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## Libraries as Community: Investigating Social Infrastructure and Community Cohesion

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# Libraries as Community

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**Abstract:** *The intent of this research is to clarify the methods and degree of influence public libraries have on their constituents as pertaining to the ideas of community and social cohesion. We hypothesize that individuals who live in a county with a moderate-highly rated library feel stronger ties to their greater community and are more inclined to participate in civil society, as well as experience a higher overall quality of life and social connection. Data gathered for the purposes of this research were from a variety of sources assembled into one cohesive data set. Results showed that communities with a strong public library system will experience more social cohesion and participation in civil society, though it was only a marginally significant difference.*

*Keywords: Libraries, community, social cohesion, society*

The library assumes the best of people. Services provided are founded upon the assumption that if given the chance, people will improve themselves. While social infrastructure alone cannot solve all that ails a community, it plays a vital role in uniting communities, overwhelmingly benefitting the expansion of our investment in foundations of the public. As physical spaces, libraries bind citizens together and form the basis of civic life. Libraries bolster community feelings of social cohesion, which has direct effects on levels of public health, addressing political polarization, climate change, inequality, and other contemporary challenges of American social life. Theory points towards the understanding that a library is the guarantor of a peaceful, well-informed society. Moreover, social infrastructure marks the promise of possibility and self-efficacy in society: to create a life one chooses rather than feeling stuck; where if not permitted, this feeling of powerlessness or powerfulness percolates into everyday interactions and feeds directly into the hegemony of literacy and subsequent social stratification. 90% of Americans see their library as “very” or “somewhat” important to their community (Klinenberg, 2019). But do they see themselves within that vision?

This prompts several questions: On a county level (in Kentucky), does the presence of a public library influence citizens’ feelings of ‘community’ or participation in democratic processes? Controlling other variables, does the efficacy of a library’s resources/outreach impact these attitudes? Is this possible relationship contingent on library use, or does the simple presence of such an institution bestow the privileges of civil society unto the residents of such county? Why does or doesn’t this relationship exist— is a library a symbol or vestige of education, mobility, democracy? What is the role of a library as an institutional structure within the neoliberal tradition, and how does this compare to its vision and aims of service?

The intent of this research is to clarify the methods and degree of influence public libraries have on their constituents as pertaining to the ideas of community and social cohesion. In doing so, a greater understanding of the relationship of public

infrastructure and community quality of life, a question of deep interest in the field of social science, is revealed. Is there a link between the presence of a library and dimensions of community? The hypothesis offered is as follows:

**H1:** Individuals who live in a county with a moderate-highly rated (\*) library feel stronger ties to their greater community and are more inclined to participate in civil society, as well as experience a higher overall quality of life and social connection.

**H0:** There is no relationship between library presence and feelings of community or community cohesion.

In establishing these hypotheses and research questions, variables must be conceptualized. In listing more theoretical/subjective measures of library rating, feelings of community, and participation in civil society, clarification of such proxy measures must be offered. From this, precision in evaluating hypothesized relationships is achieved. Variables will be based in the idea of Library Strength and Community Cohesion Indexes (defined in Methods section).

## Literature Review

Libraries are a form of public infrastructure that guide, protect, and preserve the spirit of community. Beyond its four walls, libraries are the guarantors of the task and promise of social work: to improve the lives of people in its community. Historically, libraries have evolved from safekeeping masses of information to democratizing information for the masses, and as a result of this, have become a vital structure in the support of community resiliency. This begs the question: what is the role of libraries as a public institution in contemporary civil society? This review aims to respond to this by illuminating the ways in which libraries have motivated society towards inclusion, equity, and community cohesion through their role in providing free and equal access to information. Before investigating the sociological research question in this inquiry, the public library’s

role in society must first be explained. This section therefore serves to clarify the contemporary model of libraries, which has three main functions: preserving a society's shared social history, providing dignity, resources, and hope for community members, and eliminating barriers to accessibility.

### **Library and Information Science History**

Libraries are the cornerstones and foundations of information access, organization, and management: the variety and persistence of efforts to shape life through knowledge are pursued in the aims of lending order to the universe (Manguel 2009). The wisdom of book and library history hold a central place in library and information science programs, offering insight into the well contested notions of the conception of a library's core collection, national bibliography, archives and special collections, and more as methods of information organization and control (Delsaerdt 2008, Dillon 1999). The printed word cooperates with technology within society as database, history, or story. Without being caught in the overwhelming technical schema and contentions within the field of library history, these general trends deduce that the development of the library as a social agency has been highly conditioned by the pattern of its coeval culture of mass reading and literacy, and further, the general global trends of democratization and liberalization (Goedeken 2011, Harris 1967, Hessel 1950).

