Indiscriminate or Intentional: Locations of Nonprofit Organizations in Kansas City

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Abstract: This study examines the locations of Kansas City metropolitan area nonprofit organizations, as defined by the eleven-county Kansas City Metropolitan Area. Although several authors have conducted similar studies of nonprofits in metropolitan areas, none have looked at Kansas City specifically. This study utilizes census data as well as data from Internal Revenue Service Form 990 to assess the relationship between nonprofit location, income level, and heterogeneity in the community. This study finds that both median household income and heterogeneity predict the number of nonprofits in the area. Additionally, this study highlights the difficulties of researching nonprofit organizations based on IRS reporting.

Key words: nonprofit, Kansas City, locations, Form 990

Introduction

Nonprofit organizations are formed for a variety of reasons. Some of those reasons are to assist the needy, to provide a community with cultural opportunities, and to educate the population. What factors contribute to where a nonprofit chooses to locate? This paper examines Kansas City’s eleven-county Metropolitan Area at the county level to evaluate various characteristics of the organizations as well as the populations they serve.

What determines the size and scope of a nonprofit sector? Scholars have determined several reasons for nonprofit location choice. Resource dependency theory argues that if an organization is dependent on another’s resources, they will respond to demands made by that other entity (Pfeffer, 1982). Wolch and Geiger (1983) determined that the distribution of human service nonprofits in Los Angeles County is related to community needs and resources available. Organizations will want to be located where they have ample access to volunteers and paid staff, access to monetary resources to operate, and a demand for their services. More affluent members of a diverse
community will want to help the less fortunate in their neighborhoods and will target their support to those organizations providing local services. Furthermore, nonprofits are only able to assist those who can access their services. For that reason, it is essential to the mission of those organizations to be located in areas with populations who need their services (Bielefeld et al, 1997; Twombly & De Vita, 2000).

Bielefeld (2000) suggests that wealth and income are indicative of larger nonprofit sectors for several reasons: a wealthier population provides a greater resource pool for nonprofit organizations and also encourages the provision of “amenity services” such as arts and education (Wolpert, 1993). Further, Bielefeld and Murdoch (2004) indicate nonprofits may prefer “prestigious” locations or locations in more wealthy areas, as the organization may gain legitimacy in the eyes of their funders and other stakeholders. Resource dependency theory suggests that the demands from funders propel nonprofits towards certain areas of the city.

Weisbrod (1988) finds community heterogeneity to be a predictor of greater nonprofit presence in a community. Diverse needs require a breadth of service provision not able to be met by the government. Specifically, diverse groups in a given neighborhood or county may require services tailored to their needs, like a clinic with Spanish-speaking physicians and nurses or representative cultural organizations. Additionally, suburbanization may have further segmented the population into pockets of residents with specific needs and funders with specific demands for resource allocation.

Another theory that can be applied to the location choice of nonprofit organizations is ecological theory. Hannan and Freeman (1977) note that in dense markets, the organizations that compete most intensely are those of similar size. According to this theory, similarly sized nonprofits will tend to not be located in the same area. Baum and Haveman (1997) elaborated on that initial theme, and offered an alternative theory: that it is possible for organizations to choose to locate in areas where
other like-organizations are already established. Organizations can benefit from shared infrastructure, as well as increase their demand by reducing consumer search costs. Finally, Wiewel and Hunter (1985) found that communities with high densities of existing organizations provide more favorable conditions for new similar organizations to survive. Bielefeld and Murdoch (2004) tested whether nonprofit service provision was impacted by other nearby nonprofit organizations in six different metro areas and only found significant results in two of those cities.

According to data compiled from the Internal Revenue Service (IRS) Form 990, Kansas City is home to over 3,000 501(c)(3) nonprofit organizations. Generally speaking, 501(c)(3) tax-exempt organizations are non-proselytizing, non-political entities whose donors can claim a tax deduction. With a regional population of over 1.9 million, there are approximately 1.65 nonprofits per 1,000 people. Kansas City’s nonprofits contribute over $11.22 billion to the local economy each year. The sector has a fairly even distribution of organization type. Human service organizations are the highest percentage of total organizations in the area at 25 percent. Second highest are those that provide a public or social benefit (19%) and third highest are educational institutions (15%).

Although several studies have focused on the nonprofit sectors of other metropolitan areas, none have focused exclusively on that of the Kansas City metropolitan area. Adding to the findings of previous studies, this paper seeks to determine comparable statistics for the Kansas City area. Consequently, this paper will test the following hypothesis:

H₁: The number of nonprofits in a particular county of the Kansas City metro area varies according to median household income and heterogeneity within the county.

