

# EXAMINING THE EFFECTS OF LOCATION, NEIGHBORHOOD SOCIAL ORGANIZATION, AND HOME LITERACY ON EARLY COGNITIVE SKILLS IN THE UNITED STATES

John Mark Froiland<sup>1</sup>

University of Northern Colorado, USA

---

**Author's note.** John Mark Froiland's initial development of this study was supported in part by grant award #R305B050030 (*Postdoctoral Research Fellowship in Early Childhood Intervention*) from the Institute of Education Sciences, U.S. Department of Education to Purdue University (Douglas R. Powell, PI; Karen E. Diamond, Co-PI). The initial development of the research was also supported by a travel and training award from the National Center for Education Statistics to John Mark Froiland. The further development and completion of this research and article was supported in part by a grant from the Graham Fund for Children awarded to the author. Statements made in this article do not necessarily represent the views of the research sponsors. The author would like to thank Dan Mroczek, Douglas Powell, Karen Diamond, Seung-Hee Son, Mark Davison, and Dave Kenny who all provided mentoring in advanced methodology while the author was a Postdoctoral Fellow at Purdue.

**Abstract. Background.** The bioecological model of human development indicates that there are multiple layers of factors influencing child development (Bronfenbrenner, Morris, 2006). **Purpose.** This study investigated the effects of community locale, neighborhood social organization, utilization of community cognitive developmental resources, and home literacy on early childhood cognitive skills. **Material and methods.** Hierarchical linear regression was employed with a nationally representative sample of kindergarten children from across the USA. This enabled an examination of the effects of community locale (urban, suburb/large town, and small town/rural) on neighborhood social organization, as well as the effect of social organization on early cognitive skills (a composite of individually administered early reading, math and general knowledge scales), above and beyond the effects of accessing community cognitive developmental resources (e.g., concerts, zoos, aquariums, museums, and libraries) and home literacy (e.g., parent-child shared reading). Multiple statistical controls were utilized, including race/ethnicity status, gender,

---

<sup>1</sup> Address for correspondence: Academic Institution: Department of School Psychology, McKee Hall 298, Box 131, University of Northern Colorado, Greeley, CO 80639; e-mail: john.froiland@unco.edu; tel.: 970-351-2819.

and family SES. **Results.** Neighborhood social organization was lower in urban areas and social organization positively predicted early cognitive skills; however, family SES was the strongest predictor of social organization, indicating that dwelling in an urban area was only a notable disadvantage for families of lower income. Small town/rural residence was directly associated with lower cognitive skills, but this effect is partially mitigated by the higher levels of social organization in small town/rural neighborhoods. **Conclusions.** Because contextual effects on cognitive skills were above and beyond the positive effects of parental involvement and SES, the importance of the contextualized support of child development is discussed.

**Keywords:** urban environments, rural environments, neighborhoods, cognitive development, parental involvement, elementary school students.

The bioecological model of development recognizes that child development is influenced by multiple systems including the family, school, neighborhood and larger ecologies that encompass more immediate systems (Bronfenbrenner, Morris, 2006). In recent years, psychologists, sociologists and developmental scientists have conducted research that indicates that neighborhood social organization is related to children's early cognitive development, partially via parenting practices and perceptions. For instance, Froiland, Powell, and Diamond (2011) found that the strength of neighborhood social networks in suburban neighborhoods predicts home literacy (e.g., parent-child shared reading and provision of children's books), which, in turn, predicts expressive vocabulary. However, other studies have found a direct relation between neighborhood social organization and early childhood cognitive outcomes. For instance, Kohen, Brooks-Gunn, Leventhal and Hertzman (2002) found, among a national sample in Canada, that neighborhood social disorder (presence of garbage, dilapidated housing, violence and public intoxication) predicted lower verbal ability scores among preschool children. Despite evidence that urban areas are at-risk for greater levels of social disorder than suburban, small town and rural areas (e.g., Garbarino, 2001; Geis, Ross, 1998; Sampson, 1991), very little research has examined the extent to which early cognitive development is influenced by urban locale via social organization.

