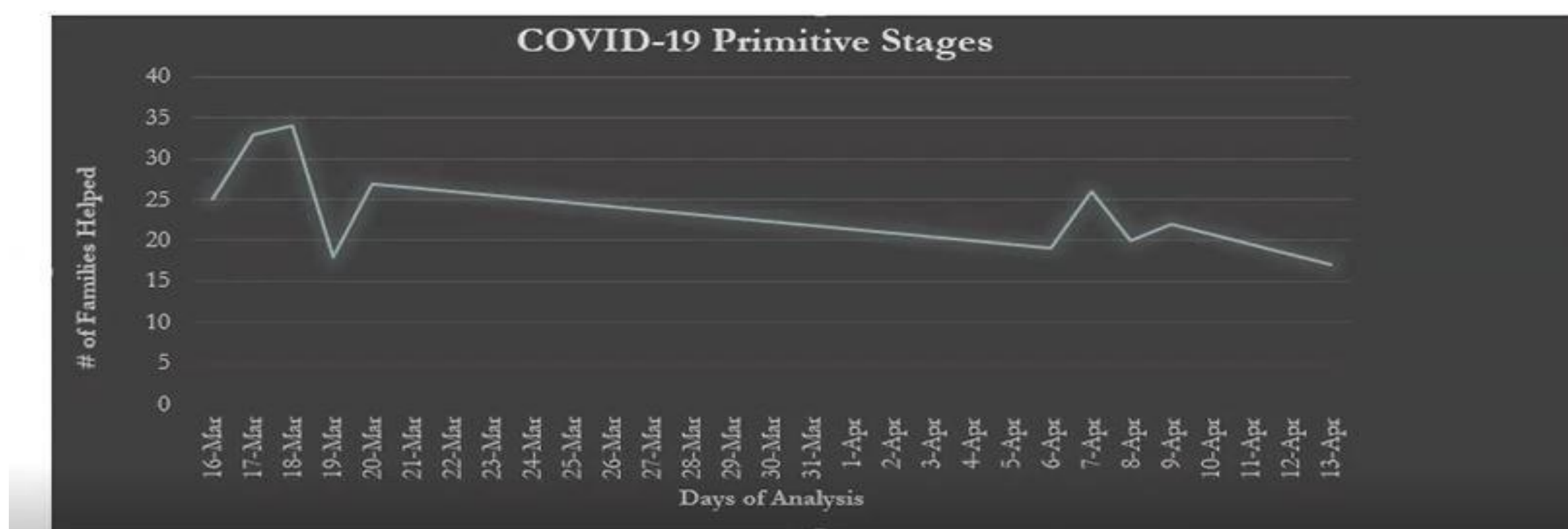### Guadalupe Barrera   Emporia State University

Introduction

Food insecurity has been a consistent issue in low-income households. Fortunately, food pantries have developed in areas that are documented to be the most in need of supplies. Food pantries are created by non-profit organizations that distribute food to households that are unable to access nutritional meals. However, within a pandemic, food security is likely to diminish, especially for households experiencing unemployment along with diminished mobility.

For the sake of this research, a food desert is classified as not being able to obtain fresh food within a mile radius of their location. This research will observe and collect data from Seton Center in Jackson County, MO. This county is closest to the metropolitan area with a median household income of $55,929 (Missouri,2020)

Purpose

What followed was this research, in case study format, involving the Seton Center in urban Kansas City, Missouri. The focus was on low-income families in the Jackson county area of Kansas City. At the risk of stating the obvious, we observed that the food insecure are typically in low-income households.

Methods

I devised two, two-week observations at the Seton Center. The first week started March 16,2020 to April 13. The second we started July 27, 2020 to August 7, 2020. My independent factor is the pandemic crisis. My dependent factor is the number of families helped at Seton Center. compared this data along to data trends that projected the cases to decrease as the year evolves.

Gerald Palmer, director of Seton Center, recorded the numbers of families helped. To exactly calculate the number of families, a record of count was saved on file. My calls would start Monday and again on Friday. This observation lasted four weeks by two intervals.

