PAA Extended Abstract

Neighborhood Instability, Social Support, and Health among Low-Income Mothers

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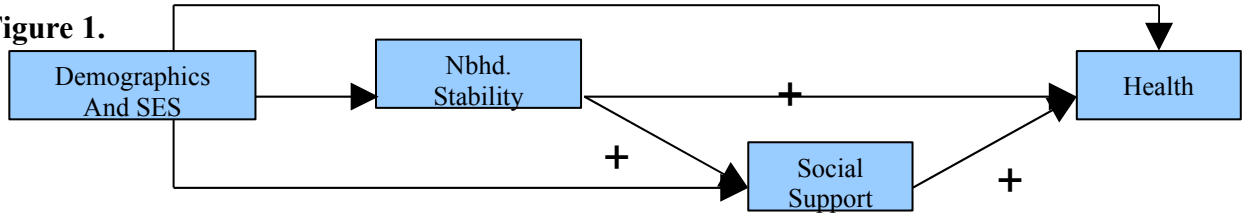
Introduction and Background

Past research connects residential mobility to health at the neighborhood level. This literature treats residential instability, the proportion of residents living in the neighborhood less than one or two years, as a neighborhood characteristic which impacts individual residents' health. However, researchers have yet to analyze individual-level neighborhood instability, individuals' length of residency in their neighborhoods, as a health determinant.

Researchers hypothesize that the negative effects of residential instability result from disrupting neighborhood integration. Neighborhood social networks provide residents with information about health care resources, social capital, and social support (Kirby and Kaneda 2006; Kirby 2008; Small et al. 2008). Even beyond health care resources, these networks are particularly important for low-income mothers to support their families. Informal work, local charities, community groups, and personal networks are all essential sources of both cash and non-cash resources for low-income and welfare mothers, all of which are tied into neighborhood social networks (Edin and Lein 1996).

Past research also suggests that networks in low-income neighborhoods are more effective for low-income residents than wealthier ones. Kirby (2008) shows that the negative relationship between health care access and neighborhood poverty affects middle- and high-income residents much more than low-income residents. Kirby concludes that the low-income residents "benefit from living among those in similar economic circumstances because they face similar barriers to care and can benefit from the experience and knowledge of those around them. This benefit appears to compensate for what would be the negative influence of community-level poverty" (Kirby 2008:344). Figure 1 graphically displays the hypothesis linking neighborhood stability, social support, and health.

Figure 1.



Methods

I test the hypotheses above by analyzing survey data from the Welfare, Children, and Families: Three-City Study (Angel et al. 2009). The Three City Study is a mixed-methods longitudinal study designed to evaluate the impact of 1996 welfare reform on children and their caregivers, carried out in Boston, Chicago, and San Antonio between 1999 and 2006. The study is composed of ethnographic, survey, and childhood embedded development components. The survey component used in this paper is drawn from a stratified random sample of 2,402 focal children and their caregivers from low-income neighborhoods. Eligible families must have household incomes under 200% of the national poverty level. The survey's three waves of data were collected in 1999, 2000-1, and 2005-6. This paper focuses on respondents from the original sample forward, excluding new caregivers who entered the survey in subsequent waves.

I analyze these data using a series of random effects models. First, I predict the probability of mothers replying they have enough people they can count on for "small favors" as a measure of instrumental support. These models include basic demographic and socioeconomic controls including age, race, marital and cohabitation status, household composition, city of residence, highest educational degree, and the log of monthly total household income divided by the square root of household size. I measure neighborhood stability through the number of years the mothers have lived in their present neighborhood. Second, I measure psycho-social health using the brief symptom inventory, a scale measuring the number and severity of depressive, anxious, and somatic symptoms the mothers

experience. A score of zero indicates the respondent does not suffer at all from any of the listed symptoms. Higher scores indicate suffering from more symptoms to a greater degree. I regress this outcome variable on the above demographic and socioeconomic controls, number of years in neighborhood, and four measures of social support. The social support variables include the measure for "small favors" described above, and questions asking the mothers if they have enough people to rely on for help looking after their children, emotional support, and to ask for emergency loans.

Table 1. Random Effects Logistic Regression of Mothers Having Enough People to Help with "Small Favors," Presented as Unstandardized Coefficients.