### **Urban, Suburban/Large Town and Small Town/Rural Neighborhoods**

In considering the differences between urban and non-urban areas, psychologists, developmental scientists and sociologists may benefit

from knowing whether urban neighborhood residence is associated with early childhood cognitive skills. Among a nationally representative sample of children at the beginning of kindergarten, Durham and Smith (2006) found that children in non-metropolitan areas across the United States generally had lower reading scores at the beginning of kindergarten; however children of low SES actually exhibited better reading than their metropolitan counterparts in reading. Although the investigators did not examine social organization, it is possible that higher levels of social organization in non-metropolitan areas served as a protective factor for low SES children, whereas high SES children in urban areas are generally in neighborhoods that have very few signs of social disorder. At the same time, the generally lower scores in non-metropolitan areas could be partially explained by less access to all of the potentially cognitively stimulating amenities of thriving cities and suburbs, such as plays, concerts, zoos, aquariums, libraries and museums. If families in small town and rural areas access these resources less frequently, this could contribute to an early cognitive disadvantage for children in small town/rural areas. In looking at the literacy development of kindergarten through third-graders, Aikens and Barbarin (2008) found no effects for suburban residence on a composite measure of literacy. However, they combined urban and small town/rural census tracts together as “non-suburban,” thus making it impossible to detect different relations between literacy and small town/rural and urban neighborhoods.

Because town and rural areas are generally associated with lower early literacy skills, but may play a protective role for low SES children (Durham, Smith, 2006), it is important to determine whether early cognitive development is influenced by variables that are likely to significantly differ by locale such as neighborhood social organization and access to community cognitive developmental resources.

### **Neighborhood Social Organization**

In urban neighborhoods that have lower social organization, families speak less with neighbors, in order to protect themselves from potential negative influences in the community (APA, 2005) and they may have less salutary communication with neighbors and be exposed to more violence (Garbarino, 2001). Indeed, neighborhood social

disorder predicts negative emotional outcomes, such as perceived powerlessness, depression and anxiety (Ross, Mirowsky, 2009), which could hamper cognitive development of adults and children in the neighborhood. Families in suburban/large town, small town or rural areas may be less overloaded with noise and interpersonal stimuli and have more attention remaining (Segal, McCauley, 1986; van den Berg, Hartig, Staats, 2007) for salutary and cognitively stimulating interactions with neighbors than those from urban neighborhoods.

### **Hypotheses**

Hypothesis 1: home literacy, accessing community cognitive developmental resources and neighborhood social organization would each be positively related to early cognitive skills, when controlling for family SES, race/ethnicity status and gender.

Hypothesis 2: residence in a small town or rural area would be negatively associated with cognitive skills, when controlling for key neighborhood, family and child factors.

Hypothesis 3: residence in a small town/rural or suburban/large town area would be positively associated with neighborhood social organization, when controlling for family SES and race/ethnicity status.

## **METHOD**

### **Participants**

This study involved a nationally representative sample of 21,409 kindergarten children from across the nation and their parents. 45 % of the children represented ethnic/racial minority backgrounds and 49 % of the children were female. Through the use of a sample weight (i.e., BYPWO, a cross-sectional weight), the data are representative of the nation's kindergartners in 1998. The data were collected by researchers from the National Center for Education Statistics (NCES) as a part of the Early Childhood Longitudinal Study, Kindergarten Class of 1998. Families were equally sampled (20 % from each) across all five levels of a socioeconomic status (SES) measure. 41 % of children were from suburbs/large towns, 21 % were from small town/rural areas, and 38 % were from urban areas.

## **Measures**

### ***Neighborhood Social Organization***

A neighborhood social organization variable was summed from six items addressing the following areas: how safe it is for children to play (1 = not at all safe; 2 = somewhat safe; 3 = very safe); presence of litter (1 = big problem; 2 = somewhat of a problem; 3 = no problem); sale of drugs; violent crime; burglary; and vacant homes. The latter four items were coded in the same way as presence of litter. Higher scores represented more social organization. Internal consistency for the scale was acceptable (Cronbach's Alpha = .76).

### ***Community Locale***

The following community locale variables were derived from the dataset: small town/rural and suburban/large town (each dummy coded with urban as the reference). These locale distinctions were derived from the U.S. Census by the NCES.

### ***Accessing Community Cognitive Developmental Resources***

Accessing community cognitive developmental resources is a variable derived from Principal Components Analysis involving scores from the following four items: visited a play or concert, visited the library, visited a zoo/aquarium; and visited a museum recently.

