Metropolitan Feelings

Metropolitan Statistical Areas (MSA): A geographical area that contains a high population density in the center but maintains economic and social integration with its surrounding communities. According to the United States Census Bureau it is the United States Office of Management and Budget (OMB) that delineates metropolitan and micropolitan statistical areas depending on standards using the Census Bureau data.

<https://www.census.gov/programs-surveys/metro-micro/about.html>

<https://www.bls.gov/sae/additional-resources/metropolitan-statistical-area-definitions.htm>

Each metropolitan statistical area must have at least one urbanized area of 50,000 or more inhabitants. In 2020 there were 384 metropolitan statistical areas in the United States.

The Question:

How do different factors affect mental health and emotional well-being in metropolitan areas across the United States.

The Sample:

For the current study, data from 89 Metropolitan Statistical Areas (MSA) in the United States from the year 2016 was used.

The 89 Metropolitan Statistical Areas (MSA) studied were chosen considering the availability of data across multiple variables.

Origin:

Initially, this study was focused on understanding how the number of clergy compared to the number of psychologists, psychiatrists, and social workers in different metropolitan areas. It was hypothesized that religion and spirituality play a significant role in the mental health of certain communities (See: “The role of religion and spirituality in mental health” (<https://www.ncbi.nlm.nih.gov/pubmed/25046080>), “The Clergy as a Source of Mental Health Assistance: What Americans Believe” (<https://www.jstor.org/stable/20058132?seq=1>), “ Patterns and Correlates of Contacting Clergy for Mental Disorders in the United States” (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1360908/>).

Principal Findings of the Study: “Patterns and Correlates of Contacting Clergy for Mental Disorders in the United States” stated:

“One-quarter of those who ever sought treatment for mental disorders did so from a clergy member. Although there has been a decline in this proportion between the 1950s (31.3 percent) and the early 1990s (23.5 percent), the clergy continue to be contacted by higher proportions than psychiatrists (16.7 percent) or general medical doctors (16.7 percent). Nearly one-quarter of those seeking help from clergy in a given year have the most seriously impairing mental disorders. The majority of these people are seen exclusively by the clergy, and not by a physician or mental health professional.”

With this in mind, the current study expanded to include additional factors that could also have an effect on the mental health and emotional well-being of people in metropolitan areas and should therefore, be controlled for.  
  
These factors included:

Frequency of attending Church, Synagogue or Mosque

The importance of religion in daily life

The religion that is practiced (Christian, Jewish, or Muslim)

The amount of hours that are spent socially

The strength of close social relationships

The political party

Income

Financial Well-being Index

Diagnosed Depression

The Frequency with which Drugs/Medication is used to Affect Mood

Correlations between these factors can be observed in the Models Section.

Implications:

Data:

Employment data for Metropolitan Statistical Areas (MSA) by the U.S. Bureau of Labor Statistics

<https://www.bls.gov/oes/2016/may/oes_stru.htm>

Income Data from 2016, 2017, 2018 was gathered from the Bureau of Economic Analysis (BEA) **Personal Income by County, Metro, and Other Areas.**

<https://www.bea.gov/data/income-saving/personal-income-county-metro-and-other-areas>

U.S. Dailies – Gallup Analytics – 2016

<https://www.gallup.com/174146/gallup-daily-methodology.aspx>

<https://www.gallup.com/analytics/213617/gallup-analytics.aspx>

Instructions: Select a Category: Religious, Social, Economic, Political, Emotional, or Medical and then a variable to explore.

Note: Display is best in large windows. Some plots may take some time to load.

All plots are interactive—It is recommended to keep the graphs on Autoscale.

Religious:

Religion is thought to affect emotional wellbeing in Metropolitan Areas throughout the United States. Through the following graphs you can explore how different Metropolitan Statistical Areas compare and contrast in regards to:

-How important religion is in daily life

-How common it is to attend Church, Synagogue or Mosque once a week

-The number of religious jobs that exist in a Metropolitan Statistical Area for every 1,000 jobs.

-What percent of the population is Christian

-What percent of the population is Muslim

-What percent of the population is Jewish

These variables show insights into the role Religion plays in different metropolitan areas, and what the distribution looks like throughout the United States.

Highlights include:

-Birmingham-Hoover AL is the place where religion is the most important part of daily life, while San Francisco-Oakland-Hayward CA is the place where it is the least important.

-Greenville-Anderson-Mauldin, SC is the metropolitan area where the largest percent of people attend church, synagogue, or mosque once per week, while San Francisco-Oakland-Hayward CA is the place where the least percent of people attend once per week.

-Las Vegas-Henderson-Paradise, NV has the least number of Religious jobs per 1,000.

-Portland-Vancouver-Hillsboro, OR, WA has the largest number of Religious jobs per 1,000.

Data Sources are included in the About Section.

Social:

Social factors thought to affect emotional wellbeing in Metropolitan Areas throughout the United States. Through the following graphs you can explore how different Metropolitan Statistical Areas compare and contrast in regards to:

-The Social Wellbeing Index

-How many hours are spent socially

-What is the strength of close social relationships

-The number of social jobs that exist in a Metropolitan Statistical Area for every 1,000 jobs.

These variables show insights into the role social activities and social work have in different metropolitan areas, and what the distribution looks like throughout the United States.

Highlights include:

-Atlanta GA, Columbia SC, and El Paso TX spend on average 11 hours socially, more than any other metropolitan area studied.

-Greenville-Anderson-Mauldin, SC has the highest index of very strong close relationships, while Madison, WI has the lowest index of very close relationships.

-Worcester,MA has the highest number of social jobs per 1,000.

-Huntsville, AL has the lowest number of social jobs per 1,000.

Data Sources are included in the About Section.

Economic:

Economic factors thought to affect emotional wellbeing in Metropolitan Areas throughout the United States. Through the following graphs you can explore how different Metropolitan Statistical Areas compare and contrast in regards to:

These variables show insights into the role economic factors have in different metropolitan areas, and what the distribution looks like throughout the United States.

Highlights include:

Data Sources are included in the About Section.

Political:

Political factors thought to affect emotional wellbeing in Metropolitan Areas throughout the United States. Through the following graphs you can explore how different Metropolitan Statistical Areas compare and contrast in regards to:

These variables show insights into the role political factors have in different metropolitan areas, and what the distribution looks like throughout the United States.

Highlights include:

Data Sources are included in the About Section.

Emotional:

Political factors thought to affect emotional wellbeing in Metropolitan Areas throughout the United States. Through the following graphs you can explore how different Metropolitan Statistical Areas compare and contrast in regards to:

These variables show insights into the role political factors have in different metropolitan areas, and what the distribution looks like throughout the United States.

Highlights include:

Data Sources are included in the About Section.

About Me:

Benjamin Villa Wiesner is an Architect and a Design Engineer from Harvard’s Graduate School of Design and the School of Engineering and Applied Sciences. You can reach me at [benjaminvilla@mde.harvard.edu](mailto:benjaminvilla@mde.harvard.edu) and find me on GitHub.

The repo for this project can be found here (<https://github.com/benjaminvillaw>).

Interests:

Architecture | Design | Cities | Data science in R.

Education:

MDE Master in Design Engineering

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