# 🌻 Factor labels – semi-quantitative formulations can help

It might be tempting to try to formulate all factor labels in a strictly similar way, using for example language like increased probability of … or positive change in … in every case. But it is difficult to identify and agree on a satisfactory template for doing this which will capture enough of the way people really make causal explanations (in the way that quantitative social scientists hope to measure everything just with continuous variables). This is always a balancing act, but we encourage you when in doubt to stick fairly close to the actual language your sources use (so-called "in-vivo" coding), and don't be *too* worried if your factor labels are different from one another grammatically (e.g. some express a difference like improvement in X and some do not).

The formulation of **factor labels** should fit the intended interpretation of the **causal links**. For example, most commonly B ➜ E is supposed to mean that B exerts in some sense an "increasing" or "decreasing" influence on E, then both B and E need to be formulated in a corresponding way. In order to ease interpretation, with a few exceptions, factors should be labelled and understood in such a way that it makes sense to say "more of this" or "this happened as opposed to not happening": we call these semi-quantitative factors.

Consequently you should avoid a factor label like Training courses, which might be understood as a mixed bag of various causal factors to do with training courses. We would usually prefer a label such as Training courses delivered or Quality of training courses which are easier to understand as things which can increase or decrease, or happen or not happen. You may even prefer to use labels like Quality of training courses improved or Improved quality of training courses, in which the *difference made* is already included in the title.

## Examples of semi-quantitative factors

These are examples of factor labels where you can judge whether it happened more or less, whether it is higher or lower, or whether it happened versus not happened:

- Sold cow
- Earthquake happened
- (Had) good harvest
- (Level of) bank account
- (Level of) ethnic tolerance

- Quality of seeds

In some contexts, we can also talk about the *likelihood* of events, so “if people get a good harvest they are less likely to sell their cow.”

## Non-quantitative factors

It is also perfectly acceptable and sometimes necessary to use purely qualitative labels, e.g. coping style, see below. However, this may limit some of the analysis and reporting tools available:

- Teaching style
- Coping strategy
- The content of the report

We can even make a link between two such factors, claiming for example that the style of 60’s music influenced the style of 70’s music, without any concept of quantity. That’s ok.

Factor labels -- a creative challenge

In a causal mapping dataset there is no need for a special table of factors