### ***Home Literacy***

A home literacy factor was created using Principal Components Analysis in SPSS version 18. The home literacy factor was derived from parent's ratings on five items involving the following: how often parents read to their children; how often parents tell their children stories; how many children's books they have at home; how often children read to themselves; how many records, tapes and CD's the family has at home. Items related to the number of children's books at home and shared reading frequency were used to measure home literacy because they are strong indicators of home literacy resources (Bracken, Fischel, 2008; Bus, van IJendoorn, Pellegrini, 1995) and the general home learning environment (Lundberg, 2002).

### **Cognitive Skills**

Child assessments included individually administered (in the fall of kindergarten) composite tests of reading, math, and general knowledge. Each of these tests were based on Item Response Theory (IRT scores) and were quite comprehensive. For instance, the Reading scale involved items addressing receptive vocabulary, letter-word identification, print familiarity, phonemic awareness and comprehension. The General Knowledge scale entails items addressing early knowledge of natural sciences and social studies. The Math scale involves items addressing counting, shape knowledge, ordinality, relative size, adding, subtracting and multiplication/division. These three IRT scales were entered into a Principal Components Analysis in order to create the Cognitive Skills factor. Each of these cognitive skills is predictive of future cognitive and academic development. For example, early math and reading are strong predictors of achievement in upper elementary school and middle school (Duncan et al., 2007).

### **Data Analysis Plan**

The hypotheses were tested via hierarchical linear regression, with control variables (i.e., family SES, African-American, Latino, Asian, and gender) entered at Step 1. Hierarchical linear regression enabled the investigator to examine the unique predictive contribution of variables on a continuum from proximal (e.g., home literacy) to more distal (e.g., geographic locale; see Table 1).

## **RESULTS**

### **Positive predictors of cognitive skills for kindergartners**

Hypothesis 1 stated that home literacy, accessing community cognitive developmental resources and neighborhood social organization would each be positively related to early cognitive skills, when controlling for SES, race/ethnicity and gender. Neighborhood social organization predicted higher cognitive skills, above and beyond the significant positive effects of accessing community cognitive developmental resources, home literacy and statistical controls (see Table 1). Interestingly, the regression coefficient for social organization increased

from Step 4 to Step 5, suggesting that the effect of social organization was slightly more pronounced when accounting for locale. The effect of accessing community cognitive developmental resources was also significant above and beyond the positive effects of home literacy and the effects of the control variables. Thus, all aspects of hypothesis 1 were supported.

**Table 1.** Summary of hierarchical regression analyses for variables predicting cognitive skills

| Predictor              | B     | SE B | $\beta$ |
|------------------------|-------|------|---------|
| Step 2                 |       |      |         |
| Home literacy          | .14*  | .02  | .14     |
| Step 3                 |       |      |         |
| Home literacy          | .14*  | .02  | .13     |
| Community resource use | .03*  | .01  | .03     |
| Step 4                 |       |      |         |
| Home literacy          | .14*  | .02  | .13     |
| Community resource use | .03*  | .01  | .03     |
| Social organization    | .02*  | .01  | .03     |
| Step 5                 |       |      |         |
| Home literacy          | .14*  | .02  | .13     |
| Community resource use | .03*  | .01  | .03     |
| Social organization    | .02*  | .01  | .04     |
| Suburban/large town    | .03   | .03  | .01     |
| Small town/rural       | -.14* | .04  | -.06    |

Note: controls entered at Step 1 are family SES, child gender, African-American, Latino, and Asian (omitted from the table).  $R^2 = .24$  for Step 1;  $\Delta R^2 = .016$  for Step 2,  $.001$  for Step 3,  $.001$  for Step 4 and  $.004$  for Step 5 ( $ps < .05$ ). \* $p < .05$ .

### Small/town rural residence and cognitive skills

Hypothesis 2 stated that residence in a small town/rural area would be negatively associated with cognitive skills, when accounting for key neighborhood, family and child factors. As predicted, residence in small town/rural neighborhoods directly predicted lower cognitive scores at Step 5 in hierarchical linear regression (see Table 1). This means that the negative effect of small town/rural residence was found, even when accounting for neighborhood social organization, accessing community cognitive developmental resources, home literacy and the statistical control variables (e.g., SES).

