

Organizational resources as capital: Configurations of resource use and adolescent health

Amanda L. Roy and Jessica Burdick

New York University

SRA Biennial Meeting

Austin, TX

March 20, 2014



Neighborhood Resource Capital



- Neighborhood organizational capacity; the ability of residents to access and benefit from organizational resources (Peterson, Krivo, & Harris, 2000)
- Neighborhood and family economic conditions are related to organizational capacity
 - Indicators of neighborhood disadvantage related to presence of resources (Queralto & Witte, 1998) and resource use (Coulton & Irwin, 2009)
 - Family income related to eligibility for and accessibility of resources

Resources and Child Health



- The presence of organizational resources (e.g. library, recreation center) is positively related to children's health (Fan & Chen, 2010) and physical activity (Kasehagan, Busacker, Kane, & Rohan, 2012)
- Neighborhood and family economic conditions are also related to child health
- Does organizational resource use explain the relationship between economic conditions and child health?

Modeling Organizational Resource Use



- Common approach is to sum the number of resources present or used
- Distinguish between “positive” vs. “negative” resources
- Does not capture variability in the ways that people use resources
- Are patterns of resource use differentially related to children’s health?

Latent Class Analysis



- Variable-centered analytic approaches (regression, factor analysis) identify relationships between variables
- Person-centered analytic approaches (LCA, cluster analysis) identify qualitative differences between individuals
- LCA is a model based approach
 - Formal tests of model fit
 - Estimates of the probability of class membership
 - Facilitates model selection and reduces bias associated with cluster misspecification

Current Study

1. Uses LCA to identify profiles of resource use
2. Does resource use mediate the relationship between neighborhood and family economic status and child health?





- Making Connections
 - A neighborhood transformation, family development initiative
- Three waves of data collection
 - Wave 2 collected between 2005-2007
- 1,794 families with children (0-17)
 - 497 families with children between 9-17
- Implemented in 10 cities

Sample



N = 1,794	%/Mean	SD
Hispanic	41%	
Black	27%	
White	21%	
Caregiver employed	59%	
Child is female	46%	
Child age	7.71	4.92
Household income	\$25,980	22,496

Resource Use



- Caregivers reported whether any household member had used 8 resources in the prior 12 months
 - Child care services
 - Check cashing facility
 - Money transfer service
 - After school programs
 - Community college
 - Rec./community center
 - Library
 - Welfare office

Economic Status



- Neighborhood disadvantage
 - Census tract of home address linked with 2000 census data
 - Average of % pop. in poverty, with less than high school education, unemployed, female-headed households
- Family income
 - Caregivers reported total household income in the prior 12 months

Child Health



- Asthma
 - “Has a doctor, nurse, or other medical professional ever told you that [CHILD] has asthma?” Yes (1), No (0)
- Health condition
 - “Has a health professional ever told that [CHILD] has a physical, learning, mental, or chronic health condition...” Yes (1), No (0)
- General health
 - “In general, would you say [CHILD]’s health is” Excellent (5) – Poor (1)

