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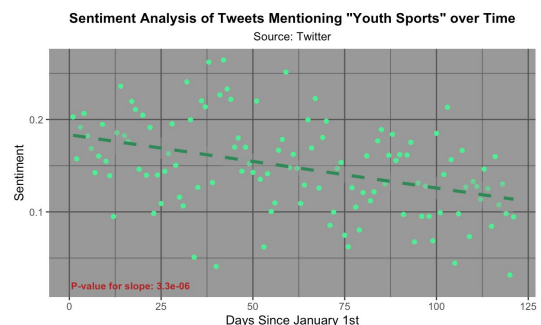
## COVID-19 and the Future of Youth Sports

In this unique time of the COVID-19 pandemic, all types of businesses and activities have been shut down and cancelled to slow down the spread of the virus. In particular, the [\\$19 billion youth sports industry](#) has been significantly affected as all youth sports clubs have been cancelled due to the government stay-at-home orders in America. This might not only have an effect on the income of this industry, but also on the health of youths who would normally participate in these activities. In light of 400 youth sports organizations [asking Congress for a \\$8.5 billion stimulus package](#), we seek to address this issue by analyzing both the magnitude of revenue loss and any potential benefits youth sports may have on the country's future.

To do this, we sought to answer the following questions. Does the industry need this money to survive after the significant revenue loss this pandemic has caused? How will fears of travel and competition in contact sports and potential decreases in interest for sports in general affect future demand for club sports? What potential benefits come from youth sports that necessitate federal intervention to keep them afloat?

First, we found the “tounacation” aspect of the industry – the use of sports as a reason for vacationing – is already feeling the economic impact of COVID-19, with one company predicting a loss of [\\$80 million in direct spending](#) into the surrounding communities because of cancelled events. We also found that physical inactivity rates for kids 6-12 from lower-income households [tend to be higher](#) than those of children in higher-income households. It follows then: if COVID-19 has a negative impact on families' income and they have less money to spend on youth sports after the pandemic, the problem of physical inactivity among children will only get worse. We took to search trends and post content from the beginning of the year till now to see if attitudes towards youth sports have changed. First, through an analysis of Google Trends data, we found interest in the terms “Youth Sports,” “AAU,” and “Little League” all took downturns since the beginning of March – [when the impact of the pandemic began to really hit](#).

We also were interested in seeing how the public has been responding to the cancellation of youth sports. We mined 50 tweets containing the keywords “youth sports” per day between 1/1 and 5/1 using Twitter's API. Each tweet was assigned a sentiment polarity using the TextBlob library in Python, and the average sentiment for each day was plotted for the 4 month period. Sentiment values range from -1 (most negative) to 1 (most positive). We fitted the following linear regression model to the data:  $\text{Sentiment} = .1834628 - .0005766 * (\text{Days Since } 1/1)$ . The slope has a p-value of  $3.3 * 10^{-6}$ , which is less than our significance level of  $\alpha = .05$ , so we accepted the alternative hypothesis that there is a relationship between sentiment and time since 1/1 (slope  $\neq 0$ ). Overall, sentiment stayed positive throughout the whole 4 month period, but it gradually decreased over time.



We recommend that Congress provide monetary relief to the youth sports industry due to the loss of revenue it's facing and the benefit it can provide in keeping the country's youth healthy. As a 2014 study found, of “obesity prevention strategies,” [extracurricular physical activity programs would reduce obesity the most](#) (1.8%) by 2032 for kids aged 6-12. With COVID-19 [attacking those in poor health most aggressively](#), prioritizing national health is an issue that must be taken seriously.

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