### **Community Cohesion and Resiliency**

From such organization, patrons delve into a world greater than themselves. Libraries provide integrated services at city touchpoints with both consumers and constituents, bridging the gap in information access for a variety of barriers. People from all walks of life are welcome— such access promotes engagement, which translates into community empowerment; by leveraging libraries as a trusted source of information, citizens are granted the power in access (Garmer 2019). This is the foundation of community resiliency. The power of public spaces such as a library is held within its power to convene people, serving as a catalyst for fresh thinking and creative, collaborative problem solving. A library is a partner, a place, and a platform for learning, literacy, access, engagement, empowerment and discovery. This level of intentionality to infuse a renewed, community-centered vision for the community is unique to this type of social infrastructure, in which the library is created by everyone and belongs to no one. Public infrastructure is truly rooted in the life of places. Thinking locally develops a new appreciation for places as the root system of a democratic and cohesive society, bridging communities to the world (American Library Association 2015, Boyte 2007).

### **Democratic Origins**

Social infrastructure fosters greater civic engagement and connection among citizens (Klinenberg 2018). In particular, libraries have become a crucial center for cities, granting all

agency to start and sustain the celebration of diversity and the deep and difficult effort to understand, enjoy, and learn from all that has changed neighborhoods, communities, states, and the world. Libraries are where democracy happens— the embodiment of hope, as a symbol of the power of connectivity between all people (Orlean 2019, Berry 2006). Libraries provide services, activities and media of various kinds, which together contribute to equip citizens with resources that enable them to engage in society in an informed manner, thereby contributing to democracy (Eckerdal 2017). Citizens emerge as co-creators of democratic societies, creating a new world through love and reason in that knowledge is co-produced by diverse groups, not simply academics (Boyte 2007).

This literature review briefly summarizes decades of research on book history, library and information science, theories of open democracy and public works approaches, and more, forming the basis for this sociological approach. Emergent from such theory is the opportunity to link such lofty, macro-oriented processes to the individual. How do Kentuckians interact with public libraries? What is the value of a library right here, right now? No public data exist to guide or chart this thinking insofar that all articles, books, or publications have oriented themselves on postulating models and navigating the intricacies of social reality. Investigating the sociological questions crafted in the Introduction section, as an application of this knowledge, will serve to highlight this thinking, offering nuance and heart to such theory with stories.

### **Theory**

In nudging onward towards a greater understanding of a community's shared social reality, the consequential value and place of community education within such is gained. Social justice access, equality, fair process, and participation are guiding principles of the conceptual framework from which the researcher attempts to reconcile multiple smaller-scale, social justice theories within traditions of Marxist theory and Communities of Inquiry (COI). Ultimately, in investigating an interdisciplinary structure such as libraries, branches, and publics, an intersectional approach is necessary to appropriately address its idiosyncrasies. In this section, theories are abbreviated in review and synthesized under the concept of Litzenship, which the researcher uses as a stand-in term for the coalescence of these theories into the comprehensive understanding of education-based social infrastructure and its impacts on community cohesion, further rooting the research. It is important to note that there is incredible nuance to such theories, and as such, this section must be considered within its own aims of establishing the foundation from which this preliminary research emerges from, through a reconciliation between the theoretical, structural, and personal.

### **Theoretical Approach: Marxian Theory**

Marxian theory, at its root, informs ideals of egalitarianism, community-focused practice, and the challenging of dominant socio-economic policies driving institutions. Critical theory is an

extension and critique of this, pointing towards dialectical thinking and subjectivity. A society's cultural reality, in this view, is not to be understated at the expense of economic determinism; instead, the culture maintains value and domination in general is critiqued, observable through rationality, the culture industry, and the knowledge industry. Of particular interest to this research is the knowledge industry: or what is behind the processes in which societal elites manufacture, sustain, and impose idea systems unto the masses (Ritzer and Stepnisky, 2014). Of course, libraries are a part of the knowledge industry through their organization and reproduction of such idea systems as they are democratized.

The Marxian tradition greatly influences public libraries, both as institution and information. With the transformation of librarianship to a social science in the 1920s and 30s, scientificity gathered footing in the empirical methodologies and worldviews supposedly supporting democracy through its claim to fame in neutrality. However, classical liberal ideology underpins the capitalist system birthing such democratic forms experienced in the United States; embedded liberalism is seen in librarianship through positivism, instrumental reason, and efficiency, all of which are predicated on an exclusion of the political itself (Popowich, 2017). In the promotion of library neutrality, the institutions' connections to white supremacist culture and the reinforcement of hegemonic values are made covert (Branum, 2008). With the veil of neutrality, democratic ideals of librarianship prevail. Yet, there is no such thing as a neutral educational process, and it is highly contested within the field of library science that this form of democracy is even remotely democratic— but rather, “authoritarian state which manages the affairs of capital to the detriment of people's lives and the planet”. What is termed democracy is “a noble lie, serving to support an unjust, unequal, and exploitative state of affairs” (Popowich, 2019).

