

Cultural Capital in Illinois: A County-Wise Analysis

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Research Brief, Short Paper

ISSN 2687-8844

Vol. 1, No. 7 (2019, May 17)

Abstract

This paper is driven by the idea that cultural capital contributes to wellbeing. Empirical analysis of cultural capital suggests that children in Illinois are missing opportunities for cultural development; their caregivers spend very little time in educating them. The paper argues that children living in poverty cannot (and should not) be culturally acceptable to Illinois residents¹.

Keywords: Cultural capital, Illinois, Data Envelopment Analysis.

1.0. Introduction

Cultural capital is a person's culture-related behavior² such as learning to play a particular musical instrument and engaging in certain religious practices³ (Di Maggio, 2004). It can be studied either at the individual level or societal level (Thorsby, 2011).

At the individual level, children inherit cultural capital primarily from family members (van de Werfhorst, 2010). Bourdieu (1984, 1986) contends that there are three types of cultural capital: (i) embodied cultural capital is made up of consciously acquired and passively inherited features such as language and tastes; objectified cultural capital denotes physical objects that are owned such as works of art, and institutionalized cultural capital is concerned with institutional recognition of capital held by the individual (for example, academic credentials).

Operational definitions of cultural capital at the individual level are often based on the 'objectified' facet of the concept such as cultural goods owned (Brooks and Kushner, 2002) or the number of formal diplomas achieved (Collins, 1979). The 'embodied' capital is the most difficult to measure (Thorsby, 1995).

At the societal level, the concept is used to describe how communities conserve, create, disseminate and educate the population about cultural assets such as heritage

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² UNESCO (2001) defines culture as the set of distinctive spiritual, material, intellectual and emotional features of a society or a social group that encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs".

³ Think of cultural capital as motives for action. Technically, it is an enduring belief that a specific mode of conduct is personally and socially preferable to the opposite mode of conduct.

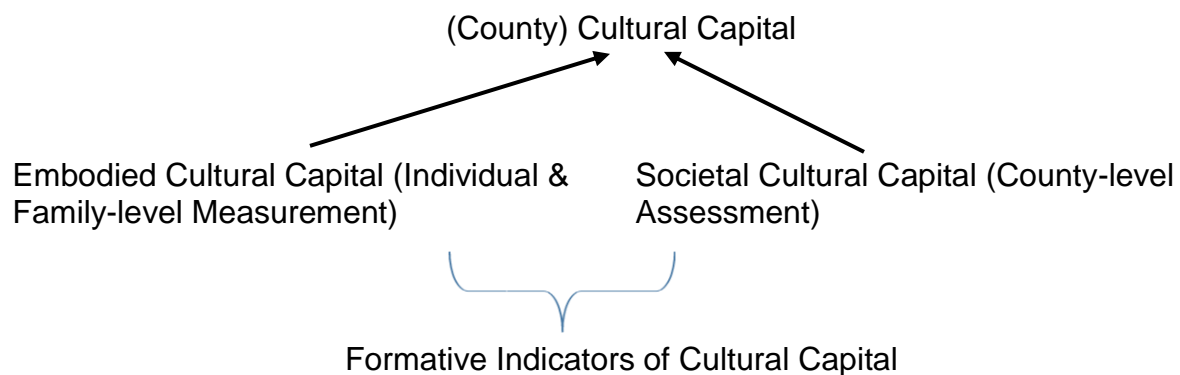
buildings, national parks, sport venues, museums and art works – to mention a few. Interaction between the two levels of cultural capital can be measured using metrics such as number of visitors to heritage sites, visitor numbers to museums, and time spent (hours of participation) in sport activities (Cooper, 2012).

In this paper, an attempt is made to assess formative indicators of embodied cultural capital in children based on the proposition that “the present and future wellbeing can be enhanced if children grow up in households that are able to access adequate economic resources” (Athiyaman, 2019). Furthermore, to assess cultural activities at the societal level in Illinois counties, we adapt the framework developed by the European Statistical System Network on Culture (ESS-Net 2012).

2.0. Methodology

The discussion above can be summarized using the graphical model shown in Figure 1.