### Association between locale and neighborhood social organization

Residence in suburban/large town neighborhoods and small town/rural neighborhoods (vs. urban neighborhoods) significantly predicted better social organization, when controlling for family SES, race/ethnicity status, and child gender (see Table 2). Interestingly, the regression coefficients for African-American, Latino, and Asian all reduced once locale was entered in Step 2. In fact, Asian was no longer a significant predictor once accounting for suburban/large town and small town/rural residence. The strongest predictor of social organization was family SES, followed by small town/rural residence and then suburban/large town residence. These findings indicate that parents perceive social organization to be higher when they are more affluent and educated, as well as when they live in non-urban neighborhoods. African-American and Latino families are at a greater risk than white families for residing in a socially disordered neighborhood, whereas Asian families are at no greater risk than white families for residing in socially disordered neighborhoods.

**Table 2.** Summary of hierarchical linear regression analysis for variables predicting neighborhood social organization

| Predictor           | B     | SE B | $\beta$ |
|---------------------|-------|------|---------|
| <b>Step 1</b>       |       |      |         |
| Family SES          | .24*  | .02  | .21     |
| African-American    | -.66* | .07  | -.15    |
| Latino              | -.55* | .06  | -.13    |
| Asian               | -.33* | .14  | -.03    |
| Gender              | -.02  | .05  | -.01    |
| <b>Step 2</b>       |       |      |         |
| Family SES          | .25*  | .02  | .22     |
| African-American    | -.50* | .07  | -.11    |
| Latino              | -.38* | .06  | -.09    |
| Asian               | -.21  | .14  | -.02    |
| Gender              | -.02  | .04  | -.01    |
| Suburban/large town | .43*  | .05  | .13     |
| Small town/rural    | .60*  | .06  | .15     |

Note:  $R^2 = .10$  for Step 1;  $\Delta R^2 = .02$  for Step 2 ( $ps < .05$ ). \* $p < .05$ .

## Locale and Accessing Community Cognitive Developmental Resources

In order to determine if the small town/rural early cognitive disadvantage is influenced by accessing community and cognitive developmental resources, a hierarchical linear regression was conducted with accessing community cognitive developmental resources as the outcome (see Table 3). These results revealed that small town/rural residence was negatively associated with accessing community cognitive developmental resources, above and beyond the positive effects of home literacy and family SES.

**Table 3.** Summary of hierarchical regression analyses for variables predicting accessing community cognitive developmental resources

| Predictor           | B     | SE B | $\beta$ |
|---------------------|-------|------|---------|
| <b>Step 2</b>       |       |      |         |
| Home literacy       | .25*  | .02  | .25     |
| <b>Step 3</b>       |       |      |         |
| Home literacy       | .25*  | .02  | .25     |
| Suburban/large town | .00   | .03  | .00     |
| Small town/rural    | -.18* | .04  | -.07    |

Note: controls entered at Step 1 are family SES, child gender, African-American, Latino, and Asian (omitted from the table).  $R^2 = .07$  for Step 1;  $\Delta R^2 = .05$  for Step 2,  $.01$  for Step 3 ( $p < .05$ ). \* $p < .05$ .

## DISCUSSION

Like suburban children in the United States, children from small towns and rural areas reside in neighborhoods with higher levels of social organization than urban neighborhoods (see Table 1). However, the cognitive benefits of higher levels of social organization in small town/rural neighborhoods are counteracted by the direct negative association between small town/rural residence and early cognitive skills. Furthermore, parents from small town/rural neighborhoods were the least likely to access community cognitive developmental resources, which was related to early cognitive skills. This suggests that only children in suburban/large town neighborhoods have a contextual advantage over children from urban neighborhoods, qua early cognitive development, and this advantage is indirect via social organization.

Children in suburbs and large towns have an indirect academic advantage over children from cities due to greater neighborhood social organization. Psychologists in urban areas should pay close attention to the neighborhoods that their students live in, advocating for greater social organization and support for children, especially when many of their students are from low SES backgrounds (SES predicts social organization, see Table 1). Although children in suburbs often benefit from greater social organization, there are now more low SES families in the suburbs than in urban areas (Berube, Kneebone, 2006). Thus, psychologists in suburbs can also examine the level of social organization in the neighborhoods that their low SES child clients reside in. This is because, even in the suburbs, low SES children and parents benefit from living in neighborhoods with more social organization (Froiland et al., 2011).

