Do counties with higher poverty rates have higher liquor sales?

We expected as poverty rate increased so to would liquor sales. What we found however that the two were completely unrelated, which had a correlation of 2.02%. Through the 6 years we found data, 5 counties (Polk, Blackhawk, Linn, Scott, Johnson) makeup of about 50% of all liquor sales in Iowa, while having a average poverty rate of 13.09%, which is slightly above the overall average poverty rate in Iowa of 12.001%. Also the top 5 counties with the highest poverty rate (Davis, Story, Wapello, Crawford, Decatur) have an average poverty rate of 18.56% but only account for about 5% of all liquor sales in Iowa.

Does the racial makeup of a county affect liquor sales?

We expected areas with a higher density of racial minorities to have a higher sale of liquor. However we couldn’t really test the racial data for sales because sales don’t record race upon purchase. Another constraint is that Iowa lacks racial diversity as 91% of the population is caucasian.

Does alcohol store density have a relationship with poverty level?

We expected alcohol store density to have a strong correlation with poverty level. What we found however was a weak regression line of 21.53%. Alcohol outlet density is much higher in areas with higher population. This is also true for poverty level. But the correlation between the two are very weak and it is safe to assume one does not affect the other.