

Retail investment: A barometer for teen obesity?

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When it comes to addressing the obesity epidemic, fast food restaurants are a favorite target, with some communities, such as the city of Los Angeles, going so far as to ban the construction of new, standalone fast food restaurants in neighborhoods with a high density of fast food restaurants that are also plagued by a high obesity rate.

But according to a new study coauthored by Michael Bader, an assistant professor of sociology at American University in Washington, D.C., communities contemplating such bans may want to look beyond the number of [fast food](#) outlets to the greater retail environment of each neighborhood.

"Fast food restaurants don't exist in a vacuum," Bader said. "Restaurants and stores open and close based on larger economic development patterns."

Bader's article, coauthored with colleagues at Columbia University and titled "More Neighborhood Retail Associated with Lower Obesity among New York City Public High School Students," was published in the September issue of the journal *Health & Place*.

The study, based on body mass index (BMI) data of 94,348 high school students in New York City public schools, found that the more banks in a student's neighborhood, the less likely the student was to be obese.

"We used banks to measure the influence of retail investment because

we could reasonably assume that they don't cause adolescent [obesity](#), but are related to investment patterns," Bader said. "When we found that having more banks in a neighborhood predicted a lower likelihood of obesity, we were reasonably confident that this association showed the beneficial influence of neighborhood retail investment."

A Surprising Discovery

But before they examined their sample for the relationship between banks and adolescent obesity, Bader and his colleagues analyzed their data to see if the density of fast [food outlets](#) had an impact on adolescent obesity.

They discovered something so unexpected, even they found it surprising—the same inverse relationship they found between banks and adolescent obesity existed between fast food outlets and adolescent obesity.

In other words, the students with more fast food outlets in their neighborhoods were less likely to be obese. However, the results differed for boys and girls. A boy who had three fewer fast-food outlets in his neighborhood than an otherwise comparable boy was 12 percent more likely to be obese. For girls, this changed to a 9 percent higher chance of being obese than an otherwise similar girl, but instead of three fewer fast food outlets in the girl's neighborhood, it was three fewer pizza places.

Retail Environment = Complex Ecosystem

"The location of fast food restaurants and banks were correlated, because they respond to similar economic conditions," Bader said. "A neighborhood's retail environment is a complex ecosystem, and we think that these findings show that is important to consider how the retail

ecosystem might influence health."

Because of this complexity, Bader and his colleagues could not pinpoint exactly what factors created the more banks and fast food outlets/fewer obese teens relationship, but offered some hypotheses.

"A larger retail presence might provide what [the late urban activist] Jane Jacobs termed 'eyes on the street' to prevent crime, a political lobby to support neighborhood services, and, of course, employment for local residents," Bader said.

Other factors that were not accounted for in the study that could have impacted the students' BMI data include the density of parks and other spaces that encourage physical activity in students' neighborhoods or the number of supermarkets, which usually offer more healthful food options than do fast food outlets.

"We will continue to investigate the complexity of the urban economic ecosystem, including how the density and diversity of food options in neighborhoods might influence obesity outcomes," Bader said. "This paper provides a preliminary finding that we hope will encourage more research investigating how economic development might influence health."

Provided by American University

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