Variables	Model I	Model II	Model III
Age	0.02***	0.02***	0.02**
	(0.00)	(0.01)	(0.01)
Black [a]	-0.22	-0.20	-0.12
	(0.18)	(0.20)	(0.21)
Latina [a]	-0.85***	-0.86***	-0.76***
	(0.18)	(0.20)	(0.20)
Other Race [a]	-0.73	-0.73	-0.66
	(0.40)	(0.47)	(0.47)
Married (1 = yes)	-0.05	-0.09	-0.08
	(0.11)	(0.13)	(0.13)
Cohabiting (1 = yes)	0.04	-0.01	0.03
	(0.14)	(0.16)	(0.16)
Adults in Household	0.17***	0.15**	0.14*
	(0.05)	(0.06)	(0.06)
Children in Household	-0.10**	-0.08*	-0.08*
	(0.03)	(0.03)	(0.03)
Boston [b]	-0.05	-0.15	-0.12
	(0.12)	(0.13)	(0.13)
San Antonio [b]	0.20	0.13	0.18
	(0.12)	(0.14)	(0.14)
Less than High School [c]		-0.39***	-0.39***
		(0.11)	(0.11)
Technical Degree [c]		0.03	0.03
		(0.13)	(0.13)
Bachelor's Degree + [c]		0.13	0.14
		(0.34)	(0.34)
Log(Adj. Household Income)		0.07	0.09
		(0.06)	(0.06)
Years in Neighborhood			0.02***
			(0.01)
Constant	-0.56*	-1.05*	-1.22*
	(0.28)	(0.48)	(0.48)
Person Periods	6360	5042	5033
N	2455	2335	2335

Source: Three City Study. Standard errors in parentheses. *** p<0.001, ** p<0.01, * p<0.05

[a] Compared to white. [b] Compared to Chicago. [c] Compared to High School/G.E.D.

Table 2. Random Effects Regression of Mental Distress Brief Symptom Inventory Score.

Variables	Model I	Model II	Model III	Model IV
Age [a]	-0.00	-0.00	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Black [a]	-2.74***	-2.45***	-2.55***	-2.64***
	(0.67)	(0.71)	(0.72)	(0.69)
Latina [a]	-1.80**	-1.65*	-1.78*	-2.55***
	(0.66)	(0.71)	(0.71)	(0.68)
Other Race [a]	-2.00	-2.18	-2.28	-2.71
	(1.47)	(1.64)	(1.64)	(1.57)
Married (1 = yes)	-1.45***	-1.27**	-1.28**	-1.27**
	(0.35)	(0.40)	(0.40)	(0.39)
Cohabiting (1 = yes)	-0.55	-0.18	-0.20	-0.04
	(0.41)	(0.47)	(0.48)	(0.47)
Adults in Household	-0.11	0.06	0.08	0.12
	(0.14)	(0.16)	(0.16)	(0.16)
Children in Household	-0.06	-0.10	-0.10	-0.05
	(0.10)	(0.11)	(0.11)	(0.11)
Boston [b]	0.03	0.45	0.41	0.47
	(0.43)	(0.46)	(0.46)	(0.44)
San Antonio [b]	0.99*	1.35**	1.29**	1.33**
	(0.45)	(0.47)	(0.47)	(0.45)
Less than High School [c]		1.09**	1.10**	0.77*
		(0.36)	(0.36)	(0.35)
Technical Degree [c]		0.10	0.10	0.14
		(0.38)	(0.38)	(0.37)
Bachelor's Degree + [c]		-0.99	-1.00	-0.91
		(1.05)	(1.05)	(1.03)
log(Adjusted Household Income)		-0.48**	-0.50**	-0.40*
		(0.18)	(0.18)	(0.18)
Years in Neighborhood			-0.03	-0.01
			(0.02)	(0.02)
Emotional Support (1=yes)				-2.05***
				(0.31)
Help with Children (1 = yes)				-0.64
				(0.33)
Emergency Loans (1 = yes)				-0.54
				(0.33)
Small Favors (1 = yes)				-1.82***
				(0.36)
Constant	10.15***	11.97***	12.21***	13.67***
	(0.97)	(1.50)	(1.51)	(1.49)
Person Periods	6434	5032	5023	4912
N	2460	2332	2332	2315

Source: Three City Study. Standard errors in parentheses. *** p<0.001, ** p<0.01, * p<0.05

[a] Compared to white. [b] Compared to Chicago. [c] Compared to High School/G.E.D.

Preliminary Results

Table 1 displays the results of the first series of random effects models predicting the probability of mothers having enough people to rely on for "small favors." Age and especially having more adults in the household significantly increase the predicted probability of reporting enough sources for "small favors." Having more children in the household, being Latina relative to white, and not having a high school degree or equivalent significantly decrease the probability of reporting enough support. As hypothesized, the number of years the mothers have lived in their current neighborhood significantly increases the probability of reporting enough support. A five year increase in the length of neighborhood residency increases the predicted odds of reporting enough support by 11%.

Table 2 displays the results of the second series of random effects models, which predicts the mothers' scores on the brief symptom inventory scale. Being black and Latina, relative to white, predicts a substantially lower score for mental distress, as well as being married and having higher monthly adjusted income. Length of residency in the neighborhood has no direct effect on the mental distress score, but two of the four indicators of having enough social support significantly predict lower mental distress (small favors and emotional support).

References

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