H₀: There is no variance in the number of nonprofits.
Method

Design

A multiple regression analysis was conducted to determine whether the number of nonprofits in the Kansas City metropolitan area varied with median household income and racial heterogeneity. Census data for median household income were obtained for each of the eleven counties studied. The data were regressed, via factor analysis, against a variable that aggregated the number of single-race African Americans in each county and the number of single-race Hispanics (Minority). These two particular races were selected, based on their percent representation within the population, as a measure of racial heterogeneity within the community. Bielefeld’s study (2000) included those racial groups comprising 2% of the total population, which corresponds to the retention of African-Americans and Hispanics in this study.

Data and Data Description

This study utilized secondary data from the 2000 census, as well as the IRS Form 990. Specifically, demographic information for Kansas City area residents were obtained from participants in the 2000 Census, and were aggregated at the county level for the eleven counties in the Kansas City metropolitan area: Johnson, KS; Leavenworth, KS; Miami, KS; Wyandotte, KS; Cass, MO; Clay, MO; Clinton, MO; Jackson, MO; Lafayette, MO; Platte, MO; and Ray, MO.

County populations range from 18,979 (Clinton, MO) to 654,880 (Jackson, MO). The mean population is 161,460.18 (sd = 205,928.379), and the median population is 73,781. Wyandotte, MO had the lowest median income ($33,784), and Johnson, KS had the highest median income for the county ($61,455). Additionally, Clinton, MO had the highest concentration of Caucasian residents (97%), and Wyandotte, KS had the lowest concentration (58%). Cass, MO and Ray, MO each had the lowest concentration of African American residents (1%), and Wyandotte, KS had the highest African American
population (28%). Finally, Ray, MO; Clinton, MO; and Lafayette, MO had the lowest concentration of Hispanic residents (1% each), and Wyandotte, KS had the highest (16%).

Although the majority of studies focusing on nonprofit location use the metropolitan area as the level of analysis, Gronbjerg and Paarlberg (2001) noted the benefit of county-level data for policy makers. Additionally, they suggest that data aggregated at this level may also more clearly indicate differences in socioeconomic characteristics, which can be lost at the metropolitan level.

Data on the nonprofit organizations in Kansas City’s metropolitan area were obtained from the IRS Form 990, which provides information on all organizations granted 501(c) status. Organizations required to file Form 990 are those that generate revenues greater than $25,000 annually, and that are not religious congregations. The original group of all Kansas City area 501(c)(3) organizations was narrowed by eliminating all organizations that reported neither assets nor income during their most recent filing period. Although all 501(c)(3) organizations are required to file, it is important to note that several organizations, specifically those affiliated with religious entities, do not report assets or income. Further, some organizations that do not generate revenues of $25,000 annually still file. A further elaboration of the limitations of Form 990 can be found in the discussion section of this paper. From the original pool of organizations, a final group of 3,244 organizations remained, which were then aggregated to the county level for comparison with census data.

The counties with the fewest nonprofit organizations (N = 2) were Ray, MO and Clinton, MO. This statistic is not surprising, since they also have the smallest populations. Similarly, Jackson, MO and Johnson, KS had the highest concentration of nonprofits (1882 and 1038, respectively), as well as the highest populations.
In order to combine the census data with the data from Form 990, all cases from each file were aggregated to the county level and combined with county as the identifier.

**Results**

The data were analyzed using a Median Income x Minority Population regression analysis. A significance level of .05 was used for all tests. There was a statistically significant Median Income x Minority Population interaction, \((\beta = 1.626, t = 8.921, p < .01)\). This shows that the effect of median income on the number of nonprofit organizations is different with different levels of minority population. While 93.6 percent of the variability in number of nonprofit organizations is accounted for by the first two variables, the interaction explains an additional 5.9 percent, to total 99.5 percent of the variability in the dependent variable. Table 1 shows the values for each variable as it was entered in the model.