Figure 1: Conceptualization of Cultural Capital



If any of these measures increases, cultural capital would change. The formative specification in Figure 1 implies the relationship:

$$\eta = \gamma_1 x_1 + \dots + \gamma_n x_n$$

Where γ_i is a parameter reflecting the contribution of x_i to the latent variable (η), the latent variable denotes the overall cultural capital which is made up of sub-factors: ‘embodied cultural capital’ and ‘societal cultural capital’.

2.1. Content Specification for Cultural Capital

The domain of the focal construct includes embodied cultural capital and societal cultural capital. Embodied cultural capital in children is developed through the investment of time and financial resources by the family⁴. Data from the American Time-Use Survey (ATUS, 2017) are used to gain insights into time spent by families on caring for household children. Specifically, activity codes 0301 (caring for and helping household children) and 0302 (activities related to household children's education) are cross-classified with family income level to understand the impact of economic and time investments on embodied cultural capital.

The adequacy of economic resources (family income) was assessed using the ACS' "specified poverty levels" data⁵; the data elements are inflation adjusted poverty thresholds.

The ESS-Net (2012) posits that societal capital consists of cultural products and activities recognized as artistic ones. These include: heritage, libraries, visual arts, performing arts, architecture, and arts crafts. The cultural functions are: creation, production, dissemination, preservation, education, and management. Cross-classified together, cultural products and cultural functions form a 6 x 6 grid (Table 1). We now turn to the task of gathering relevant measures.

The Illinois Natural Heritage Database⁶ provides natural areas inventory and natural preserves numbers, both by county. To these county-level frequency data, we add information on arts providers, arts revenue, government support to culture, and the prevalence of other leisure activities in the county - all sourced from the NCAR *Vibrancy Index*, 2018⁷. To assess the external validity of the embodied-cultural-capital indicators, we correlated the six indicators with a county wellbeing measure (Athiyaman, 2019).

Table 2 shows the results of the zero-order correlational analysis. The correlations provide empirical evidence for the validity of the indicators, at least 10% of the variance in county wellbeing can be explained by each of the indicators. Having established the validity of indicators, we now turn to measuring county cultural capital.

The operational definition of county cultural capital shown in Figure 1 is: Σ (Embodied Cultural Capital and Societal indicators). The two indicators related to embodied cultural capital were rescaled to their quartile scores (for example, quartile 1

⁴ Family is a derived concept from the term 'household'. A household includes all the people who occupy a house, an apartment, a mobile home, a group of rooms, or a single room. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living arrangements. The term family indicates a householder (the person who owns or rents the home) living with one or more individuals related to her by birth, marriage, or adoption (ACS, 2017).

⁵ See American Community Survey Table S1702.

⁶ Available online:

<https://www.dnr.illinois.gov/conservation/naturalheritage/pages/naturalheritagedatabase.aspx>

⁷ NCAR is the abbreviation for National Center for Arts Research.

= 25) and their sum averaged⁸. The societal cultural capital scores equal the arithmetic average of the sum of NCAR *Vibrancy Index* (scores) and the quartile-scaled average scores of the two indicators 'natural areas inventory' and 'natural preserves' numbers⁹.

In the following pages, we first assess embodied cultural capital and then explore the impact of government support for arts and culture. For the latter, we use an efficient frontier approach to depict the county rankings: county ranks are based on deviations from the "best" expected performance on cultural capital¹⁰.

⁸ The scores for embodied capital range from 0 to 100.

⁹ 600 is the total maximum score for the sum of six indicators and 0 is the minimum; each variable has a range of 100, minimum is 0 and maximum is 100.

¹⁰ Data envelopment analysis is the technical name for efficient frontier analysis.

