Are N.C.’s Ashley Madison statistics hiding something?

Last month, the Ashley Madison website, which connects cheating spouses with people who want to cheat with them, was hacked. Its membership data, including names, email addresses and home addresses, were made public. Because AM’s registration process hasn’t included confirmation emails, there’s no way of knowing if the email addresses are all valid. Even so, the hack gave enterprising data miners a new hobby.

One of the hobbyists was the Durham-based RoadsNacks website, which did an analysis of the hometowns listed in AM accounts. There are more than 300,000 AM accounts in North Carolina, and the town with the highest number of accounts per capita is little Cherryville, in Gaston County, where the number of AM accounts amounts to nearly 17 percent of its population.

The statewide rate is about 3 percent. In fact, the top nine cities in per-capita AM membership are all small towns. This led some to crow that the alleged moral superiority of small-town values is a fiction.

But let’s apply some statistics and a little common sense to see where the cheating spouses, both actual and wannabe, really live in North Carolina.

First, the small-town AM data are almost certainly the result of clustering. Just as flipping a coin enough times practically guarantees strings of all heads or all tails, we often find geographical clusters of such things as diseases purely by random chance. A cluster of cancers might imply a local cancer-causing factor, but it might be nothing more than the spatial equivalent of a series of coin flips. If random clusters can occur for cancers, why not adulterers?

A cluster of AM accounts occurring in a big-city neighborhood gets averaged against the rest of the city’s large population. In contrast, a cluster arising in a small town stands out like a sore thumb and makes the whole town look like a den of iniquity.

So if the issue is whether AM accounts are more prevalent in urban or rural areas, one must aggregate the data to avoid the clustering problem. The largest 10 cities in North Carolina account for about a quarter of the state’s population but more than half of its AM accounts. In those 10 cities, the rate of AM accounts is 6.4 percent, well above the state average. Outside the big cities the rate is only about 2 percent.

Therefore, if the AM account data are meaningful (and we don’t know how many were faked), they don’t paint a picture of immorality and hypocrisy in rural North Carolina.

An urban resident is three times more likely to have an AM account than someone in a suburban or rural area. Sorry, liberals! Our state’s libertines are mostly in the cities.

The conservative Civitas Institute went the other way, ideologically speaking. It claimed that almost 100 email addresses in the AM database are associated with state and local government in North Carolina. Conservative bloggers said this illustrates the moral corruption of government.

But national news reports have said that 5,000 addresses in the database have .mil domains, indicating membership by someone connected to the military.

Would conservatives conclude from this that the military is morally corrupt? What about all the business email addresses that are undoubtably in the database? Is the private sector morally corrupt?

The AM database has certainly generated a good deal of fun (for those not included in it!). But when people start throwing around numbers, it’s good to keep it in context.

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Washington Post reports a jury awarded a Winston-Salem woman $100,000 because of bed bugs in her Maryland hotel room during a January 2014 stay. She had sued the Red Roof Inn seeking damages for the bites and distress her experience caused her.

The good news is North Carolina’s employment rate is at its highest point in years. The bad news: Salary growth isn’t keeping pace. Compared with last year, Guilford County wages average 1.6 percent higher and Forsyth 0.8 percent higher, compared to national average of 2.1 percent.

Federal government approves three areas on N.C. coast near Kitty Hawk and Wilmington for installation of power-generating wind turbines. A review found there would be no significant environmental impacts...assuming you don’t count seeing giant wind turbines sticking out of the water.

BB&T’s Kelly King predicts number of banks will drop by 50 percent or so over the next 20 years. And King is doing his part: BB&T has itself completed or reached agreements to acquire three banks just within the past year.

We asked

If you were job hunting, what would be your No. 1 resource to find openings?

This week’s question

Have you received an EMV chip card?