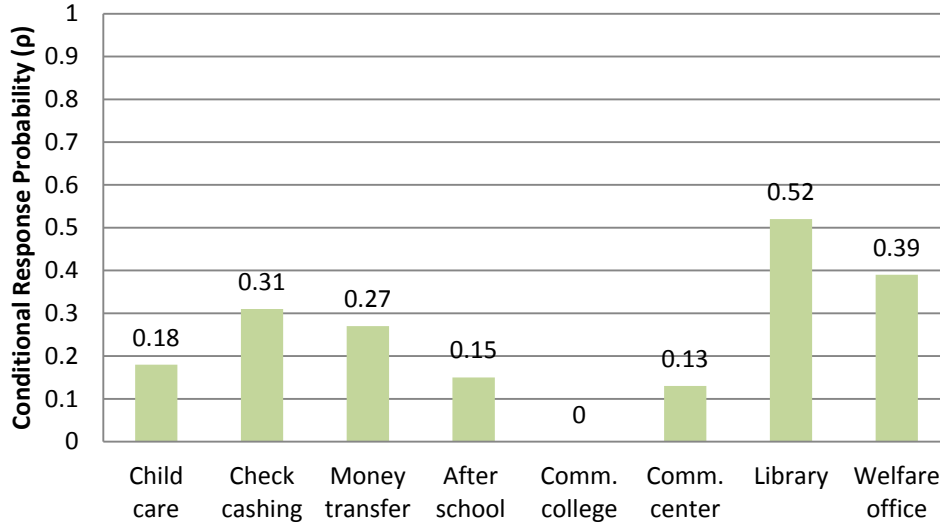
Identifying Profiles



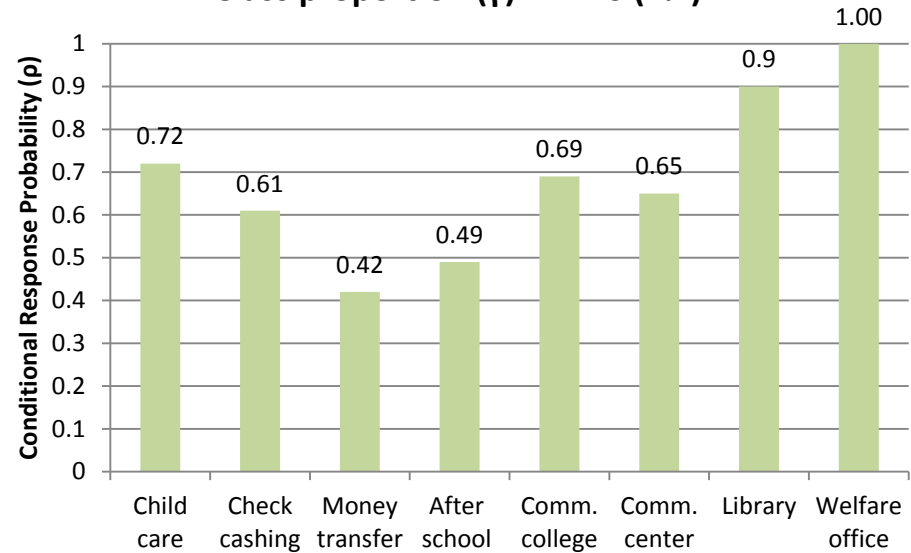
- Models run on full (N=1,794) sample in Mplus
- Specified 2-5 classes
- Four class model selected based on fit statistics and conceptual clarity

	G^2	p	AIC	BIC	BICa	$G^2\Delta$
2	349	.00	17,777	17,870	17,816	.00
3	300	.00	17,741	17,884	17,801	.00
4	260	.03	17,714	17,907	17,795	.05
5	236	.11	17,707	17,949	17,808	.08

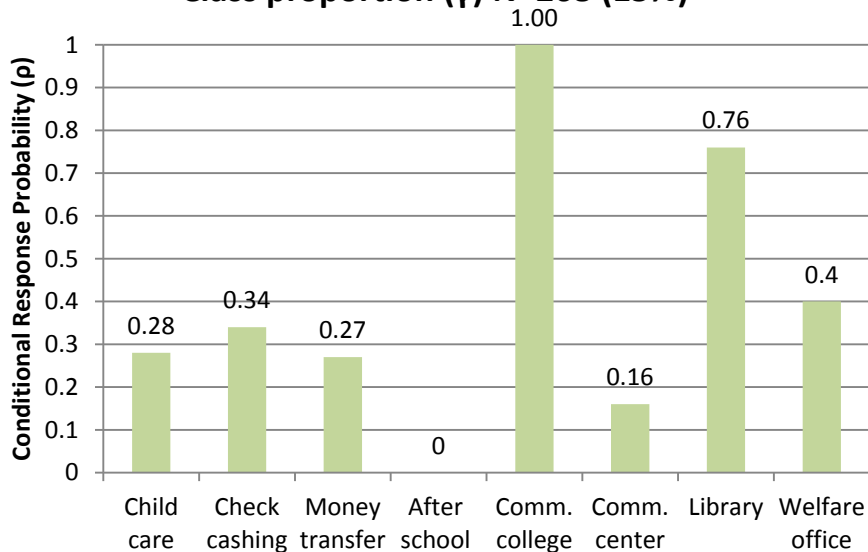
Low-use:
Class proportion (γ) N=663 (37%)