Table 1: Cultural Activities by Function: Data Collection Framework

	Creation	Production	Dissemination	Preservation	Education	Management
Heritage						
⇨ Museums			Museums' exhibitions	Operation activities for historical sites	Teaching activities	State, local or other.
⇨ Historical places			Art galleries' activities	Restoring of museum collections		
⇨ Archeological sites			Natural areas and nature preserves			
Libraries			Lending activities	Preservation activities	Teaching activities	State, local or other.
Visual Arts						
⇨ Fine arts	Creation of art works	Production of art works	Visual arts conventions	Restoring & protecting visual arts	Teaching activities	State, local or other.
⇨ Photography			Galleries & other temporary exhibitions			
⇨ Design						
Performing Arts						
⇨ Music	Creation of art works	Production of art works	Live presentation activities	Restoring of musical instruments	Teaching activities	State, local or other.
⇨ Dance						
⇨ Drama						
⇨ Circus						
⇨ Other live shows						
Architecture	Architectural creation		Architectural exhibits	Preservation activities	Teaching activities	State, local or other.
Art Crafts	Artistic crafts creation	Production of artistic craft	Artistic craft exhibitions	Restoring of art crafts	Teaching activities	State, local or other.

Note: Adapted from ESS-Net (2012)

Table 2: Correlations of the Societal Cultural Capital Indicators with Wellbeing

	<i>Arts Providers</i>	<i>Arts Dollars</i>	<i>Govt. support</i>	<i>Other Leisure</i>	<i>Nature Preserves</i>	<i>Nat. Areas</i>	<i>Wellbeing</i>
Arts Providers	1						
Arts Dollars	0.73	1					
Govt. Support	0.62	0.63	1				
Other Leisure	0.60	0.69	0.45	1			
Nature Preserves	0.42	0.42	0.24	0.33	1		
Nat. Areas	0.37	0.30	0.28	0.25	0.85	1	
Wellbeing	0.61	0.38	0.37	0.37	0.31	0.34	1

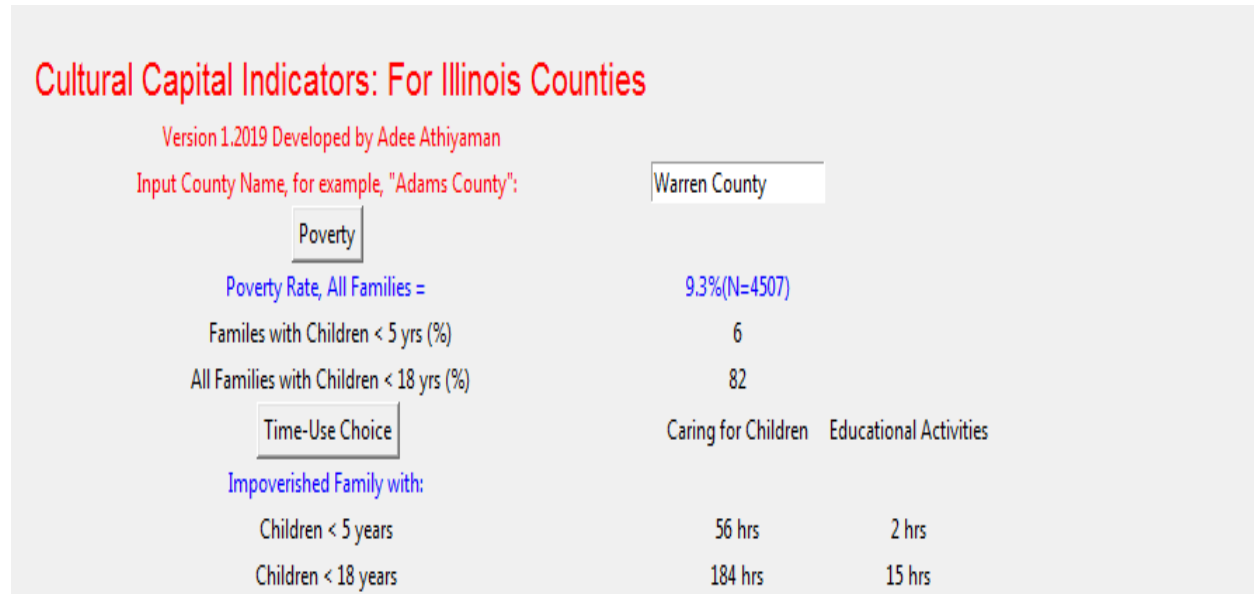
3.0. Results and Discussion

Extant research on cultural capital suggests that children inherit from previous generations diverse cultural values and accepted norms for practicing those values (see for example, Poulton et al 2015). However, there is substantial evidence that childhood poverty affects a child’s wellbeing (McCall, 2016). To understand the levels of childhood poverty in the counties, we programmed an interactive computer application¹¹. Labeled Culture.Exe, the software opens to the screen:



¹¹ This software is available for free and can be downloaded from www.research.iira.org.

