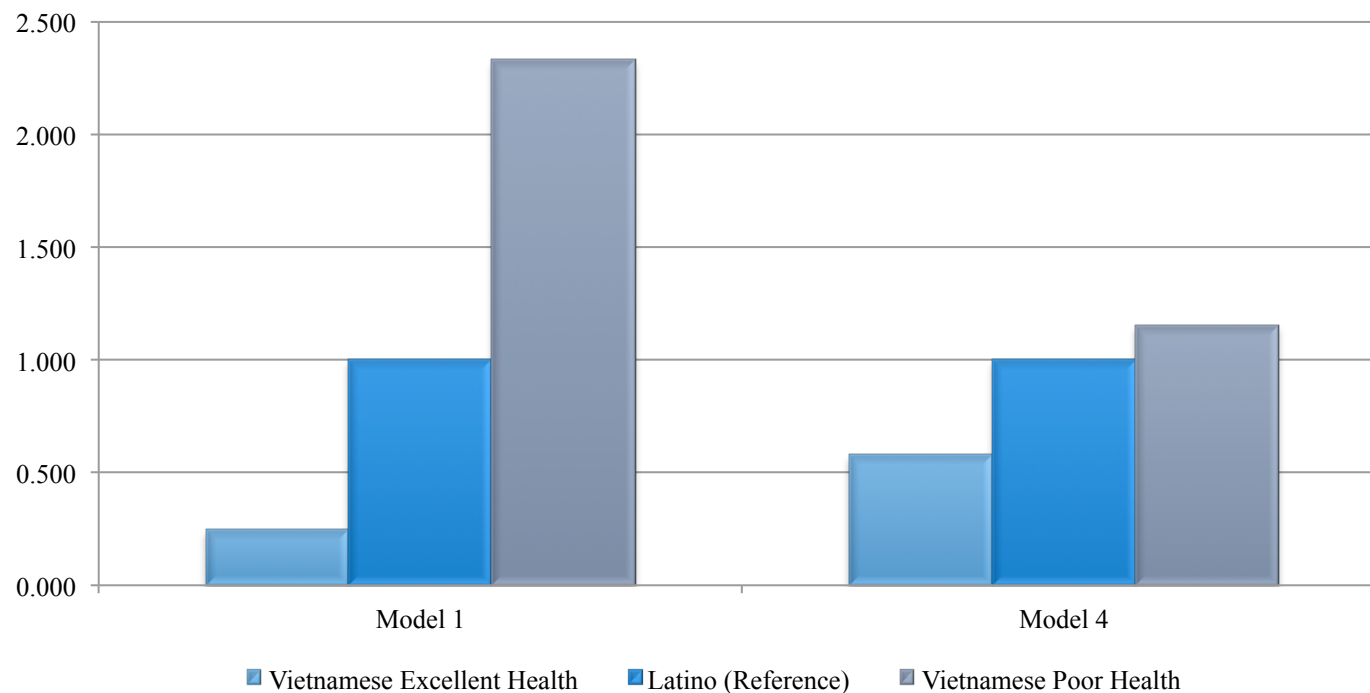
	Vietnamese	Latino
Excellent	22%	57%
Very Good	40%	30%
Poor	38%	13%

- Enclave residence relatively similar ~50%. Those residing outside the enclave are more likely to report excellent health (61% vs. 42%).
- Latinos in sample have higher SES and acculturation:
  - higher income, education levels, and more likely to have kids, own their own homes, and interview in English.