As an educational, public institution, libraries either function as an instrument used to facilitate the integration of citizens into the logic of the present system and bring conformity, or as a ‘practice of freedom’, in which people deal critically and creatively with reality, discovering how to participate in their world and its transformation (Freire, 1972). Similarly, Communities of Inquiry research approaches emphasize collaborative engagement in purposeful critical discourse and reflection in the construction of personal meaning and understanding. COI is a process of creating learning experiences through the interdependence of social, teaching, and cognitive presences (Garrison et al., 2010). In such a perspective, several qualities are emphasized throughout researching, maintaining a trusting environment, developing interpersonal relationships, realization of personally meaningful learning outcomes, and connection and confirmation of meanings through reflection and discourse. Libraries are a rarity in which any person can feel the generous assumption of human nature; the physical spaces and organizations shape the way people interact in both breadth and depth. Social infrastructure in this regard promotes powerful avenues for civic engagement and social interaction within communities and across group lines, but only

if each underserved, disadvantaged, or underrepresented population has its own information needs and cultural perspectives accounted for (Jaeger et.al., 2011; Klinenberg, 2018).

### **Conceptual Frameworks within Traditions of the Public**

The same can be applied to the development of library history alongside the development of capitalism. Libraries have an understudied, insidious role within the system of capitalism that popular democratic structures of librarianship purport; structural intersections between librarianship and capitalistic exploitation embed oppression within the profession. Libraries socially reproduce capitalism through formulating practices of keeping and allowing access to information, while oppressive structures of society are obscured by the ideology of democracy that holds sway in the field (Popowich, 2019). The exclusion of the political from mainstream library science refers to how systems of ideas are generated to support the existence of the system, preserving hegemony. In mystifying the system through legitimation, masses fail to develop a ‘revolutionary’ consciousness, in which their true position in society is blurred.

Attempts to ameliorate this issue mainly rise from the intellectual tradition of Intersectionality theory. Categories of marginalization and identity interact on multiple, and often simultaneous, levels; this theory elaborates on the understanding of librarianship's reproduction of mythical norms, which are based on single-axis identities (Ettarh, 2014; Lorde, 1984). Cultural representations of libraries as “places of freedom (like freedom of access and intellectual freedom), education, and other democratic values do not elide libraries’... built-in disparity and oppression” (Ettarh, 2018). It is from the coalescence of these lenses that the researcher forms the basis for their Methodology and underlying basis for the research work.

### **Litizenship as Application**

Understanding critical librarianship first requires a deep knowledge of the extant forms of publics. Therefore, while this research is oriented on celebrating the role public libraries play in communities and their reduction of inequality, libraries are not above criticism, or even inherently ‘good’ or sacred. The quality of this research is contingent on the ability to look both within and without existing systems, and measuring degrees and qualities of influence on individuals' perceptions, involvement, and enthusiasm with public infrastructure. While initially inspired by Klinenberg's works on such, more extensive research revealed the need for a critical investigation into what exactly is favored within the idea of ‘Litizenship’, or rather, the synthesis of these ideas into the holistic social interactions of individuals, their social realities, public infrastructure, and the systems woven within such. In considering this work's Literature Review and Theory sections together, a rationalization for critical inquiry into forms of publics is made: to clarify the extent of the ‘current’ to better understand a course of improvement for the future. This future requires acknowledgement of current practices that reinforce existing structures of inequity and privilege, and that librarians then leverage services and resources to support,

document, and encourage diversity and social justice efforts within librarianship and society.

While one may celebrate the beauty of community protected within the four walls of a library, all must understand that that building's foundation was constructed from decades of capitalist, exclusionary tradition. This is the arena of focus in beginning to form a path towards inclusivity, equality, and freedom for all citizens of all communities.

### **Method**

In clarifying the methods and degree of influence public libraries have on their constituents as pertaining to the ideas of community, democratic participation, and social cohesion, the researcher questions: is there a link between the presence of a library and dimensions of community?

### **Data and Variables**

The concepts of Public Library Strength and Community Cohesion are intended to capture specific social realities, in which adequate social infrastructure supports civil society, social cohesion, and overall quality of life in communities on a county level. To appropriately address the researcher's sociological questions, proxy measures must be used. In this section, the operationalization and conceptualization of individual variables are offered, wherein such variables are then compiled into scales. Scales are the researcher's proxy measures as described in the hypothesis and form the basis of the Analysis section for establishing statistical differences and their validity.

#### ***Public Library Strength***

Public Library Strength is the first variable analyzed in this research. The intention of this index is to accurately capture the breadth and value of a public library's resources (both in its collections and its services offered) as well as the situational context for Kentucky counties. Subsections of the scale are Accessibility, Media, and Social Measures, which are outlined below. The Public Library Strength Index is composed of the following measures, alongside their definitions are listed in Table 1.

