



Community and Family Influences on Family Engagement in Georgia's Maternal, Infant, and Early Childhood Home Visiting Program

Darcey D. Terris¹, Junhan Cho¹, Rachael E. Glisson¹, Anita Brown¹, Dayoung Bae¹, and Carole Steele²

¹Center for Family Research, University of Georgia, Athens, GA

²Office of Prevention and Family Support, Georgia Division of Family and Children Services, Atlanta, GA

Funding provided through a D89 competitive grant awarded by the Health Resources and Services Administration.



Descriptive Statistics for Study Variables

Variables	n (%)
Program participation	
Retention	
0 – 3 months	436 (42.6)
4 – 6 months	142 (13.9)
7 – 12 months	193 (18.8)
13 – 24 months	156 (15.2)
More than 2 years	97 (9.5)
Dosage ^a	17.47 (18.48)
Intensity ^a	2.32 (1.19)
Family demographics	
Mother's age	
12 – 17	125 (12.2)
18 – 21	378 (36.9)
22 – 29	392 (38.3)
≥ 30	129 (12.6)
Relationship status ^b	
Living with a main romantic partner	461 (56.4)
Others	357 (43.6)
Employment status ^b	
Employed	263 (27.3)
Unemployed	699 (72.7)
Educational attainment ^b	
Less than 12 years	386 (38.0)
12 years or more	629 (62.0)
Race/ethnicity ^b	
White	302 (29.6)
Black	634 (62.2)
Other ^c	84 (8.2)
Primary language	
English	906 (88.5)
Other ^d	118 (11.5)
Poverty level below 100% of the federal guideline ^e	
Above poverty level	167 (23.5)
Below poverty level	543 (76.5)
Child characteristics	
Gender ^b	
Female	375 (46.0)
Male	440 (54.0)
Child age ^b	
Prenatal	323 (39.8)
Neonatal (less than one month)	204 (25.2)
1 – 12 months	223 (27.5)
13 – 24 months	37 (4.6)
Over 24 months	24 (3.0)
Community-level factors	
Low birthweight babies (%) ^{a,*}	0.10 (0.02)
Count of infant mortality per 1,000 ^{a,*}	6.71 (2.98)
Count of children with a substantiated incident of abuse or neglect per 1,000 ^{a,*}	7.79 (1.78)
Median population income in the past 12 months (US\$) ^{a,f}	24677.01 (4205.16)
Unemployment rate (%) ^{a,f}	0.06 (0.01)
Single parent household (%) ^{a,f}	0.36 (0.08)
Households receiving public assistance (%) ^{a,f}	0.19 (0.08)
Community risk index ^{a,g}	3.25 (2.09)

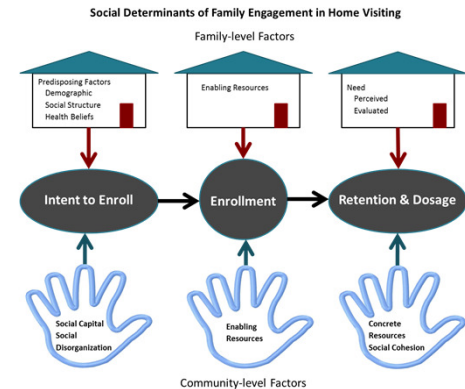
N = 1024. ^a mean (SD). ^b Number of missing data for respective variable (No information provided): relationship status (n = 206), employment status (n = 62), education attainment (n = 9), race/ethnicity (n = 4), poverty level (n = 314), child gender (n = 209), and child age (n = 213). ^c Other in race/ethnicity included American Indian, Alaskan Native, Asian, multi-ethnicity, and unknown ethnicity. ^d Other in primary language included Amharic, Burmese, Farsi, French, Nepali, Somali, Spanish, and Sudanese. ^e Community-level factors retrieved from the 2012 Kids Count Data Center. ^f Community-level factors retrieved from the 2012 American Community Survey. ^g Community risk index was developed by sum of median split community-level factors (0 = absent, 1 = present; range = 0 – 7).