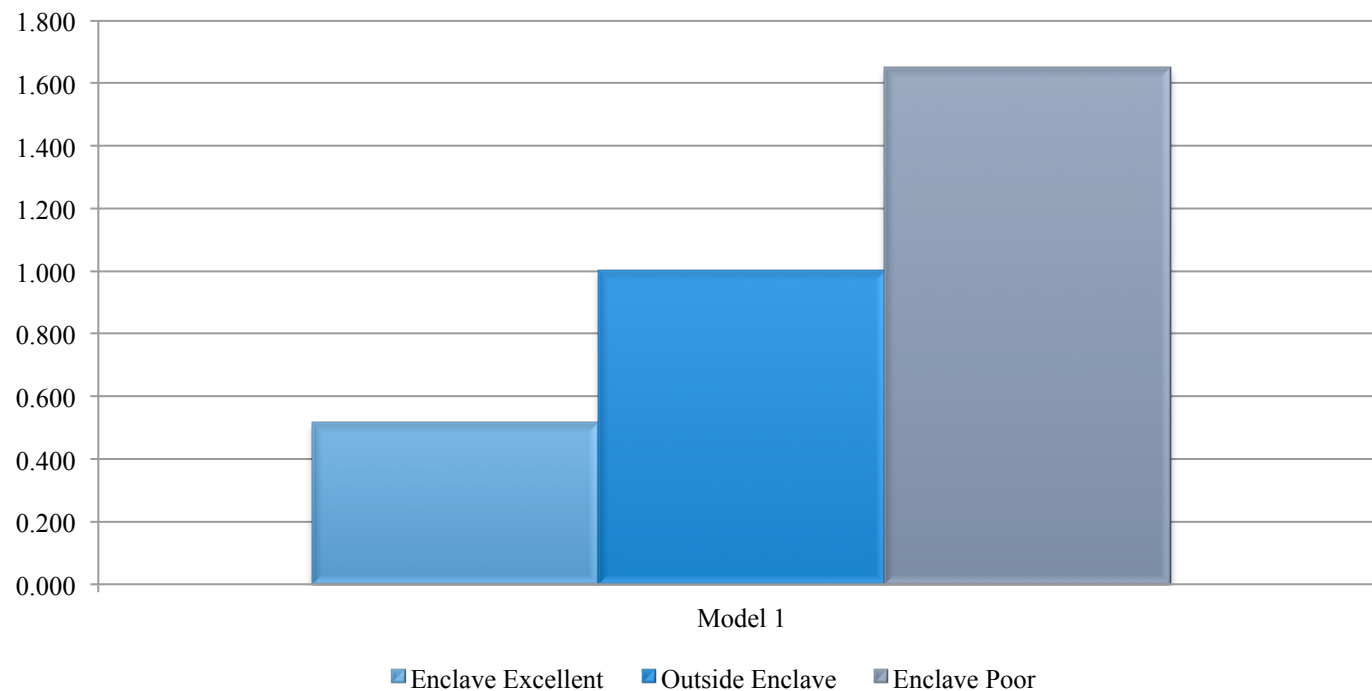
# Vietnamese are more likely to report poor health and less likely to report excellent health than Latinos



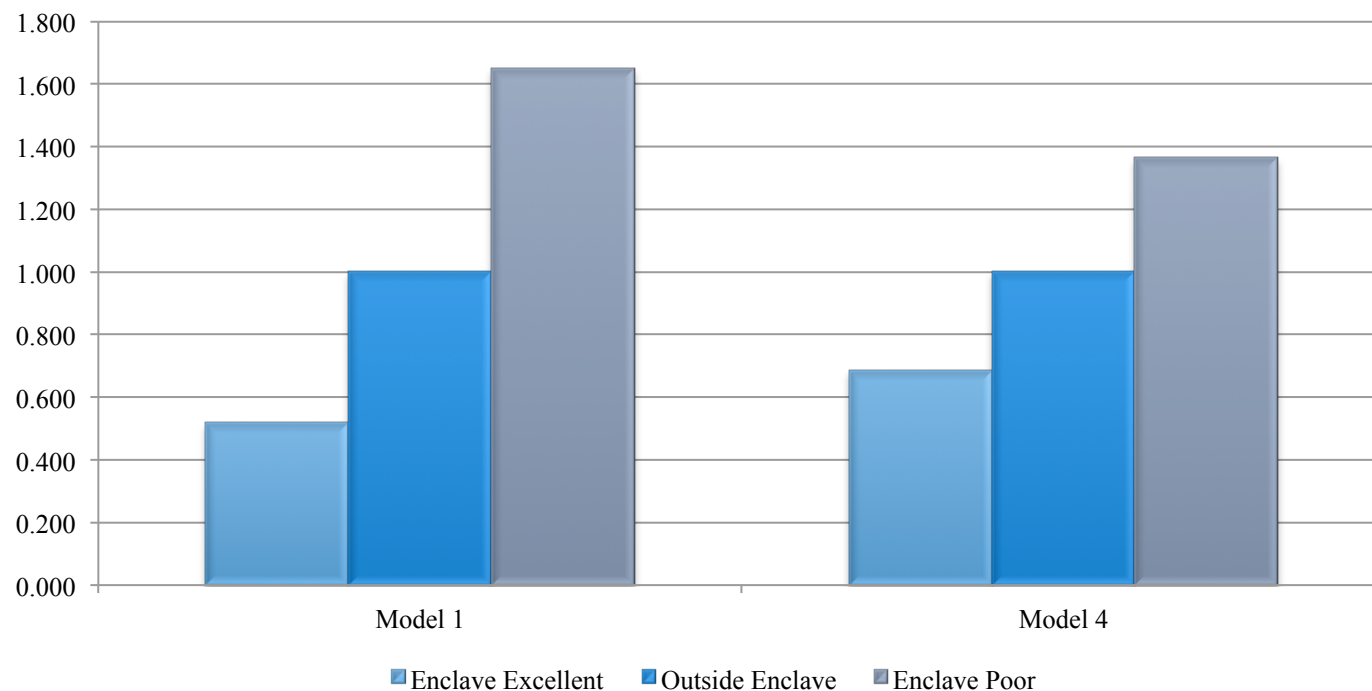
Controls explain differences in poor health. Vietnamese still significantly less likely to report excellent health.



