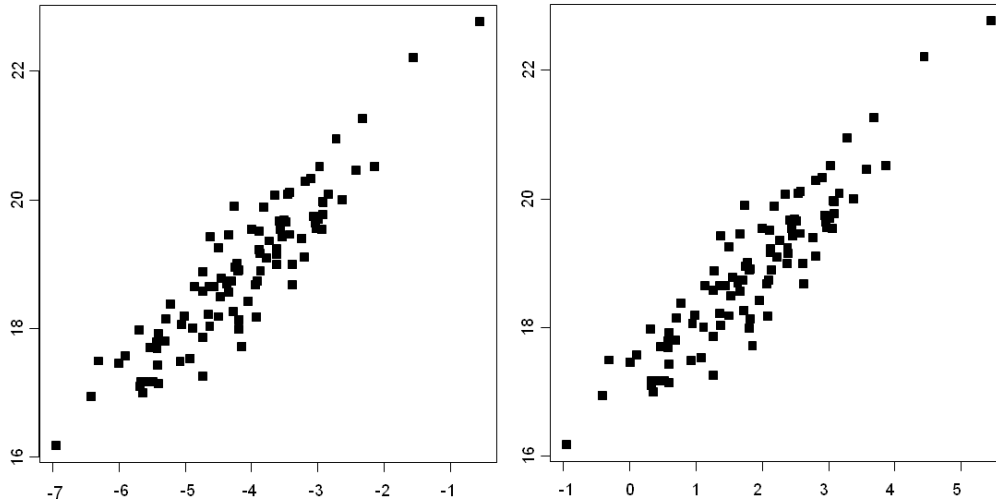


A few notes on the importance of using scatter plots in the Undesired Self project.



An example: Let's assume you compute a new variable, DIFF, that represents the difference between Actual C and Ought C. People with positive scores have higher levels of C than they think they should. People with negative scores have lower actual levels of C than they think they should.

Let's assume that the correlation between DIFF and Life Satisfaction (LS) is as high as +.80.

What does that mean?

Well, on the surface, it means that people with higher DIFF scores tended to report more life satisfaction. But, what that *really* means depends on the range of scores you see on your DIFF variable.

In the right-hand figure above, you can see a situation where, on average, the DIFF scores are positive, indicating that the typical research subject reported having higher levels of C than they thought they should based on their "ought self." By studying the scatter plot, you can correctly see that the higher this discrepancy is (i.e., the larger their actual C was relative to their ought C), the more satisfied with life they were. An appropriate conclusion based on these data is that life satisfaction is highest among people who have high—and positive—discrepancies between their real and ought C.

In the left-hand panel you see the same exact correlation ($r = +.80$), but notice that the range of DIFF scores is different. The average DIFF score is negative, indicating that the typical person in this research sample has a lower value of C than they think they should

have based upon other people's expectations for them. In this graph, as you move from left to right along the DIFF axis, life satisfaction increases. But notice that moving up doesn't necessarily mean that the scores are getting more positive. The scores are getting closer to zero. An appropriate conclusion based on these data is that life satisfaction is highest among people who show the least discrepancy between their actual and ought selves; the closer that difference gets to zero, the more satisfied people are.

Now, on the one hand, the difference I'm highlighting here is subtle. But it is important to realize that simply observing a correlation of, say, + .80 between DIFF and LS doesn't have the simple interpretation of "people with larger discrepancies between their actual levels of C and their ought levels of C reported being more satisfied with life." It only means that if higher values of DIFF are actually positive values. In the left-hand plot, higher scores mean "closer to zero" and not necessarily "greater than zero."

It is important to examine the relationships in your data via scatter plots and not rely on correlations ALONE in order to make sense of your data.