## **Under/Overconfidence: It's All About the Mindset**

When women become realists and men become über-confident Published on June 25, 2013 by Alain Samson, Ph.D. in Consumed

It's not uncommon for us to be overly confident in our own abilities. In psychology, the overconfidence effect is observed when people's subjective confidence in their own judgments is greater than their objective (actual) performance. Research and anecdotal evidence has shown that men are more likely to suffer from overconfidence than women. Interesting new research by Sabine Hügelschäfer and Anja Achtziger, about to be published in the Journal of Economic Psychology, supports this gender difference. It also suggests that having a different frame of mind can strengthen confidence, potentially turning underconfidence into realism and realism into overconfidence.

In their experiment, Hügelschäfer and Achtziger compared two different mindsets that have previously been studied by psychologists: deliberative and implemental. A deliberative state of mind is evident when we think about an unresolved problem, for example, whether or not to buy a car. Thinking about this type of question tends to be more objective about desirability and realistic about feasibility, as we weigh the pros and cons involved. An implemental state of mind, on the other hand, is active when we have made that initial decision and think about how to achieve the goal, such as how to go about buying that new car. This mindset tends to be associated with more optimism and bias, as we tend to focus very strongly on the feasibility of reaching our goal and may suffer from exaggerated expectations.

The researchers recruited male and female students and investigated differences in overconfidence by first inducing half of their experimental participants with a deliberative mindset and the other half with an implemental mindset. In order to get people into a deliberative frame of mind, they were instructed to think about a 'Should I do X or not?' type of question that they are currently deliberating on in their personal lives. They were also asked to imagine the potential consequences of their decision, rate the expected likelihood of each consequence to occur and how positive or negative they would consider these outcomes. Getting the other group into an implemental frame of mind was achieved by asking them to think about an 'I intend to do X' type of question, an important personal goal which they want to reach in the near future, but for which they hadn't yet made any plans. They further had to write down their goal, list steps they could take to reach their goal, and then specify how, where and when they intend to realize the steps.

At the next stage of the experiment, under/overconfidence levels were assessed. This was done by having participants answer 20 multiple-choice questions (taken from a general knowledge test) and asking them to rate how confident they are in their answer on a scale. Under/overconfidence was measured by calculating a score of a person's average confidence ratings relative to the actual proportion of questions answered correctly.

As expected, the results of the study showed that, on the whole, men were more confident than women. For both genders, confidence was higher with an implemental than a deliberative mindset. Looking at the more detailed results, however, indicates that women were underconfident in a deliberative mindset and an implemental state of mind made them realistic. Men were somewhat overconfident already in the deliberative mindset and the implemental mindset made even more overconfident. These shifts were evident even when taking into account differences in self-esteem and academic performance.

Given women's underconfidence in a deliberative mindset, which resembles past research results on gender differences, Hügelschäfer and Achtziger suggest that women's tendency to underestimate themselves appears to be boosted when they are in an implemental state of mind. This finding could have important implications for education, work and everyday life.

Naturally, we can't infer too much from a single study. More research has to be done to see whether the findings of this experiment can be replicated with people from different walks of life and using different types of performance tasks. This may also involve investigating real-life decision making in organizations. Nevertheless, a different spin on the results of this study could also lead to a somewhat politically incorrect implication: If we have to work with the status quo, different genders might be suitable for different planning or decision making stages. This would minimize the problems of biases in corporate strategy-setting, for example, where overconfidence or underconfidence can produce undesirable off-target results. If men are plagued by overconfidence and women by underconfidence for deliberative decisions, mixed-gender collaborations may be important to realistically answer 'Should I do X or not?' types of questions. If women are more realistic than men when they're in an implemental frame of mind, it appears that men would then best be excluded from deciding on how to reach that goal. (Sorry guys!) But for the time being, I would suggest that we all just work on our general lack of realism.