### **Limitations**

Although relatively comprehensive, the composite measure of home literacy in this study was based on parent self-report and did not include objective observations of the home literacy environment. In future studies, a particularly useful aspect of home literacy to examine is the extent to which parents interact in a controlling vs. autonomy supportive way with their children during shared reading time. Research indicates that parental autonomy support (e.g., communication entailing empathy and inspirational explanations of the value of learning) enhances children's intrinsic motivation to learn and positive emotions surrounding learning at home (Froiland, 2011); furthermore, controlling parental involvement often backfires, as it is associated with academic anxiety (Froiland, 2011) and lower achievement levels (Cooper, Lindsay, Nye, 2000).

Another potential limitation of this study involves the use of parent's perceptions of neighborhood social organization, rather than independent observations. However, the fact that neighborhood social organization could be predicted by locale is in harmony with previous findings (e.g., Sampson, 1991).

### **Implications**

Interventions aimed at improving at-risk young children's cognitive development may benefit from attention to geographical, neighborhood, and family supports for early cognitive development. This is the second recent study to indicate that low-income children have more difficulty

with early cognitive development in urban areas (Durham, Smith, 2006) and at least the second national study (the other was in Canada) to indicate that social disorder predicts lower cognitive skills (Kohen et al., 2002). Since urban areas also pose mental health risks for children (e.g., through exposure to community violence; Bradshaw, Rodgers, Ghandour, Garbarino, 2009), especially poor children (Wandersman, Nation, 1998), psychologists, developmental scientists and sociologists may wish to further advocate for low-income children and their parents in urban areas in a time in which many city governments are focusing on gentrification, rather than strengthening their support to the communities and low SES residents that may need the most help (Peck, 2005; Wacquant, 2008). The focus in urban areas, especially low SES urban neighborhoods, would be to enhance social organization. One potential intervention target for children in small town and rural areas could be encouraging community visits to cognitively stimulating amenities in large towns or cities, such as museums, zoos, aquariums, and plays, as well as insuring that families have adequate access to and satisfaction with local libraries.

Further development of research on child development in the context of neighborhoods is important if psychologists are to respond to the call to apply ecological systems theories by creating synergistic support for children in the home, school, and community (Christenson, 2004). Such research may require the additional input of geographers, sociologists and economists, in order to pinpoint advantages of space and the potential savings to society for creating more psychosocially healthy communities.

While ecologically minded child psychologists consider the family, school, classroom and child when conducting early childhood assessments, the current findings further suggest the importance of considering the neighborhood contexts of early cognitive development. Moreover, many studies indicate that neighborhoods influence the emotional and physical health of children and adults (Leventhal, Brooks-Gunn, 2000). It may be worthwhile for community scientists to strive toward discovering ways in which to include brief neighborhood observations or assessments into multi-systemic preventive interventions. In fact, leading school psychology trainers have recommended that school psychologists encourage parents to share knowledge about their community so that Response to Intervention teams can understand children's skill development and behavior in light of multiple germane contexts

(Reschly, Coolong-Chaffin, Christenson, Gutkin, 2007). More generally, it is important for applied psychologists and sociologists to further advocate for children's optimal development by supporting policies and research that seek to help at-risk children thrive in a range of neighborhoods and spaces. Based on the findings with this national representative sample of students, neighborhood social organization, access to community cognitive developmental resources and home literacy are alterable factors that influence early cognitive skills. Thus, systematic interventions and policy to enhance these positive characteristics should be developed.