Data for this index was directly sourced from the Kentucky Department for Libraries and Archives (KDLA) Statistical Report of Kentucky Public Libraries (2018) The dataset covers a variety of library-specific use statistics in educational, economic, and community-centered considerations, and offers statistical comparisons and rankings between/among Kentucky counties. Data was collected by individual branch libraries, submitted to the Boards of each county library system, then compiled by KDLA into this report, which is completed annually. Although more current data are provided by KDLA, the year of 2016 is used to provide more consistency in the components of the Community Cohesion Index and their data sources, which are larger mass social surveys offered in or around this year in question.

#### ***Community Cohesion***

The Community Cohesion Index is intended to gain a base understanding of any given resident of a county's experiences, participation in civil society, and outlook on life. This is a quality of life (QOL) measure offered as a proxy measure of notions of community and individual wellbeing, faith in the democratic system, and more. This variable serves as the dependent variable, in that supposing public library strength will influence (positively correlate) community cohesion. Subsections of the scale are Wellbeing and Economic Outcomes, Faith in Democracy (Commonwealth of Kentucky State Board of Elections, 2017), and Quality of Life (United States Census Bureau American Community Survey, 2016), which are outlined below. The Community Cohesion Index is composed of the following measures, alongside their definitions are listed in Table 2.

Data gathered for the purposes of this research are from a variety of sources assembled into one cohesive data set. Because the nature of this research is relatively unknown to data analysis and/or statistical application, this type of piecemeal data approach is required. However, pulling data from a variety of mass secondary data stores from governmental agencies and major social surveys allows balance to be achieved in pursuing a data-wise approach to libraries and community.

### **Procedure**

An independent samples t-test provides a useful approach to examining the relationships between library strength and community cohesion through creating groupings above and below the mean in the Library Strength Index and comparing the values of the dependent variable (the Community Cohesion Index). In this approach, conducting a two-tailed t-test will be able to indicate whether or not averages within ratings of public library programs and their respective county's quality of life outcomes vary by group; specifically, it would indicate if the thinking outlined in the hypothesis holds true within the confines of this data analysis. Because of the varying meanings behind the measurement scales of variables, each variable will be standardized. In this research, variable standardization creates a version of each variable with a mean of approximately 0 and standard deviation of approximately 1. The variable can be understood as distance from the mean, in which Z-scores below the mean are negative, and above the mean are positive, therefore permitting statistical testing.

To ensure that such standardization, particularly in the assembly of scaled indices (Public Library Strength and Community Cohesion) are statistically valid, a Cronbach Alpha statistic was generated. With this sample ( $N = 11$ ), the internal consistency of such scales were identified as acceptable ( $\alpha = 0.78$ ). Descriptive statistics are also generated for each component of each index to explore the extent that Kentucky's social world relates to library systems and community cohesion.

### **Results**

Descriptive statistics listed in this section were with an observed sample size of 120, with some exceptions in the case of missing data. Please note there is variance in the context of

numerical values in the statistics, wherein special consideration should be given to variables with negative-oriented coding, such as economic inequality or disconnected youth. Data in this section will be described in their raw, unstandardized form to provide accuracy in depicting Kentucky's social reality.

### **Library Strength Index**

Table 3 details descriptive statistics for the variables under the Library Strength index. What are the elements of a public institution that confer benefit to community members?

#### ***Accessibility***

The first element this research attempts to study is that of Accessibility. As a palace for the people, libraries are inherently patron-facing. To measure the degree of access, the researcher assumes a positive association with hours of service with that of an increased reach of both typical and marginalized community members alike. Of all the branches in a county, the average Kentucky library system is open 5,328 hours annually, which equates to just over one hundred hours weekly (SD = 5646.69). However, this average is more than ten times that of the minimum public library system's yearly hours open, which is 784 (Webster County), and less than one tenth of the maximum, which is 55,874 (Lee County). This variation is incredibly interesting and investigated at length in the Discussion section. The second measure in that of Accessibility is web user sessions. The internet is a promising technology, which when granted with free and open access, allows patrons to better complete schoolwork, as well as search for jobs or learn skills. The average in annual sessions is 35,417, or 97 unique sessions daily.

#### ***Media***

A public library system's collection similarly promotes accessibility. As repositories of information, libraries curate and maintain their collections to reflect that of the community (and global society) they serve. Media are provided in a variety of forms: paper books, audiobooks, electronic titles, movies, CDs, DVDs/other movie media, magazines, and more. In some libraries, branches carry a variety of personal items on loan, such as: cooking supplies, musical instruments, science equipment, technology such as laptops or cameras, board games and puzzles, tools, or even crop/flower seeds. Kentucky libraries loan out a total of 16,235,282 media items each year, with each county loaning an average of 140,666 media items. An alternative view of this statistic is looking at loans per capita, or the amount of material circulated with respect to population. 3.63 media items are loaned to each resident in Kentucky annually, on average, with a minimum and maximum of 0.25 and 10.48, respectively. This data point represents key information regarding media circulation density.

