

# Social Norms and Competitiveness: My Willingness to Compete Depends on Who I am.

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## Introduction

Both laboratory and field experiments largely confirm the gender gap in tournament entry.

The reasons why the gender gap in competition entry persists: overconfidence, risk aversion can explain part of it.

**Research Question:** In this paper we ask if social identity or social norms play an important role in people's willingness to compete.

Social identity is a sense of belonging to a social category, coupled with a view on how people in that category should behave, Men and Women are two separate social categories, and they are associated with different behavioral prescriptions, such as domestic for women, bread-winning for men.

The reasons why social identity can influence economic outcomes is deviating from the prescribed behavior generate social cost.

In psychology, such social cost is called Backlash effect.

## Experimental Design

We conduct a between subject design with a baseline and treatment group, and the control and treatment only differs in the second stage.

**1st Stage:** Subjects are given 5 minutes to solve the real task (add up sets of five two-digit numbers) under a noncompetitive piece-rate scheme individually. They receive 10 cents for each correctly solved problem.

**2nd Stage:** Each participant is randomly paired with another participant in the classroom. No information of partners is disclosed. Each group have another 5 minutes to solve the similar task in the first stage.

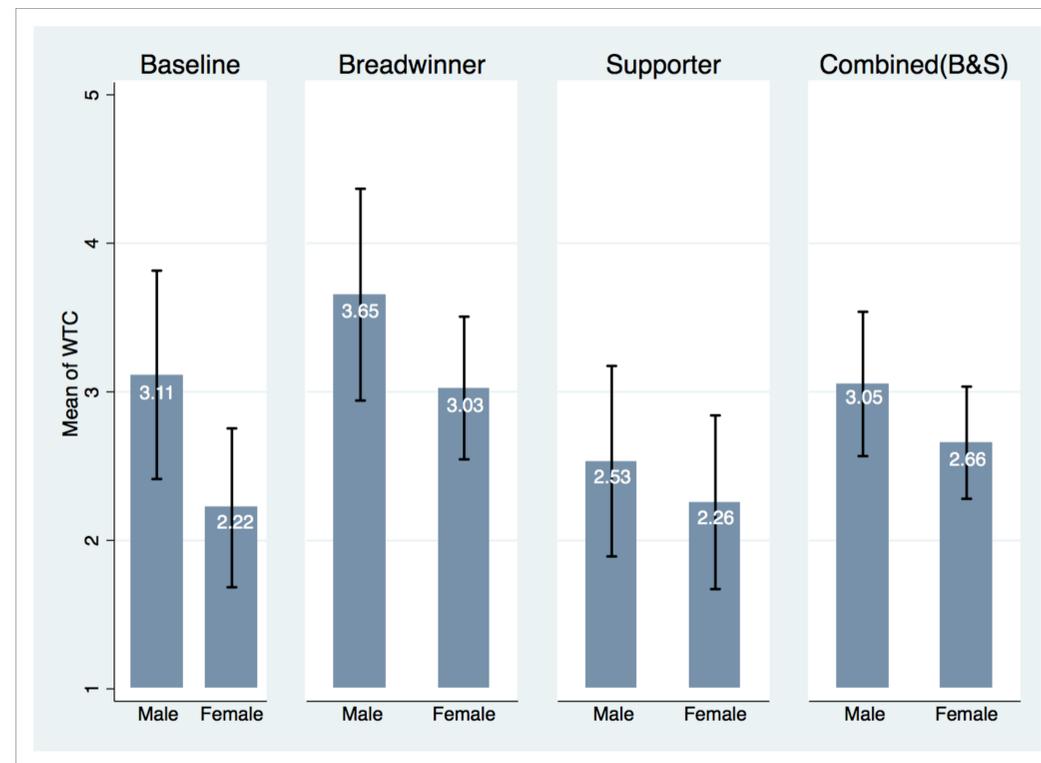
Before proceeding to the second task, each group member is asked to select the payment scheme for his group using a five-scale: 0, 1, 2, 3, 4, 5, which is our measurement for the willingness to compete (hereafter WTC).

**Treatment:** Before the group member makes his decision in competition entry, he is told: *You are randomly selected as the Breadwinner (Supporter) of the group, and your partner is the Supporter (Breadwinner) of the group.*

In the control group, there is no such role assignment.