Data

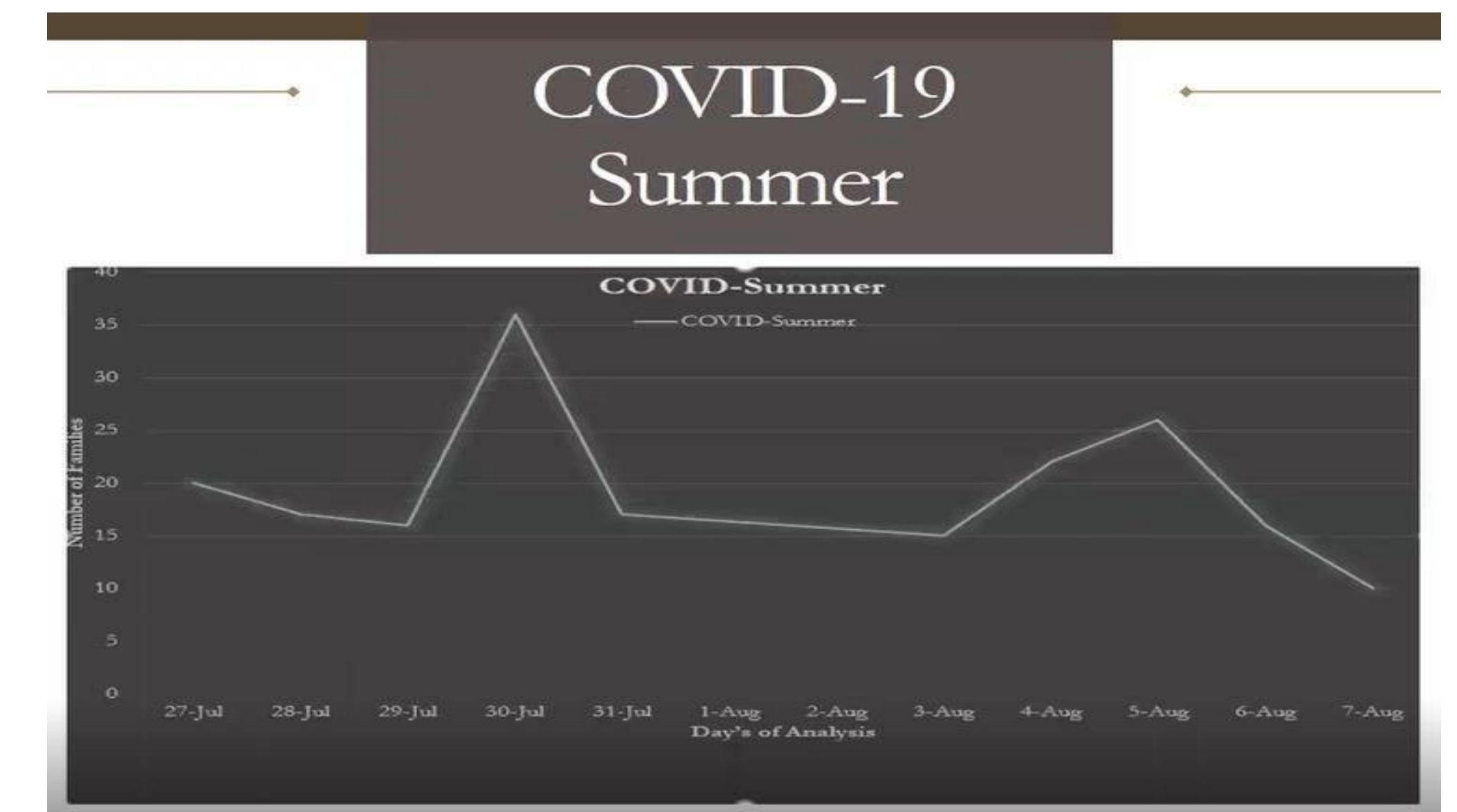| Primitive Stages of COVID-19		COVID-19 Summer	
March 16	25	June 27	20
March 17	33	July 28	17
March 18	34	July 29	16
March 19	18	July 30	36
March 20	27	July 31	17
April 6	19	August 3	15
April 7	26	August 4	22
April 8	20	August 5	26
April 9	22	August 6	16
April 13	17	August 7	10

Results

By viewing the data there is not much of a difference. Further calculations had to be done to know exactly how the stages differed from one another. To do this, I calculated the T-Value of these two stages to determine whether to reject the null hypothesis. A T-Value is used to statistically measure the difference relative to the variation of two samples. Thus, the greater the number, the more it deciphers the null hypothesis.

The analysis of my data shows that there is no relative change in families helped during a pandemic. Thus, with the data I collected COVID-19 did not have a significant difference in families helped between the month of March to August.

We fail to reject the null hypothesis.

Discussion

Before conducting these observations, I created a Federal Reserve Economic Data chart that compares the Supplemental Nutrition Assistance Program Benefit Recipients in Jackson County MO to the Estimate of Median Household Income in Jackson County. This tool allows you to compare certified data with other data to make a conclusion. The purpose of this data was to compare a trend in 2008 when we had a recession. This was to project the same trend during this 2020/2021 pandemic.

Sources

Center, Seton. (2020, June 04). About us. from https://www.setonkc.org/about-us/

U.S. Bureau of Labor Statistics, (2021), Unemployment Rate in Jackson county, MO, retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MOJACK5URN, January 12, 2021

U.S. Census Bureau, (2021), SNAP Benefits Recipients in Jackson County, MO, retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CBR29095MOA647NCEN,