### ***Social Measures***

Social Measures describe another dimension of the effectivity of patron-facing services at the library. Utilization of any service or facility of the library demonstrates an average entry of 150,500 persons into branches annually. Associated with entry, outreach programs are typically designed with specific attention granted to vulnerable populations: youth, elderly persons, and low-income residents. Further, these programs intend to engage and empower patrons through granting them opportunities for self-growth, creative expression, literacy, or even "soft" measures many people take for granted, such as safety, hygiene, etc. Of all the programs offered each year- ranging from butterfly house creation to story times with emotional support animals to financial literacy courses- an average of 21,596 people attend. Again, Lee and Webster counties form the bookends of this statistic, with a max and min of 313,483 and 72 people attending, respectively.

### **Community Cohesion Index**

Table 4 details descriptive statistics for the variables under the Community Cohesion index. With respect to the research design, what elements of community and social life could evidence of public infrastructure's benefit be observed in?

#### ***Wellbeing and Economic Outcomes***

Social stratification in contemporary society is deeply connected to a variety of quality of life (QOL) measures, with the promise of possibility and self-efficacy following from educated, highly equitable communities. As such, the first variable in this element of the Index is income inequality. The average degree of income inequality in Kentucky counties is 4.956, which is on par with national rates for inequality in income distribution. The high school graduation rate is 91.77%— with a startling county minimum of 70.54%.

#### ***Faith in Democracy***

Democratic activity forms the basis of social cohesion; ordinary citizens exercise power through participation in local, state, and national political cycles. Politics, though highly divisive in recent years, are a sensible way to measure personal agency, empathy, and community involvement. As such, it is interesting to discuss voter turnout rates. In the 2016 general Presidential election, an average of 58% of eligible county voters cast ballots. Throughout Kentucky, there is a range of 24.5% points between the lowest and highest participation rates.

**Table 1**  
*Descriptive Statistics: Library Strength Index Variables*

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>Min</i>	<i>Max</i>	<i>SD</i>
Annual hours of service of all branches	119	5328	784	55874	5646.69
Web user sessions	119	35417	446	732501	79520.06
Material circulation total	119	140666	2048	2600045	303938.6
Material circulation per capita	119	3.63	0.25	10.84	1.984
Total program attendance	119	21596	72	313483	38018.17
People entering library	119	150500	854	2831249	326292.2

**Table 2**  
*Descriptive Statistics: Community Cohesion Index Variables*

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>Min</i>	<i>Max</i>	<i>SD</i>
Income inequality	120	4.956	3.674	7.828	0.701
High school graduation rate	115	91.77	70.54	99.5	4.638
Voter turnout rate	120	0.578	0.437	0.682	0.052
Disconnected youth rate	83	22.79	7.39	52.04	8.420
Social associations	120	10.925	1.308	23.386	4.938

**Table 3**  
*Descriptive Statistics: Scaled Indices*

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>Min</i>	<i>Max</i>	<i>SD</i>
Library Strength index	118	-0.0638	-1.36	0.85	0.405
Social Cohesion index	82	-0.0084	-0.73	6.94	0.837

**Table 4**  
*T-Test Results Comparing Means of Counties' Library Strength and Community Cohesion*

<i>Group(&gt;/&lt;-0.0084)</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Strong Libraries	20	0.0852	0.3899	1.962	33.385	0.057
Weak Libraries	61	-0.1137	0.4036	-	-	-

### **Quality of Life**

Other QOL measures part of the Community Cohesion Index include youth disconnection and social associations. These measures specifically intend to capture the social part of a county's social reality. These measures show the most variance in the values recorded, providing an image of a state united in disconnection. Cohesion is ultimately contingent on interaction, the formation of social bonds, and mutual/synergistic emphasis on community. Disconnected youth are present at an average rate of 23%; yet the range spans from 7 to 52 percent in counties across the Commonwealth. This statistic truly demonstrates the discordance in unity and youth involvement across counties. Similarly, social associations are investigated, indicating jarring ranges. The average social association rate is around 11 per

10,000 residents, but ranges from 1 to 23. Consequently, when rationalized these data show: an average of 1 per 1,000, a minimum of 1 in 10,000, and a maximum of 1 in 434 social associations per population.

### **Descriptive Statistics of Scaled Indexes**

Having discussed each variable's unstandardized form and its social meanings, the indexed measures will be now discussed similarly. The indexes, as a summative measure of each variable in its standardized form, capture the reality of libraries and social cohesion across Kentucky. Shown below in Table 3, the Library Strength scale's average is -0.0084, indicating that the average county falls below the summative means of the standardized variables comprising the scale. The scale's minimum of -0.73 and

maximum of 6.94 indicate a wide range of normality within the counties, as well; some counties perform consistently well on measured elements, whereas others are inconsistent. This holds true for the Community Cohesion scale ( $\bar{x} = -0.0638$ ).