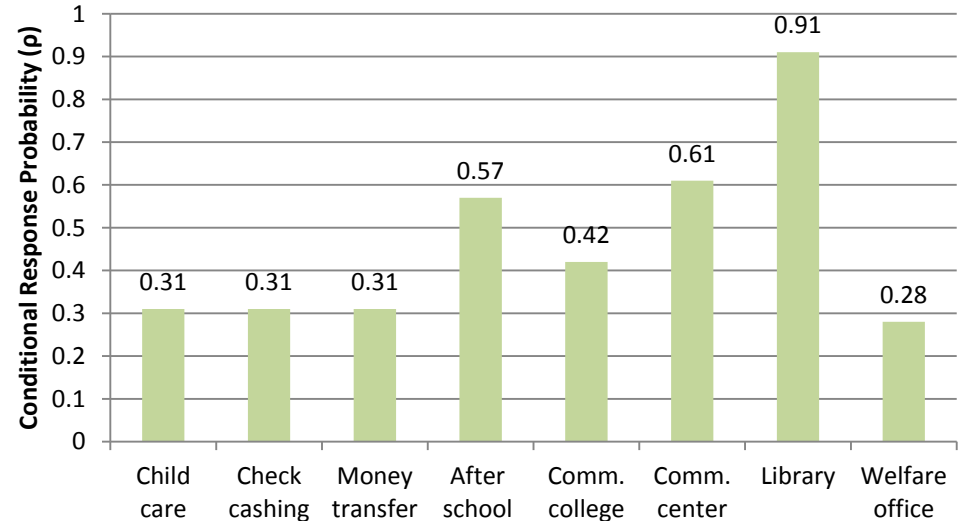
High-use:
Class proportion (γ) N=126 (7%)



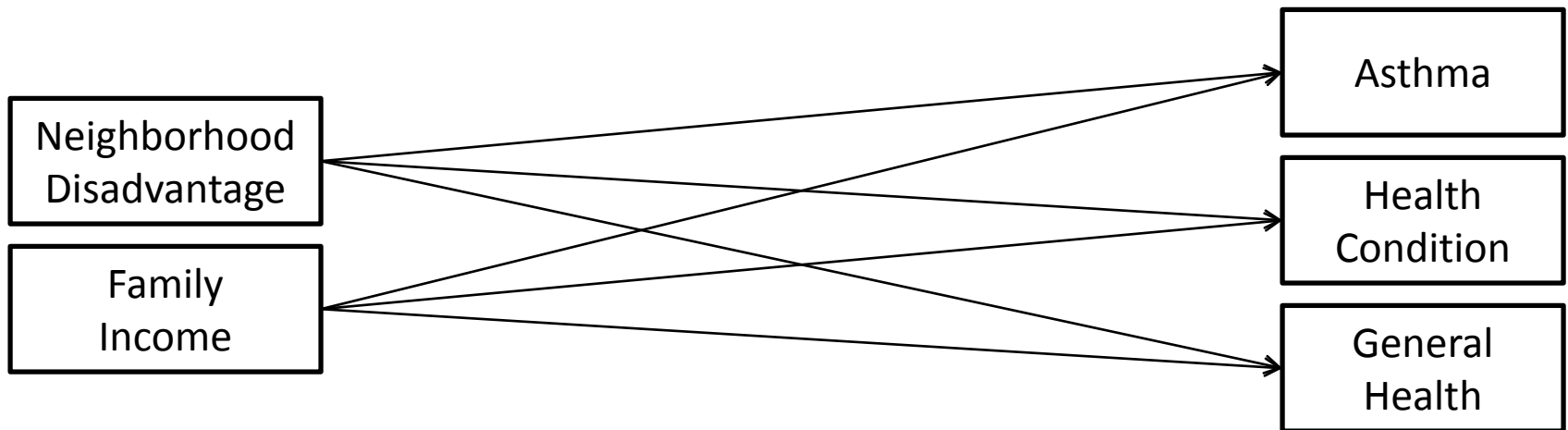
Educational services:
Class proportion (γ) N=268 (15%)