With the name of the county as an input, clicking on the “Poverty” button, will display information about childhood poverty in the county. In addition, the time spent by the children’s family in caring and educating the children are also shown. The display below is for Warren County, Illinois.



A policymaker can readily see that of the 4507 families in the county, 419 families are impoverished. Of these, majority of them (82%) have children at home. Research suggests that at least 20% of these impoverished children will end up as financial burden to federal, state, and local governments (Caspi et al 2016).

Another salient finding from the display above is the very little time parents spend on educating their children on everything from school curriculum to cultural values and social norms.

These findings raise the question about the efficacy of public funding on arts and culture and their efficient use by the counties. To evaluate the impact of government support on cultural capital, a commonly used productivity measure was used:

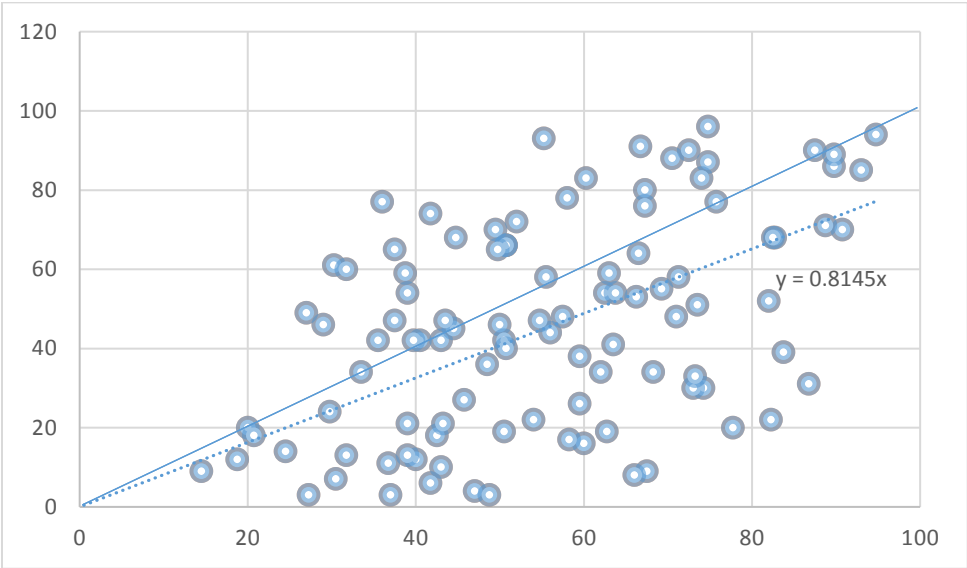
$$Efficiency = \frac{County\ Cultural\ Capital^{12}}{Government\ Support}$$

Figure 2 shows a scatterplot of the two efficiency variables for the 102 Illinois counties. If we fit a least-square regression line through the origin, then the resulting equation $\hat{y} = 0.8145 x_i$ can be used to define points above the line as *excellent* and those below the line as *inferior* (the dashed line in Figure 2). On the other hand, if we insert a 45° line

¹² A variant of cultural capital measure was used, Σ (Nature preserves, Nature areas, Arts providers, and other leisure). The correlation between this measure and the overall, eight indicators of county cultural capital is 0.7.

through the origin then it represents the highest slope and is called the 'efficient frontier' (the solid line in Figure 2). The frontier line identifies the best efficiency(s) and then compares the rest by their deviations. Put another way, the regression line reflects the average behavior of the observations, while the frontier line deals with best performance and evaluates all performances by deviations from the frontier line (the solid line in Figure 2).