### Statistical Testing

How does a county's public library system strength relate to its social cohesion? Through the researcher's hypothesis and application of sociological theory, it can be reasoned that a strong library will positively associate with community cohesion; this does not hold true with testing. Table 4 shows the results of an Independent Samples t-test. While indicating a difference of means, the difference is not statistically significant at the 95% confidence level ( $p = 0.057$ ,  $t = 1.962$ ,  $df = 33.385$ ), instead offering moderate significance at a level just slightly beyond this accepted threshold. In grouping the rankings of libraries above and below the mean ( $\bar{x} = -0.0084$ ), the researcher rejects the null hypothesis in support of a relationship between the two variables with caution. At such a margin of statistical non-significance, it is pertinent to look both within and without the research design to gain a better understanding of why this is the case. Such a marginal confidence level breach is explored further in the Discussion section, and further, for the limited scope and implications of this research, will be considered sufficient evidence to support the existence of a relationship between the two variables.

### Discussion

Recall the sociological question this research intends to elaborate on: how does a county's public library system strength relate to its social cohesion? The methods and degree of influence public libraries have on communities, and further, what those influences are, have been in part uncovered through this work. The researcher's hypothesis was:

**H1:** On a county level, communities with a strong public library system will experience more social cohesion and participation in civil society.

**H0:** There is no relationship between library presence/strength and community cohesion.

Strong libraries were found to positively associate with community cohesion with moderate significance (Table 4;  $p = 0.057$ ,  $t = 1.962$ ,  $df = 33.385$ ). In comparing the difference of means in average library rankings and quality of life measures, the researcher rejects the null hypothesis in support of a relationship between the two variables.

### Application and Context

Indeed, it was hypothesized for there to be a measurable impact of library strength on counties' QOL; yet, in accounting for the insight of the Literature Review and Theory sections, it is entirely reasonable for support of the hypothesis to be marginal. Statistical significance was not confidently affirmed, for multiple reasons both within and without the research design of this paper; this is sensible. Within the Marxian lens, there maintains a dichotomy between public library effectiveness and community need for such. If publics were to ameliorate and heal community

plights, then the common model of libraries would cease to exist. It is entirely true that public infrastructure such as public libraries is a form of harm reduction: their absence would be sorely missed, yet the elimination of being needed in the first place as intervention for individuals' lives would be beneficial. This is the fine line walked in this research design, in which the social implications of an institution may be beneficial, but the roots of such are equally detrimental.

This does not negate the beauty of a library and its services. Libraries are the embodiment of public service and public good in their origination; but as the Theory section elaborates, with the development of neoliberal capitalism, the mission has become clouded. While it is acknowledged that the library does not represent a community, and it represents only the structures of oppression integral to the maintenance of white, patriarchal, capitalist power itself at its most clear and unambiguous form today—it also must be acknowledged that neighborhoods and families find refuge within the care of publics through their face-to-face relations. This small slice of the life-world establishes the dialectic in the ways people experience the obdurate social and cultural reality as inherited from systems en masse. There is a reason that there is some established extent of influence from public libraries on community cohesion, but it must be qualified by understanding the infrastructure's historical context.

This reason is that libraries function as key community resiliency centers; libraries are not only important for providing books, films, internet access, and other vital information, but also for ensuring a neighborhood's vitality and promoting stronger social ties. Libraries are the home of equal opportunity, providing infinite functions for the general population in working to provide the resources and cultural memory (and subsequent resonance) of a shared history and purpose. Though not everyone in a community will patron a library, the effects are self-perpetuating through assisting people in achieving dignity, connection, and awareness, which undoubtedly radiates throughout patrons' social spheres. Libraries, and the people who work in them often are the heart of the narrative of many lives, just as they are often the heart of the places they serve. This holds true for the individual citizen as well for communities.

### Limitations

Beyond concerns orienting around this model's basis in theory and its congruence to the observed social world, there were several elements throughout this work that the researcher found pause within; namely through the proxy measure formation in the scales and levels of measurement. Naturally, as secondary data research, answers will not be as specific as desired to complete a thoughtful analysis in such an understudied area as libraries and community.

Variables within the Wellbeing and Economic Outcomes portion of the Social Cohesion Index were faultily composed. 'Income inequality' notes a ratio between percentiles of household income within counties. Noting that the Appalachian region of Kentucky experiences endemic, abject poverty, these ratios will capture the slightest of difference. The composition of the overall cases within the ratio will heavily lean towards the



federal poverty line, which is not considered in the creation of this scale. If everyone is faring poorly, then equality is indicated at a higher value— this captures the opposite intention of the scale. Additionally, the creation of the Index with such measures creates issues: being above/below the mean is not consistently coded, wherein being above average in ‘income inequality’ and ‘disconnected youth’ would create a positive difference in the scale when the element is truly negative.