# Enclave residents are more likely to report poor health and less likely to report excellent health



Controls explain differences in poor health. Enclave residents remain less likely to report excellent health.



Interaction between ethnicity and enclave not significant

# Discussion

- While enclave residence may provide other advantages, enclave residence negatively affects self-rated health.
  - Both less likely to report excellent health and more likely to report poor health
- Vietnamese also report poorer health than Latinos. Likely reflects differences in immigrant process and context.

# Discussion Continued

- Controlling for demographics, ses, and lifestyle explains differences in self-reported poor health
  - Does not explain lower likelihood of reporting excellent health
- Ethnicity and enclave appear to independently influence health.
  - Effect of enclave residence is similar for both Latinos and Vietnamese
  - Only difference is Vietnamese outside enclave are more likely to report “good” health



# Next Steps

- Refining definition of enclave
- What can help explain differences in reporting of excellent health?
- Adding in census-based geographical indicators
  - Do neighborhood quality indicators help explain lower likelihood of reporting excellent health among Vietnamese and enclave residents

Multinomial Regression on Self-Rated Health, Excellent or Very Good versus Good

	Model 1		Model 2		Model 3		Model 4	
	Excellent vs. Good		Excellent vs. Good		Excellent vs. Good		Excellent vs. Good	
	B	OR	B	OR	B	OR	B	OR
<b>Vietnamese</b>	-1.400	0.247***	-0.645	0.525*	-0.641	0.527**	-0.547	0.579*
<b>Enclave</b>	-0.661	0.516***	-0.439	0.645**	-0.353	0.703	-0.377	0.686**
<b>Demographics</b>								
Female			0.230	1.259	0.447	1.564*	0.448	1.565*
Age 35 to 44			-0.574	0.563^	-0.762	0.467**	-0.742	0.476*
Age 45 to 54			-0.42	0.657	-0.498	0.608	-0.529	0.589
Age 55 and Older			-0.892	0.410**	-0.841	0.431*	-0.881	0.414*
Single			-0.576	0.562*	-0.576	0.562^	-0.654	0.520*
Interview not In English			-1.029	0.357***	-0.601	0.548*	-0.564	0.569*
<b>Social Class</b>								
Education								
HS or Less (ref)					-0.899	0.407*	-0.816	0.442*
Some College					0.122	1.130	0.135	1.145
College or Higher					0.216	1.241	0.2	1.221
Home Owner					0.004	1.004	-0.008	0.992
Income								
under \$40 K					-0.084	0.919	-0.093	0.911
\$60 K or greater					0.256	1.292	0.233	1.262
missing Income					-0.405	0.667	-0.409	0.664
<b>Lifestyle</b>								
Current or Former Smoker							-0.123	0.884
At Least One Drink							0.206	1.229
<b>Constant</b>	1.024		1.478		1.478		1.144	

Note: \*\*\* denotes significant at p<.001, \*\* denotes significant at p<.01, \* denotes significant at p<.05, ^ denotes significant at p<.10

Multinomial Regression on Self-Rated Health, Poor or Fair versus Good

	Model 1		Model 2		Model 3		Model 4	
	Poor or Fair vs. Good		Poor or Fair vs. Good		Poor or Fair vs. Good		Poor or Fair vs. Good	
	B	OR	B	OR	B	OR	B	OR
<b>Vietnamese</b>	0.846	2.330***	0.041	1.042	0.057	1.059	0.141	1.151
<b>Enclave</b>	0.501	1.650***	0.424	1.528*	0.323	1.381	0.311	1.365
<b>Demographics</b>								
Female			0.505	1.657*	0.528	1.696**	0.581	1.788**
Age 35 to 44			0.45	1.568	0.535	1.707	0.598	1.818
Age 45 to 54			0.857	2.356*	0.809	2.246^	0.84	2.316^
Age 55 and Older			1.706	5.507***	1.497	4.468***	1.516	4.554***
Single			-0.547	0.579*	-0.56	0.571^	-0.531	0.588^
Interview not In English			0.903	2.467***	0.599	1.820*	0.46	1.584*
<b>Social Class</b>								
Education								
HS or Less (ref)					-0.350	0.705	-0.351	0.704
Some College					-0.429	0.651	-0.455	0.634
College or Higher					-0.762	0.467*	-0.725	0.484*
Home Owner								
					-0.296	0.744	-0.304	0.738
Income								
under \$40 K					0.768	2.155*	0.727	2.069*
\$60 K or greater					0.203	1.225	0.122	1.130
missing Income					0.649	1.914^	0.604	1.829
<b>Lifestyle</b>								
Current or Former Smoker								
							0.442	1.556^
At Least One Drink								
							-0.641	0.527*
<b>Constant</b>	-0.760		-2.213		-1.941		-1.875	

Note: \*\*\* denotes significant at p<.001, \*\* denotes significant at p<.01, \* denotes significant at p<.05, ^ denotes significant at p<.10