Don't tell anyone I lost to a girl! Gender stereotypes and hiding low performance

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Abstract

In this paper, we report the results of an experiment in which we measure the cost of being outperformed by a peer. The setup is designed to be extendable to other settings and populations. We elicit a willingness-to-accept to have one's inferior performance against a competitor on a cognitive task made public. We compare the behavior of women and men, and further contrast their behavior based on the gender of the competitor. This allows us to consider whether the social cost of being outperformed is greater for men than for women, and then to ask whether the cost depends on the gender of the person who is outperforming the other.

Specifically, in the main portion of our experiment, participants are asked to perform a series of additions of five randomly-chosen, two-digit numbers in a four- minute period. Their performance is measured as the number of the correct sums calculated, and this score is compared with that of a randomly matched partner. In some trials, the partner is of the other gender, and in others, the partner is of the same gender. The member of the pair with more correct totals is designated as the Better performer, and the other person is dubbed the Worse performer. The Worse Performer is eligible to claim a monetary payment as a consolation prize. However, to claim it, he must make his Worse Performer status publicly

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known. Therefore, participants in our experiment face a trade off between obtaining extra monetary compensation and being able to hide their relatively inferior performance. Thus, we elicit participants' monetary values for hiding their poor performance. This value can be interpreted as the cost of the stigma of performing worse than the competitor. We are able to measure how this cost varies by own gender and the gender of the competitor.

The experiment is conducted in both China and the U.S., with participant pools of similar profiles. The experiment is not designed to directly compare effect sizes in the two samples, but we do compare the qualitative patterns between them. This cross-cultural approach allows us to investigate how the cultural background influences individuals' stigma costs. The two countries have very different cultures, histories, and societal norms. As we report later, we also obtain evidence that different stereotypes about the relative performance of women and men on our task are present in the two groups. We recognize, of course, that any differences between our two samples could be attributed to factors other than cultural background that might differ between our samples, or that cultural differences interact with other demographic factors so that the same patterns would not appear with other paired samples. Nevertheless, we believe that our results make a contribution to understanding differences between gender stereotypes and interaction between the two countries.

The hypotheses for the experiment emerge from a simple theoretical model. The model assumes that players are competing in a task in which males are believed to be better than females on average, though it could be readily translated to assume the opposite stereotype. The model predicts that more females than males would claim a given consolation prize when they are competing with a partner of a different gender. It also predicts that females' are less likely to claim the consolation prize if their performance is compared with another female than with a male. In contrast,

males are less likely to claim the prize when facing a female than a male partner.

Our data show very different patterns in two countries. In China, females are more willing to accept the consolation prize than men, and are more willing to do so when competing with a partner of a different, than of the same, gender. In the US, there is no overall gender difference in the likelihood of accepting the prize, and females are less likely to accept the consolation prize when paired with a male than a female. Questionnaire data shows that members of our two samples hold different stereotypes. The belief that men would outperform women on average in the mathematics addition task is held by a majority in China, though not in the US. Thus, the results are generally consistent with our model.

Two remarks are in order at this point. The first is that by measuring the willingness-to-pay to hide one's Worse Performer status, we are measuring the cost of having peers find out about one's poor performance, beyond the cost of merely learning yourself that you did not perform well. This difference seems to us to be the most relevant effect to measure. In dating and employment relationships, the relative status of the two parties (profession, position in company hierarchy, educational level), is typically known to others. One typically also is aware of one's own ability or status before entering the relationship. Therefore, beginning a relationship implies making one's ability or status public rather than private. For this reason, we chose to study the cost of making one's status public. The second remark is that we do not try to simulate an employment or a romantic relationship in our experiment. Our pairings are anonymous and fleeting. This means that any cost of inferior performance in a field would likely be much greater than those we observe, and our experiment should therefore be viewed as a minimal paradigm to observe gender differences. In our view, this makes the gender and cultural differences that we do observe all the more striking.