A further concern is within the limitations of understanding social connections within a methodological framework. There is not currently a reliable, national source of data for measuring social or community support at the local level, therefore measures does not account for important social connections offered via family support structures, informal networks, or community service organizations, all of which are important to consider when understanding the amount of social support available within a county. It also does not account for perceived support, or lack thereof. For instance, an individual can be a member of numerous social associations, but feel they receive no social support from those organizations.

Additionally, it is sensible to note that a lack of voter participation does not equate apathy. There is incredible nuance to Kentuckians’ participation in electoral processes, particularly in regions within communities that have been historically disenfranchised and disillusioned with the political system. It is not fully accurate to draw ties between voting and self-agency in a region such as this.

### Suggestions for Future Research and Conclusions

Intricacies in the numbers are not always accurately capturing social phenomena. Yet, theory and methodology can assist in understanding a shared social reality; research should seek to connect the structural to the personal. There is an abundance to gain from listening directly from patrons themselves as to their views of library science and community cohesion. There is surely a fruitful inquiry to be made into the idea of spatial value alongside Library Strength. Just as each library and its branches tailor their programs, content, and overall service model to constituent needs, community resiliency and the overall value of a library in a particular community must be considered. In essence, a library focused on providing services for those routinely disadvantaged or marginalized may qualify as a more valuable branch than that of a fully-funded, extravagant public in a well-off metro area. There is incredible nuance to be offered in the consideration of this idea.

Ultimately, public libraries have long facilitated information access and removed systemic barriers to education, self-improvement, and feelings of belonging within communities through their dedication to providing information equity. Despite shortcomings, they have shaped, preserved, and motivated society towards inclusion, equity, and community. They embody a promise of a better tomorrow— one of openness, freedom, and connection between people. In cherishing the publics, each individual may share a vision of themselves within this new tomorrow. The task and solution for librarianship is to embrace constituent power, setting up forms of dual power in resistance to

the state, recognizing that each person must be part of community, with communities deciding what is to be done.

Let libraries be celebrated for their value they add to the experience of a book, cultural memory of shared civilizations, and bonds enriched between citizens— for minimizing inequality, being a force of creativity and innovation, and being the heart and soul of communities.

### References

- American Library Association (ALA). (2015). After access: Libraries & digital empowerment. *Building digitally inclusive communities*. [http://www.ala.org/advocacy/sites/ala.org/advocacy/files/content/ALA%20DI%20After%20Access\\_final\\_12%2017%2015.pdf](http://www.ala.org/advocacy/sites/ala.org/advocacy/files/content/ALA%20DI%20After%20Access_final_12%2017%2015.pdf)
- Berry, J. (2006). Where democracy happens. *Library Journal* 131 (11). <https://www.libraryjournal.com/?detailStory=2006-galelj-library-of-the-year-salt-lake-city-public-library-where-democracy-happens>
- Boyte, H. (2007). Building civic agency: The public-work approach. *Open Democracy*. [https://www.opendemocracy.net/en/building\\_civic\\_agency\\_the\\_public\\_work\\_approach/](https://www.opendemocracy.net/en/building_civic_agency_the_public_work_approach/)
- Branum, C. (2008). The myth of library neutrality. *Library & Information Science*. <http://dx.doi.org/10.17613/M6JP2R>
- Commonwealth of Kentucky State Board of Elections (2017). *Voter Turnout Report for the 2016 General Election (11/6/2016)*. <https://elect.ky.gov/statistics/Documents/voteturnoutcounty-2016G-20170207-045554.pdf>
- Delsaerd, P. (2008). From légère teinture to central place: A revaluation of book and library history within library and information science programmes. *Library History*, 24(2), 143–151. <https://doi.org/10.1179/174581608X329826>
- Dillon, D. (1999). Making the wild wind visible: Information technology in a brave new world. *Journal of Library Administration*, 28(1), 47–61. [https://doi.org/10.1300/J111v28n01\\_05](https://doi.org/10.1300/J111v28n01_05)
- Eckerdal, J. (2017). Libraries, democracy, information literacy, and citizenship. *Journal of Documentation*, 73(5), 1010–1033. <https://doi.org/10.1108/jd-12-2016-0152>
- Ettarh, F. (2018). Vocational awe and librarianship: The lies we tell ourselves. *In the Library with the Lead Pipe*, 10. <http://www.inthelibrarywiththeleadpipe.org/2018/vocational-awe/>
- Ettarh, F. (2014). Making a new table: Intersectional librarianship. *The Library with the Lead Pipe*, 2. <https://www.inthelibrarywiththeleadpipe.org/2014/making-a-new-table-intersectional-librarianship-3/>
- Freire, P. (1972). *Pedagogy of the oppressed*. New York: Herder and Herder.
- Garner, A. (2019). The grand opportunity: Creating community, equity and innovation with Houston public libraries. *The Aspen Institute Dialogue on Public Libraries*. <https://csreports.aspeninstitute.org/documents/HOUSTON2018-FINAL-REV.pdf>
- Garrison, D. R., Anderson, T., & Archer, W. (2010). The first decade of the community of inquiry framework: A retrospective. *The Internet and Higher Education*, 13(1-2), 5-9. <https://doi.org/10.1016/j.iheduc.2009.10.003>
- Goedeken, E. A. (2019). The literature of American library history, 2010-2011. *Information & Culture: A Journal of History*, 54(3), 342-380. <https://doi.org/10.7560/IC54304>
- Harris, M. (1967). Library history: A critical essay on the in-print literature. *The Journal of Library History (1966-1972)*, 2(2), 117–125. [www.jstor.org/stable/25540036](http://www.jstor.org/stable/25540036)
- Hessel, A., & Peiss, R. (1950). *A history of libraries*. Washington: Scarecrow Press.
- Jaeger, P., Subramaniam, M.M., Jones, C., & Bertot, J. (2011). Diversity and LIS education: Inclusion and the age of information. *Journal of Education for Library and Information Science*, 52(2), 166-183. <https://www.jstor.org/stable/41308894>
- Kentucky Education and Workforce Development Cabinet Department for Libraries and Archives. (2018). *Statistical Report of Kentucky Public Libraries (Fiscal Year 2016-2017)*. <https://kdla.ky.gov/librarians/plssd/Documents/kdla1617.pdf>