Figure 2: Regression versus Frontier Line: County Efficiency in Converting Government Support to Cultural Capital



The frontier-line analysis shows that Effingham County is the best performer, the county has an efficiency score of 16.25; Warren County is the worst with a less than 0.47 efficiency score. The software provides productivity scores for each of the counties, both regression-based ranking and frontier ranking. The Warren County's productivity rankings are shown below:

Cultural Capital Indicators: For Illinois Counties

Version 1.2019 Developed by Adee Athiyaman

Input County Name, for example, "Adams County":

Warren County

Poverty

Poverty Rate, All Families =

9.3%(N=4507)

Families with Children < 5 yrs (%)

6

All Families with Children < 18 yrs (%)

82

Time-Use Choice

Caring for Children Educational Activities

Impoverished Family with:

Children < 5 years

56 hrs

2 hrs

Children < 18 years

184 hrs

15 hrs

Overall Cul.Capital Rank

62

Productivity Indices

Frontier Rank

102

Regression Rank

102

4.0. Summary and Conclusion

This paper is driven by the idea that cultural capital contributes to wellbeing. To place this in a community context, we examined data related to the proposition that wellbeing can be enhanced if children grow up in households that are able to access adequate economic resources. The results suggest that children in Illinois are missing opportunities for cultural development; their caregivers spend very little time in educating them.

The research also explored the efficient use of government funding on culture. Appendix 1 shows the performance of counties on the efficiency metrics. It is hoped that the software provided with the paper will not only inform county policymakers about the status of their county's cultural capital, but the baseline measure will help in judging the effectiveness of new initiatives aimed at enhancing cultural capital.

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Appendix 1: Efficiency Scores: Impact of Government Support on Cultural Capital

Geography	Regression Deviation	Efficiency Frontier	Frontier Rank	Regression Rank
Adams County, Illinois	-7.3695	0.733516484	88	91
Alexander County, Illinois	-3.007	0.768939394	84	83
Bond County, Illinois	27.839	2.361111111	24	32
Boone County, Illinois	1.291	0.845238095	78	79
Brown County, Illinois	27.7905	3.340909091	14	33
Bureau County, Illinois	-7.3535	0.725903614	89	90
Calhoun County, Illinois	18.517	1.157407407	56	50
Carroll County, Illinois	24.009	1.228448276	49	40
Cass County, Illinois	23.7585	1.694444444	33	42
Champaign County, Illinois	3.8885	0.859195402	77	76
Christian County, Illinois	5.807	0.985294118	68	72
Clark County, Illinois	20.162	1.272727273	43	46
Clay County, Illinois	30.226	3.333333333	15	28
Clinton County, Illinois	16.4685	1.164893617	55	55
Coles County, Illinois	38.323	2.288461538	25	17
Cook County, Illinois	18.187	1.007978723	65	52
Crawford County, Illinois	43.742	11.75	3	14
Cumberland County, Illinois	8.791	1.023809524	63	65
DeKalb County, Illinois	-9.3055	0.656779661	94	94
De Witt County, Illinois	12.533	1.086956522	59	62
Douglas County, Illinois	-7.515	0.707142857	92	92
DuPage County, Illinois	23.7675	1.094117647	58	41
Edgar County, Illinois	-8.467	0.630434783	95	93
Edwards County, Illinois	13.097	1.75	32	60
Effingham County, Illinois	46.3065	16.25	1	12
Fayette County, Illinois	60.1695	7.5	6	4
Ford County, Illinois	-10.636	0.658088235	93	95
Franklin County, Illinois	-12.9105	0.551020408	99	96
Fulton County, Illinois	16.291	1.202380952	52	56
Gallatin County, Illinois	3.71	1	66	77
Greene County, Illinois	21.8955	1.857142857	30	44
Grundy County, Illinois	46.968	3.75	11	10
Hamilton County, Illinois	6.089	1.152777778	57	71
Hancock County, Illinois	18.404	1.197916667	53	51
Hardin County, Illinois	19.178	1.347222222	41	49
Henderson County, Illinois	19.767	1.180555556	54	47
Henry County, Illinois	8.259	0.956896552	72	66