## References

- American Psychological Association (2005). *Toward an Urban Psychology: Research, Action, and Policy*. Washington, DC: Author.
- Aikens, N. L., Barbarin, O. (2008). Socioeconomic Differences in Reading Trajectories: The Contribution of Family, Neighborhood, and School Contexts. *Journal of Educational Psychology*, 100, 235–251.
- Berg, A. E. van den, Hartig, T., Staats, H. (2007). Preference for Nature in Urbanized Societies: Stress, Restoration, and the Pursuit of Sustainability. *Journal of Social Issues*, 63, 79–96.
- Berube, A., Kneebone, E. (2006). *Two Steps Back: City and Suburban Poverty Trends 1999–2005*. Washington, DC: Brookings Institution.
- Bracken, S. S., Fischel, J. E. (2008). Family Reading Behavior and Early Literacy Skills in Preschool Children from Low-Income Backgrounds. *Early Education and Development*, 19, 45–67.
- Bradshaw, C. P., Rodgers, C. R. R., Ghandour, L. A., Garbarino, J. (2009). Social-Cognitive Mediators of the Association between Community Violence Exposure and Aggressive Behavior. *School Psychology Quarterly*, 24, 199–210.
- Bronfenbrenner, U., Morris, P. A. (2006). The Bioecological Model of Human Development. In R. M. Lerner, W. Damon (Eds.), *Handbook of Child Psychology*. Vol. 1: *Theoretical Models of Human Development* (6th ed., pp. 793–828). Hoboken, NJ: John Wiley & Sons Inc.
- Bus, A., van IJzendoorn, M. H., Pellegrini, A. D. (1995). Joint Book Reading Makes for Success in Learning to Read: A Meta-Analysis of Intergenerational Transmission of Literacy. *Review of Educational Research*, 65, 1–21.
- Christenson, S. L. (2004). The Family-School Partnership: An Opportunity to Promote the Learning Competence of All Students. *School Psychology Review*, 33, 83–104.
- Cooper, H., Lindsay, J. J., Nye, B. (2000). Homework in the Home: How Student, Family, and Parenting Style Differences Relate to the Homework Process. *Contemporary Education Psychology*, 25, 464–487.
- Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L. S., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K.,

- Japel, C. (2007). School Readiness and Later Achievement. *Developmental Psychology*, 43, 1428–1446.
- Durham, R. E., Smith, P. J. (2006). Non-metropolitan Status and Kindergartners' Early Literacy Skills: Is There a Rural Disadvantage? *Rural Sociology*, 71, 625–661.
- Froiland, J. M. (2011). Parental Autonomy Support and Student Learning Goals: A Preliminary Examination of an Intrinsic Motivation Intervention. *Child and Youth Care Forum*, 40 (2), 135–149.
- Froiland, J. M., Powell, D. R., Diamond, K. E. (2011). Relations among Neighborhood Social Networks, Home Literacy, and Early Literacy in Suburban Head Start Families. Manuscript submitted for publication.
- Garbarino, J. (2001). An Ecological Perspective on the Effects of Violence on Children. *Journal of Community Psychology*, 29, 361–378.
- Geis, K. J., Ross, C. E. (1998). A New Look at Urban Alienation: The Effect of Neighborhood Disorder on Perceived Powerlessness. *Social Psychology Quarterly*, 61, 232–246.
- Kohen, D. E., Brooks-Gunn, J., Leventhal, T., Hertzman, C. (2002). Neighborhood Income and Physical and Social Disorder in Canada: Associations with Young Children's Competencies. *Child Development*, 73, 1844–1860.
- Leventhal, T., Brooks-Gunn, J. (2000). The Neighborhoods They Live in: The Effects of Neighborhood Residence upon Child and Adolescent Outcomes. *Psychological Bulletin*, 126, 309–337.
- Lundberg, I. (2002). The Child's Route into Reading and What Can Go Wrong. *Dyslexia*, 8, 1–13.
- Peck, J. (2005). Struggling with the Creative Class. *International Journal of Urban and Regional Research*, 29, 740–770.
- Reschly, A. L., Coolong-Chaffin, M., Christenson, S. L., Gutkin, T. (2007). Contextual Influences and Response to Intervention: Critical Issues and Strategies. In S. R. Jimerson, M. K. Burns, A. VanDerHeyden (Eds.), *Handbook of Response to Intervention: The Science and Practice of Assessment and Intervention* (pp. 148–160). New York: Springer.
- Ross, C., E., Mirowsky, J. (2009). Neighborhood Disorder, Subjective Alienation, and Distress. *Journal of Health and Social Behavior*, 50, 49–64.
- Sampson, R. J. (1991). Linking the Micro- and Macrolevel Dimensions of Community Social Organization. *Social Forces*, 70, 43–64.
- Segal, M. E., McCauley, C. R. (1986). The Sociability of Commercial Exchange in Rural, Suburban, and Urban Locations: A Test of the Urban Overload Hypothesis. *Basic and Applied Social Psychology*, 7, 115–135.
- Wacquant, L. (2008). Relocating Gentrification: The Working Class, Science and the State in Recent Urban Research. *International Journal of Urban and Regional Research*, 32, 198–205.
- Wandersman, A., Nation, M. (1998). Urban Neighborhoods and Mental Health: Psychological Contributions to Understanding Toxicity, Resilience, and Interventions. *American Psychologist*, 53, 647–656.

