

From the Kitchen

14 April 2010



I dislike tests. They are meant to judge a person's fitness for an aspect of life, or to ascertain how alive a person is. It is very difficult (if not impossible) to design a test, the results of which are useful. The designer of the test makes assumptions, some based on known facts about the person being tested, such as their knowledge, upbringing, background and state of mind.

The test might be of someone's knowledge, their physical ability, their dexterity, their intelligence, their skills. In every case, the test will fail to tell the tester anything about the complete person taking the test.

In medical tests, the results may be clear, but their interpretation may not. An example is hair analysis for lead or mercury. Does a high level in the hair mean a high level elsewhere in the body or that the body has successfully eliminated the toxic metal and sequestered most or all of it in the hair, the way trees get rid of toxins into their leaves and then drop them? The experts cannot agree. The answer depends on many and diverse factors.

If someone fails a driving test, is it because of nerves, lack of knowledge, an unsympathetic examiner, unclear instructions or a lack of experience? Or just bad driving?

When I studied law and sat for frequent exams, the exams tested my very specific knowledge but gave no indication of whether I'd make a good lawyer. That I ended being one (a good lawyer) had more to do with my upbringing, my ability to argue, my training with a wonderful solicitor, my *saing-froid* in exciting situations (such as a law court) and my ability to empathise. None of these were taught or tested at law school and testing them may not have been possible.

It is similar in medical training. Coming top in exams probably has no bearing on whether a person will be a good doctor – it is not just about knowledge.

Having the results in a final high school exam, along with some assessment during the year, be the standard by which students are admitted to medical school or the law faculty, makes no sense. Certainly, there are good embryonic doctors and lawyers coming out of universities, but I wonder how much this has to do with their year 12 results.

There is a medical school in Germany that only admits students whose final high school scores are between 45% and 65%. Acceptance or rejection is largely based on interviews. The students consistently do extremely well in their (national) final medical exams and a professor of medicine in Melbourne has told me that, per capita, they make better doctors than graduates of other German medical schools.

When I was at university (1967 - 1972), applications for the physical education course were so numerous that students needed a higher year 12 score than those applying for medicine, law or engineering. Thus, many students who were probably more suited to being phys. ed. teachers, missed out in favour of people able to do extremely well in high school tests.

We are exhorted to submit to a host of medical tests at various ages, especially as we get older. Many of these are screening tests, designed for early detection of diseases. How useful are these? Older men are advised to have a PSA test. The level of Prostate Specific Antigens is supposed to be an indication of the likelihood of prostate cancer. However, there is continuing controversy over the relevance of the test and its results, as high levels of PSA may indicate prostate problems or be the normal result of ageing, sex or a long bike ride. A lower PSA level may be the result of taking certain medications. Interpretation is everything, but many men have unnecessary biopsies or even unnecessary prostate removal.

Tests themselves may be accurate, but how useful are the results? How frequently are the results misinterpreted or even ignored? I know of men who were given lipid-lowering drugs even though they had low cholesterol readings; despite the known and sometimes dangerous side-effects of the drugs. The reason for ignoring the test result? “Just in case” was the answer from one specialist. [see [From the Kitchen #38](#)]

There are good arguments to be made for standardising academic tests, one of them being fairness. But this comes with costs, the main one being the ignoring of individuality. There are also good arguments made for medical tests but, although our knowledge is growing, our ignorance is still enormous and we often look like blindfolded children at a party, trying to pin the tail on a donkey.