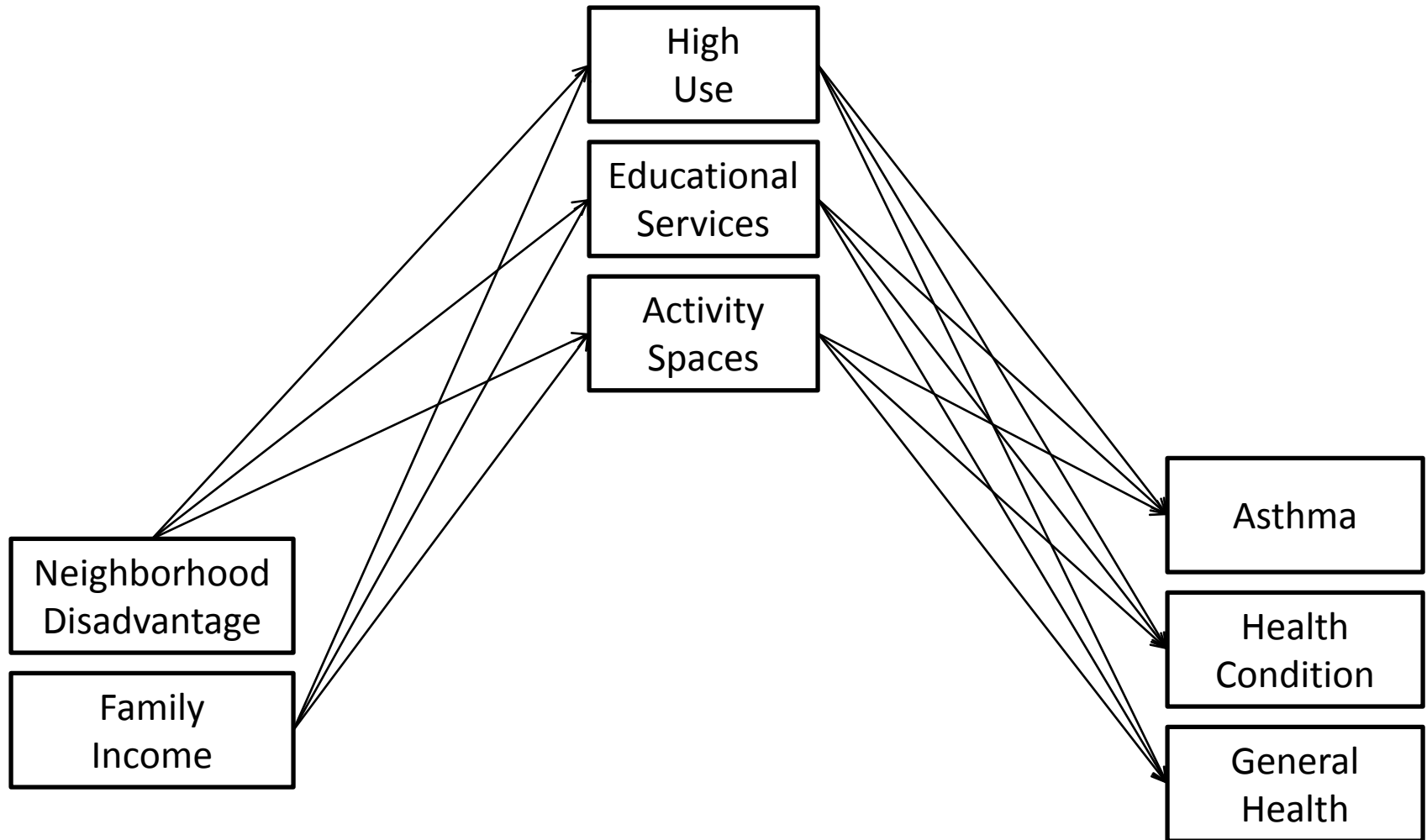
Activity spaces:
Class proportion (γ) N=735 (41%)