**Table 1: Results of Model 1 and Model 2**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE B *</th>
<th>(\beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1</strong> (Constant)</td>
<td>617.202</td>
<td>79.957</td>
<td></td>
</tr>
<tr>
<td>Centered median household income</td>
<td>3.074E-02</td>
<td>.007</td>
<td>.420**</td>
</tr>
<tr>
<td>Centered minority population</td>
<td>1.070E-02</td>
<td>.001</td>
<td>1.024*</td>
</tr>
<tr>
<td><strong>Model 2</strong> (Constant)</td>
<td>800.976</td>
<td>31.859</td>
<td></td>
</tr>
<tr>
<td>Centered median household income</td>
<td>3.370E-02</td>
<td>.002</td>
<td>.460*</td>
</tr>
<tr>
<td>Centered minority population</td>
<td>2.763E-02</td>
<td>.002</td>
<td>2.644*</td>
</tr>
<tr>
<td>INCXMINO</td>
<td>1.132E-06</td>
<td>.000</td>
<td>1.626*</td>
</tr>
</tbody>
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Note \(R^2 = .936\) for Model 1; \(\Delta R^2 = .059\) for Model 2. * \(p < .001\), ** \(p < .01\)
Additionally, because these data are continuous predictors, simple slopes were calculated to determine the form of the interaction. This strategy has several advantages, namely the ability to maintain the continuous nature of the median household income and minority population variables. This provides a greater amount of information that would be lost if the variables were to be dichotomized. Specifically, at low levels of heterogeneity, the regression equation is \( Y' = -760.65 - .03 \) (median income). At medium levels of heterogeneity within the county, the regression equation is \( Y' = 800.976 + .0337 \) (median income). At high levels of heterogeneity, the regression equation is \( Y' = 2362.60 + .098 \) (median income). At high levels of income and heterogeneity, the number of nonprofits in a county is predicted to be at high levels. The same is true for medium levels of income and heterogeneity. Counties with low heterogeneity (a predominantly white population, in this case) tended to have decreasing numbers of nonprofit organizations as income levels increased, however.

![Figure 1: Simple Slopes](image-url)
There was also a main effect of median household income on number of nonprofit organizations, ($\beta = .420$, $t = 4.419$, $p < .01$). As median income increases, so do the number of organizations in an area, although very slightly (Pearson’s $R = .076$).

There was a main effect of minority population on number of nonprofit organizations, ($\beta = 1.024$, $t = 10.781$, $p < .01$). As the number of minorities in the population increases, so do the number of organizations in the area (Pearson’s $R = .883$).

**Discussion**

This study shows that there are several factors contributing to the number of nonprofits located in the Kansas City metropolitan area. First, nonprofits are more likely to locate in areas with higher median incomes. This may be attributed to the fact that nonprofit organizations rely on the resources of its neighboring community, both in terms of workers and financial contributions. Second, nonprofits are more likely to locate in areas with a more heterogeneous population. This may be due to the fact that diverse needs require a diverse set of organizations to meet those needs.

Most importantly, there was a significant interaction of median income and minority population, confirming the test hypothesis. What this demonstrates is that the effect of median household income on the location of nonprofits varies according to the levels of heterogeneity within a metropolitan area. With low levels of heterogeneity, higher levels of median household income tend to predict a lower number of nonprofit organizations. With medium levels of heterogeneity, higher levels of median household income predict a greater number of nonprofits. Similarly, high levels of heterogeneity tend to predict a greater number of nonprofits located in that particular area of the metropolitan area.

This research contributes to the existing knowledge of where nonprofits are located in major metropolitan areas. It confirms previous work citing resources and heterogeneity as major predictive factors. Because most studies conducted thus far have
focused on a given metropolitan area as a whole (Wolpert, 1988; Bielefeld, 2000; Twombly & De Vita, 2000; Bielefeld & Murdoch, 2004), this particular piece of research contributes to a more precise understanding of the fluctuations within one area. Additionally, this study provides the nonprofit sector with new data about yet another metropolitan area.

Like most studies on the nonprofit sector, this study has quite a few limitations that hinder the outcomes. Data on nonprofit organizations, in general, are quite limited. Researchers are limited to financial data provided by the IRS, which are incomplete in several regards. Religious organizations, which comprise over 15 percent of the organizations required to file in the Kansas City area, are not obligated to list their assets and income. Consequently, the size of organizations cannot be accurately tested. Further, the data provided by the IRS do not comprise the same fiscal year for all organizations. Organizations may file extensions, resulting in a several-year span within the auspices of the 2006 data alone. To wit, one organization is just now filing their 1991 returns.

Another limitation of the study is the level of analysis. Although county-level data is beneficial, it might be interesting to analyze the same dataset at the zip code level. Because Kansas City is heterogeneous, the zip code level of analysis would allow researchers to find more nuanced differences between various sections of the city. Additionally, it would be interesting to see what types of organizations cluster in particular areas of the city. One potential research question could ask whether older areas of the city are more nonprofit-rich than newer suburbs.

The work of nonprofit organizations is mission-driven. As a result, it is important to know if those organizations are accessible to populations they serve, and if they have clear access to needed resources. This was tested through levels of heterogeneity within a county, as well as median income. This study found Kansas City nonprofits to be located in those areas needing and utilizing their services.
References


