

A LINE ON LIFE

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Making the Most of the Media *

Psychological information in the media is often incomplete, uncritical and/or biased toward reporting sensational aspects. How can we make the most of their information?

1. **Be skeptical.** Findings that sound "*incredible*" are usually just that – "*not believable*." For example, you may remember reports of "*dermo-optical perception*." Blindfolded people were able to identify colors and even read print by passing their fingertips over the material. Rather than being a "*sixth sense*" or "*X-ray eyes*," it is more easily explained by a "*nose-peek*" – seeing through tiny gaps in the blindfold near the nose. When this peeking is adequately controlled, these "*dermo-optical*" abilities disappear.
2. **Consider the source of the information.** If someone is trying to sell something, their evidence is more biased by profit than a search for truth. For example, media ads declare that "*no other pain reliever is better than ours*." They fail to tell you that their product is also no better than the others. In other words, there is *no difference* between these pain relievers!
3. **Ask yourself if there is a control group.** The media is full of experiments without control groups. Control groups are used to answer the question, "*Is the treatment the cause of the change?*" For example, there are courses that can train you – for a considerable fee – to walk barefoot on hot coals. After going through "*neurolinguistic programming*," their graduates are able to walk on live coals without being burned! However, with the aid of volunteers who had not taken the course, a physicist demonstrated that anyone – with reasonably callused feet – could walk over coals without being burned. The light, fluffy bits of charcoal transfer relatively little heat during a brief contact. (However, I am not recommending that you try this at home.)
4. **Be aware that correlation does not necessarily mean causation.** Many people mistakenly assume that – because two variables are correlated – one *must* cause the other. This could be true, but which way does the causal effect go? Beside that, there is another option – other factors could be causing the changes in both variables. For example, most scientists say there is no scientific foundation for astrology. To counter this, Jeanne Dixon, a popular astrologer, stated: "*They would do well to check the records at the local police stations, where they will learn that the rate of violent crime rises and falls with lunar cycles*." Dixon believes that changes in the moon directly effect human behavior.

Although there are cycles for crime, they are more easily explained by other factors – victims getting paid monthly, the criminals' bills falling due

on a monthly basis and so on. In addition, a scientifically controlled psychological study in 1985 demonstrated that the "*lunar effect*" does not occur.

5. **Know the difference between *observation* and *inference*.** An observation is sensed directly, while an inference is a guess related to your observation. Observing tears may lead you to infer that the person is sad, but this inference might be in error. Tears can flow for other reasons than sadness – peeling onions, being overjoyed or using contact lenses for the first time.

This does not mean that inference is bad – experts in all fields make inferences from data they gather. However, some people treat their inferences as if they were fact – as if they cannot be wrong. Let's consider a psychological example. To reduce a schizophrenic patient's listless behavior, she was rewarded with cigarettes for holding a broom. Since she liked to smoke, she spent most of her time holding a broom. Later, her broom-holding behavior was observed by a psychiatrist through a one-way mirror. The psychiatrist assumed that the broom-holding behavior had deep-seated unconscious symbolism. The psychiatrist said the broom could symbolize "*a child that gives her love and she gives him in return her devotion,*" "*a phallic symbol*" or "*the scepter of an omnipotent queen.*"

The psychiatrist *inferred* the deep-seated symbolism from *observing* the broom-holding behavior. If he knew about the rewarding of this behavior with cigarettes, his inferences would change. Unfortunately, some people treat their inferences as fact and reject any data that conflicts with them.

6. **"For example" is not proof.** Examples in this article are not used as evidence that what I say is true. They are used merely to relate the concepts to concrete situations that are easier to understand.

In contrast, the media uses anecdotes, single cases and testimonials as evidence that something is *true*. Auto manufacturers have satisfied customers who testify to the matchless qualities of their cars. Various diets show you people who have lost large amounts of weight with their plans. Unfortunately, *individual cases* do not tell what is true *in general*. All makes of cars have individuals who favor them – but this does not tell you which is the best car. Almost any diet will have some people who lose a great deal of weight. However, it doesn't tell you what portion of the people who tried the diet lost weight or what the average loss was.

Being aware of the above points can help you to make the most of psychological information you find in the media.

* Adapted from Dennis Coon's *Introduction to Psychology: Exploration and Application*, West Publishers, 1989, pages 42-44.