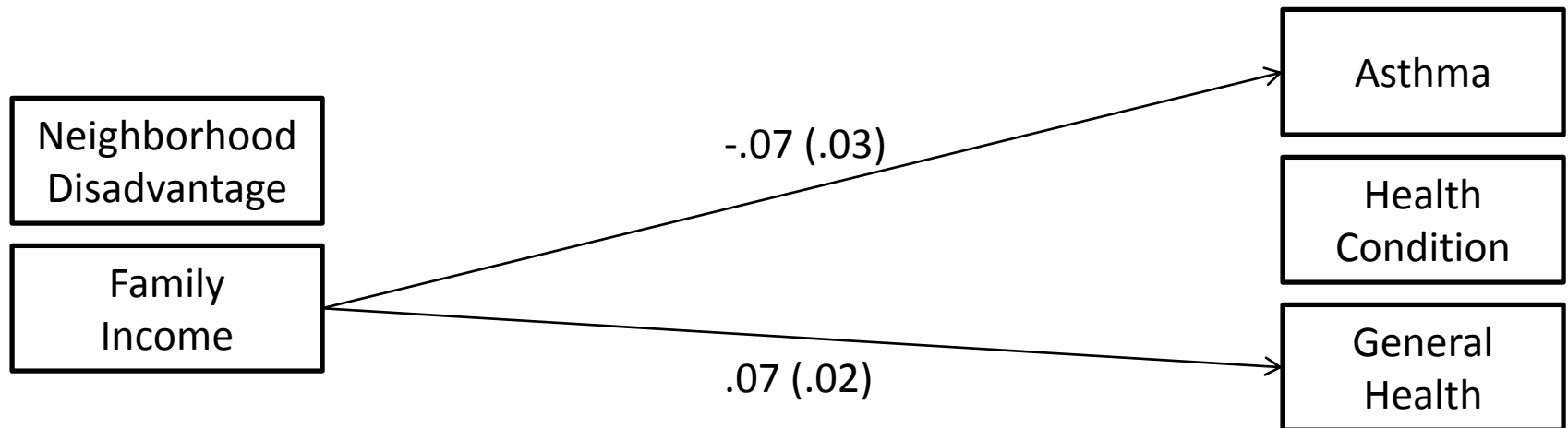
Resource Use as a Mediator



Resource Use as a Mediator

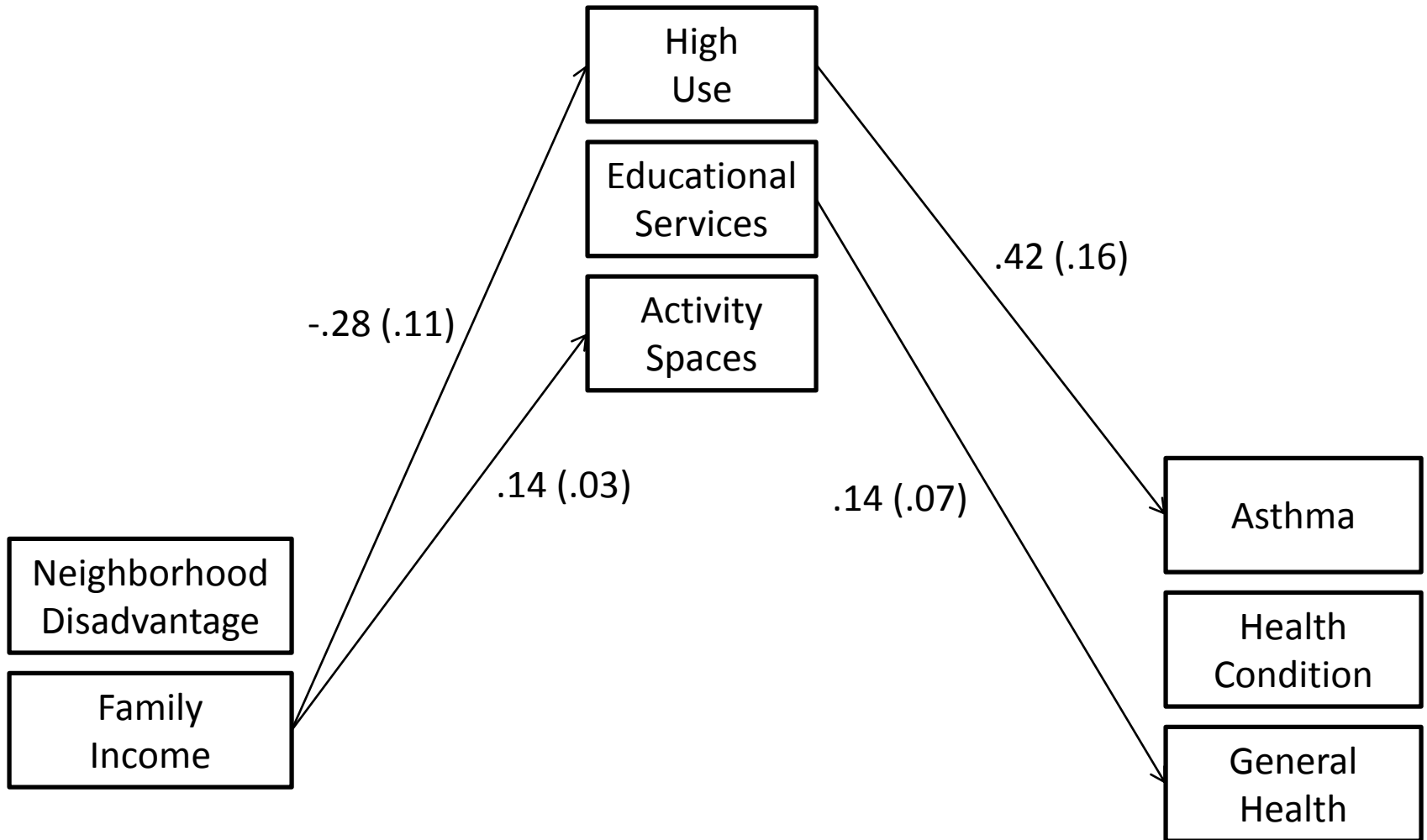


Resource Use as a Mediator



Models adjust for: Employed, Race/ethnicity, child sex, child age

Resource Use as a Mediator



Models adjust for: Employed, Race/ethnicity, child sex, child age

Conclusions



- Families use resources in different ways
- Higher income families are more likely to be in the activity spaces profile and less likely to be in the high use profile (relative to the low use profile)
- Children in the high use profile are more likely to have asthma while children in the educational services profile have better health

Next Steps

- Direction of effects
 - Capitalize on multiple waves
- Are profiles equivalent for families with younger vs. older children?
- Integrate objective data from business census
 - Are presence and use related?





Thank You!

Child Health by Use Profile

	Asthma			Health Condition			General Health		
	OR	SE		OR	SE		b	SE	
High use	2.49	.31	**	1.21	.30		.09	.23	
Edu. Services	1.26	.25		.70	.28		.33	.17	*
Acitivity spaces	.95	.18		1.00	.17		.12	.11	
NB disadvantage	1.87	.77		.82	.58		-.31	.43	
Family income	.95	.03	†	.98	.04		.07	.02	**
Employed	.98	.14		.88	.15		.02	.09	
Hispanic	1.07	.21		.69	.22		-.02	.13	
Black	1.48	.25		.77	.20		-.12	.11	
Other	1.12	.28		.49	.32	*	.00	.12	
Child gender	.84	.11		.78	.17		.15	.08	†
Child age	.99	.04		1.00	.05		-.02	.02	