- Objective:** To explore the influence of community and family-level factors on observed family engagement outcomes.
 - Initial family engagement (> 1 home visit before exit)
 - Retention in home visiting (duration)
 - Completion of expected home visits (dosage)
 - Number of home visits completed over length of retention (intensity)
- Outcomes:**
 - We found that mothers were more likely to engage in home visiting for a longer duration and to complete a greater number of home visits if they:
 - Lived with a romantic partner
 - Spoke a primary language other than English
 - Had a family income above the poverty level
 - Enrolled when their children were relatively younger
 - Further, living in a community with greater disadvantage, independent of a family's socio-economic status, was associated with decreased family engagement outcomes in home visiting.

Hierarchical Regression Results for Family- and Community-level Factors' Effects on Participants' Engagement in Home Visiting

Variables	Retention		Dosage				Intensity					
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
Family-level factors												
Mother's age	.03	.03	.03	.03	.02	.02	.02	.03	-.05	.04	-.07	.04
Relationship status	.14**	.05	.14**	.05	.12**	.05	.14**	.05	.03	.04	.02	.03
Employment status	.03	.04	.03	.04	-.01	.04	-.01	.04	-.08*	.04	-.03	.02
Educational attainment	.03	.02	.02	.02	-.05	.03	-.05	.03	.01	.01	.01	.01
Race/Ethnicity												
African American	-.06	.08	-.08*	.05	-.09	.08	-.10	.08	-.01	.05	-.02	.07
Other ^a	.05	.13	.05	.13	.08	.12	.08	.12	.05	.07	.05	.08
Primary language	.22**	.03	.22**	.04	.18**	.02	.17**	.02	.02	.04	.02	.04
Poverty level	-.10*	.05	-.10*	.05	-.12*	.07	-.09*	.06	.02	.04	.01	.05
Child gender	-.01	.02	-.01	.02	-.02	.02	-.02	.02	-.03	.03	-.04	.04
Child age	-.14**	.04	-.08*	.04	-.14**	.04	-.14**	.03	-.09*	.04	-.07*	.04
Community-level factor												
Community risk index ^b	-	-	-.06*	.03	-	-	-.10*	.03	-	-	-.09*	.03

N = 1024. Unstandardized coefficients are shown. All variables are standardized by z-transformation (mean = 0 and SD = 1). Caucasian American are used as the reference group for race/ethnicity findings. ^a Other in race/ethnicity included American Indian, Alaskan Native, Asian, multi-ethnicity, and unknown ethnicity. ^b Community risk index was developed by sum of median split community-level factors (0 = absent, 1 = present; range = 0 – 7). *p < .10. **p < .05. ***p < .01.



Our guiding conceptual model arose by merging components of three previously described models: the Social Determinants of Health (HealthyPeople.gov, 2015), the Intent to Enroll, Enrollment, and Retention in Home Visiting (McCurdy and Daro, 2001), and the Andersen Behavioral Model of Health Services Use (Andersen, 1995).

- Methods:**
 - Study period: January 1, 2012 to September 30, 2015.
 - Of the 1,486 families enrolled in home visiting through one of Georgia's seven MIECHV-funded sites, 1,024 were included in our study.
 - Families enrolled longer than the study end date were excluded. There were no other eligibility criteria for inclusion in our study.
 - Two-level hierarchical linear modeling (HLM) was utilized in our analyses because participants were clustered within counties. Using the HLM analysis command adjust s parameter standard errors for interdependence in the data.
 - In models 1, 3, and 5, the influences of family-level factors on the engagement outcome s were tested.
 - In models 2, 4, and 6, the community risk index was included, after controlling for the family-level factors.
- Questions?**
 - Please contact Darcey Terris at dterris@uga.edu