WTC scale	Probability to enter the competition
0	0%
1	20%
2	40%
3	60%
4	80%
5	100%

## Comparison of WTC



## Regression Results

	Baseline (1)	Treatment (2)	Female BW&base	Male BW&base
Female	-0.390 (0.277)	-0.335 (0.218)		
Breadwinner		0.401** (0.203)	0.514** (0.254)	0.429 (0.294)
Perfor in 1st	0.014 (0.037)	-0.037 (0.026)	-0.002 (0.035)	0.023 (0.044)
Confidence	0.388 (0.300)	0.335 (0.241)	0.020 (0.340)	0.840** (0.334)
Risk	0.142* (0.079)	0.201*** (0.069)	0.145** (0.073)	0.076 (0.089)
Composition	-0.099 (0.113)	0.132 (0.082)	0.012 (0.116)	-0.110 (0.123)
Observation	76	129	79	61
Pseudo R <sup>2</sup>	0.043	0.064	0.030	0.060

Ordered Probit model. Dependent variable is WTC. Robust standard errors in parentheses. All results are robust to OLS. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$

## Results Conclusions

1. In baseline, there is gender gap in WTC.
2. When women are randomly assigned as breadwinners, their WTC increases significantly compared with women in baseline.
3. The gender gap in WTC disappears when compare female breadwinners with men in baseline
4. Men are also affected by the roles assigned to them. Although there is no difference in WTC between either breadwinner and baseline, or supporter and baseline, male supporters are less willing to enter tournament compared with male breadwinners.
5. There is no difference in WTC between male supporters and woman in baseline.

## References

- [1] Erin L Krupka and Roberto A Weber. Identifying social norms using coordination games: Why does dictator game sharing vary? *Journal of the European Economic Association*, 11(3):495–524, 2013.

## Mechanism: confidence

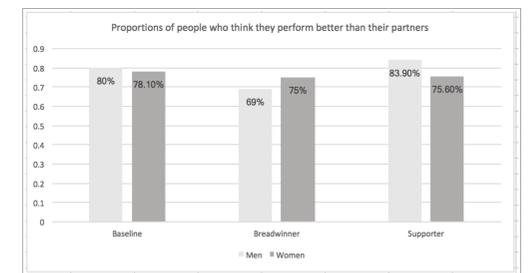


Figure 1: Confidence by Gender and Treatment

There is no change in confidence when subjects are assigned with roles.

## Mechanism: social norms

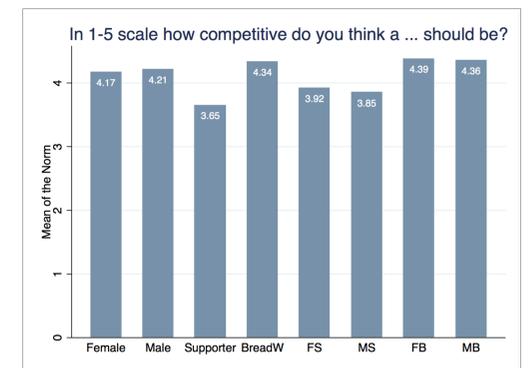


Figure 2: Elicited Social Norms for Competitiveness

Following[1]: Supporters' competitiveness is lower than any other group ( $p < 0.01$  for all), and breadwinners' competitiveness is higher than any other group ( $p < 0.01$ ), except female and male breadwinners.

## Who changes WTC

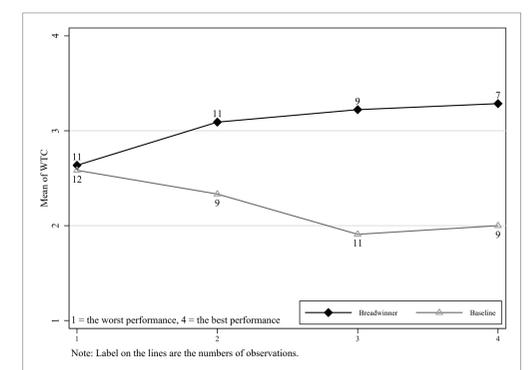


Figure 3: WTC by Performance Quantile

The increase in WTC of female breadwinners is mainly contributed by high-ability women.