## VIETOVĖS, GYVENAMOJO RAJONO SOCIALINĖS ORGANIZACIJOS IR RAŠTINGUMO UGDYMO NAMŲ APLINKOJE REIKŠMĖ ANKSTYVIESIEMS VAIKŲ KOGNITYVINIAMS ĮGŪDŽIAMS JUNGTYNĖSE AMERIKOS VALSTIJOSE

John Mark Froiland

Šiaurės Kolorado universitetas (University of Northern Colorado), JAV

**Santrauka. Mokslinė problema.** Pagal bioekologinį žmogaus vystymosi modelį, vaiko vystymąsi veikia įvairių lygmenų veiksniai (Bronfenbrenner, Morris, 2006). **Tikslas.** Tyrimu nagrinėjama vietos bendruomenės, gyvenamojo rajono socialinės organizacijos, bendruomenės kognityvinio vystymosi išteklių ir raštingumo ugdymo namų aplinkoje reikšmė ankstyviesiems vaiko kognityviniams įgūdžiams. **Metodika.** Tyrime taikoma hierarchinė tiesinė regresija, analizuojama reprezentatyvi JAV vaikų darželius lankančių vaikų imtis. Vertinama gyvenamosios vietovės (miestas, priemiestis / didelis miestas, nedidelis miestas / kaimas) reikšmė gyvenamojo rajono socialinei organizacijai, taip pat socialinės organizacijos reikšmė ankstyviesiems kognityviniams įgūdžiams (įgūdžiai vertinami apibendrinant individualiai atliktų ankstyvųjų skaitymo, matematikos ir bendrųjų žinių testų skales), atsižvelgiant į bendruomenei prieinamus kognityvinio vystymo išteklius (pvz., koncertus, zoologijos sodus, akvariumus, muziejus, bibliotekas) ir raštingumo ugdymą namų aplinkoje (pvz., tėvų ir vaikų bendrą skaitymą). Atliekant statistinę analizę atsižvelgiama į rasę / etniškumą, lytį, šeimos socialinį-ekonominį statusą. **Rezultatai.** Gyvenamųjų rajonų socialinė organizacija buvo mažiau palanki kaimo vietovėse, socialinės organizacijos pobūdis savo ruožtu prognozavo ankstyvuosius kognityvinius įgūdžius. Tačiau šeimos socialinis-ekonominis statusas buvo stipresnis prognozinis veiksnys, numatantis socialinę organizaciją, – tai rodo, kad gyvenimas kaimo vietovėse yra ypač nepalankus šeimoms, turinčioms mažas pajamas. Gyvenimas mažuose miestuose ar kaime buvo tiesiogiai susijęs su prastesniais ankstyvaisiais kognityviniais įgūdžiais, tačiau ši sąsaja buvo silpnesnė tais atvejais, kai mažo miesto ar kaimo socialinė organizacija buvo geresnė. **Išvada.** Tyrimas atskleidė, kad kontekstas yra reikšmingas veiksnys, prognozuojantis vaiko ankstyvuosius kognityvinius gebėjimus, nepriklausomai nuo raštingumo lavinimo namuose ar šeimos socialinio-ekonominio statuso. Straipsnyje aptariama kontekstualizuotos pagalbos vaiko vystymuisi reikšmė.

**Pagrindiniai žodžiai:** miesto aplinka, kaimo aplinka, gyvenamasis rajonas, kognityvinis vystymasis, tėvų įsitraukimas, pradinės mokyklos mokiniai.

Received: 22 April, 2011

Accepted: 26 October, 2011