Iroquois County, Illinois	2.09	0.840625	79	78
Jackson County, Illinois	-3.442	0.778645833	83	86
Jasper County, Illinois	34.855	4.3	9	21
Jefferson County, Illinois	7.8475	0.988888889	67	67
Jersey County, Illinois	23.0815	1.25	46	43
Jo Daviess County, Illinois	33.735	1.296428571	42	24
Johnson County, Illinois	13.0335	0.983766234	69	61
Kane County, Illinois	27.364	1.216911765	50	34
Kankakee County, Illinois	49.815	2.475	20	7
Kendall County, Illinois	30.1055	1.548780488	38	29
Knox County, Illinois	-20.4985	0.594086022	96	101
Lake County, Illinois	30.9205	1.25	46	27
LaSalle County, Illinois	61.46	3.8875	10	3
Lawrence County, Illinois	36.863	6.958333333	7	18
Lee County, Illinois	59.484	8.25	5	5
Livingston County, Illinois	21.1615	2.442307692	22	45
Logan County, Illinois	26.1455	2.05952381	28	36
McDonough County, Illinois	-3.007	0.768939394	84	83
McHenry County, Illinois	51.9845	2.147435897	27	6
McLean County, Illinois	14.372	1.0390625	62	58
Macon County, Illinois	44.4035	3.426470588	13	13
Macoupin County, Illinois	28.549	1.565789474	36	30
Madison County, Illinois	-1.176	0.801136364	81	82
Marion County, Illinois	18.17	1.26875	44	53
Marshall County, Illinois	24.4525	1.259090909	45	39
Mason County, Illinois	48.565	2.433333333	23	8
Massac County, Illinois	5.348	0.884868421	76	74
Menard County, Illinois	-3.1925	0.765384615	86	85
Mercer County, Illinois	-18.523	0.564189189	98	99
Monroe County, Illinois	14.195	0.972222222	70	59
Montgomery County, Illinois	24.7985	4.357142857	8	38
Morgan County, Illinois	36.081	2.454545455	21	19
Moultrie County, Illinois	-19.4345	0.495901639	101	100
Ogle County, Illinois	31.9605	1.441176471	40	25
Peoria County, Illinois	61.5005	2.798387097	18	2
Perry County, Illinois	-17.12	0.529166667	100	98
Piatt County, Illinois	14.9445	1.06779661	60	57
Pike County, Illinois	40.557	2.007352941	29	15
Pope County, Illinois	19.703	1.043604651	61	48
Pulaski County, Illinois	-6.644	0.722222222	90	89
Putnam County, Illinois	-0.7815	0.79787234	82	80
Randolph County, Illinois	35.0245	2.657894737	19	20
Richland County, Illinois	24.8065	9.083333333	4	37

Rock Island County, Illinois	-0.805	0.805555556	80	81
St. Clair County, Illinois	17.2595	1.008426966	64	54
Saline County, Illinois	28.4115	3	17	31
Sangamon County, Illinois	-5.531	0.743589744	87	88
Schuyler County, Illinois	6.291	0.964285714	71	70
Scott County, Illinois	5.541	0.946428571	73	73
Shelby County, Illinois	10.202	1.239583333	48	63
Stark County, Illinois	-4.983	0.722222222	90	87
Stephenson County, Illinois	5.2185	0.925531915	74	75
Tazewell County, Illinois	64.331	3.738636364	12	1
Union County, Illinois	6.3965	0.891566265	75	69
Vermilion County, Illinois	46.3715	2.21969697	26	11
Wabash County, Illinois	34.5565	12.33333333	2	22
Warren County, Illinois	-26.7165	0.467532468	102	102
Washington County, Illinois	34.307	1.823529412	31	23
Wayne County, Illinois	8.976	1.5625	37	64
White County, Illinois	7.1695	1.611111111	34	68
Whiteside County, Illinois	47.2745	3.302631579	16	9
Will County, Illinois	39.646	1.576923077	35	16
Williamson County, Illinois	-15.4425	0.576923077	97	97
Winnebago County, Illinois	27.114	1.213235294	51	35
Woodford County, Illinois	31.904	1.479166667	39	26