Drawing conclusions from an incomplete set of data, because that data has ‘survived’ some selection criteria.

When analyzing data, it’s important to ask yourself what data you don’t have. Sometimes, the full picture is obscured because the data you’ve got has survived a selection of some sort. For example, in WWII, a team was asked where the best place was to fit armour to a plane. The planes that came back from battle had bullet holes everywhere except the engine and cockpit. The team decided it was best to fit armour where there were no bullet holes, because planes shot in those places had not returned.