Klinenberg, E. (2019). *Palaces for the people: How social infrastructure can help fight inequality, polarization, and the decline of civic life*. Broadway Books.

Lorde, A. (1984). Age, race, class, and sex: Women redefining difference. *Sister Outsider: Essays and Speeches*, Crossing Press, pp. 114-123.

Manguel, A. (2009). *The library at night*. Yale University Press.

Orlean, S. (2019). *The library book*. Simon and Schuster.

Popowich, S. (2017). Ruthless criticism of all that exists: Marxism, technology, and library work. *University of Alberta The Politics of Theory and the Practice of Critical Librarianship*. <https://doi.org/10.7939/r3-26j6-5r32>

McNichol, M. (2020). Confronting the democratic discourse of librarianship: A Marxist analysis: Review of the book Confronting the democratic discourse of librarianship: A Marxist analysis by Popowich, S. *Pathfinder: A Canadian Journal for Information Science Students and Early Career Professionals*, 1(2), 68-71. <https://redlibrarian.github.io/article/2019/10/30/two-democracies.html>

Popowich, S. (2019). *Confronting the democratic discourse of librarianship: A Marxist analysis*. Library Juice Press.

Ritzer, G., & Stepnisky, J. (2018). *Sociological Theory*, Ninth Edition. Thousand Oaks.

United States Census Bureau American Community Survey (2016) ACS 5-year Estimates – Social Characteristics in the United States. <https://data.census.gov/cedsci/table?t=Education%3AEducational%20Attainment%3AHealth%3AHousing&g=0400000US21.21.050000&tid=ACSDP5Y2016.DP02&hidePreview=true>

## Appendix A

**Table A1**  
**Public Library Strength Index: Variables and Definitions**

Variable	Definition
<i>Accessibility</i>	
Annual hours of service	Annual hours of service operations in main library, branches, and bookmobiles per county library system.
Web user sessions	Refers to the number of internet sessions on library computers annually. An internet session is defined as the period of time a user is actively engaged with a website, app. All usage data (screen views, e-commerce, events, etc.) is associated with a session.
<i>Media</i>	
Book circulation total	Total material circulated annually in branch, main, and outreach libraries.
Book circulation per capita	Sum of all material circulated annually for the central library, branches, and bookmobiles, divided by population per county.
<i>Social Measures</i>	
Total program attendance	Total people participating in programs of all ages offered by libraries annually. Programs can include outreach activities such as crafting, job market skill shares, computer skills classes, genealogy, story times for youth, etc.
People entering library	Total number of people entering the library for any reason during the year.

**Table A2**  
**Community Cohesion Index: Variables and Definitions**

Variable	Definition
<i>Wellbeing and Economic Outcomes</i>	
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile in each county. Intended to capture the presence of an irregular spread of income distribution, controlling for geographical locations and costs of living.
High school graduation	Percentage of ninth-grade cohort of a particular county that graduates with a high school diploma in four years. While there are other measures available that include GEDs, delayed graduations, etc., this variable was selected for its particular connections to youth wellbeing and the well-established associations with timely graduation to QOL outcomes.
<i>Faith in Democracy</i>	
Voter Turnout	Percent of eligible voter pool in each county that participation in the general 2016 Presidential election.
<i>Quality of Life</i>	
Disconnected Youth	Percentage of teens and young adults ages 16-19 who are neither working nor in school.
Social associations	Number of membership associations per 10,000 population. Rates measure the number of events in a given time period (generally one or more years) divided by the average number of people at risk during that period. The associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations.