CAN TEAMS HELP TO CLOSE THE GENDER COMPETITION GAP?

Abstract

Previous research finds that significant gender differences occur when experimental subjects choose whether or not to enter a competition, even when performance levels are similar across genders. In this paper, we investigate the potential for competing in teams to reduce these differences. We first replicate earlier findings that men are more likely to compete than women when the competitions are based on individual performance. We then isolate the effect of competing in teams by considering the decisions made by different subjects who completed the same task and chose whether they wanted to enter a competition based on the combined performance of themselves and a teammate. The results show that competing in two-person teams reduces the gender competition gap by two-thirds. We find that this result appears to be driven primarily by gender differences in competitive preferences, as opposed to other potential explanations such as risk aversion, feedback aversion, or confidence.

I. Introduction

Previous research indicates that there is a large gender gap in competitive fields. For example, Bertrand and Hallock (2001) show that women accounted for just 2.5% of the top five executive positions in a sample of U.S. companies. Even in 2008, just 2.8% of firms in the S&P 500 were led by female CEOs. This type of empirical evidence is consistent with a variety of potential underlying explanations including discrimination against women, differences in performance in competitive environments, and differences in preferences for entering those environments in the first place. Economists have used experiments to investigate the reasons underlying gender differences in competitive environments. These papers have generally concluded that males enjoy competing more than women do, with some papers concluding that men perform better than women in competitive environments even when no performance differences exist when the competitive aspect is removed (Gneezy, Niederle, and Rustichini 2003; Gneezy and Rustichini 2004).

Notably, Niederle and Vesterlund (2007; from here, NV) find that when there are no gender differences in performance, gender differences in competitive preferences and confidence persist. They find that women choose to compete too little and men choose to compete too much, concluding that women would be better off if they competed more and men would be better off if they competed less.[1] To disentangle the roles of competitive preferences, risk aversion, feedback aversion, and confidence, NV had their subjects complete a series of adding tasks under different incentives.[2] We employ a similar design that allows for team competition. Little research has

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[1] Field evidence from finance is consistent with these lab findings. For example, Barber and Odean (2001) find that overconfidence leads male equity investors to make more trades than they optimally would.

[2] Previous research has indicated that there are significant gender differences in each of these dimensions. Women have sometimes been found to be more risk-averse than men (for a review, see Eckel and Grossman 2008 or Byrnes, Miller, and Schafer 1999), although this finding may depend on ethnicity (Finucane et al. 2000) and on framing (Schubert et al. 1999). Likewise, men have been found to generally be more prone to overconfidence than women (e.g., Lichtenstein, Fischhoff, and Phillips 1982; Soll and Klayman 2004; Niederle and Vesterlund 2007).

considered the interaction between gender and teams.[3] For example, the extant literature on gender differences in competitive environments considers the decisions and performances of individuals competing against other individuals. We hypothesize that gender differences in choices about entering competitions will be attenuated by competing in teams. As suggested by Gneezy, Leonard, and List (2009), context is likely to have a significant effect on gender differences in competitive environments. While our subjects live in a context where men dominate in many of those environments, teams may change individuals' decisions about competing if perceptions about gender roles are different in the team context (Eagly 1987).

In our primary experimental treatment, subjects competed as individuals in two-person teams, thereby creating a team aspect without introducing the confounds that would be associated with having subjects cooperate directly with each other. Subjects worked separately on each task and then their scores were combined to determine their total team score. This design isolates the effect that competing on the basis of team performance has on preferences while keeping constant the situation in which subjects are performing. Our experiment thus differs from most of the large literature on teams, which considers the decisions that team members make together with regards to topics such as coordination, strategic learning, cooperation, and the effect that that dynamics within groups have on decisions (e.g., Feri, Irlenbusch, and Sutter 2009; Cooper and Kagel 2005; Kocher and Sutter, 2005; Sutter and Strassmair 2009; Cason and Mui 1997).[4] Our experiment is most similar to the one conducted by Dargnies (2010), who also extends NV to consider teams. The primary differences between her experiment and ours are that

[3] Dufwenberg and Muren (2006) consider an environment in which teams make allocation decisions and find that gender composition affects outcomes. They use a group dictator game to show that women-majority groups are more likely to choose an egalitarian division of donations than male-majority groups. Ivanova-Stenzel and Kubler (2005) consider an experiment in which subjects actively collaborate with the partners on a problem-solving task. In contrast to our results, they find gender differences in performances depending on the gender of one's partner.

[4] In addition to cooperation, social preferences more generally may affect performances when people compete in teams. For example, see Bandiera, Barankay, and Rasul (2005). Also, women may be more responsive to cues that refer to the fact that their actions affect the payoffs of others (Croson and Gneezy 2008).

our sample is much larger and that the gender composition of each session remained the same. We also employ a between-subjects design, so that subjects participated in either the individual treatment or the team treatment. These design features increase the statistical power of our tests and make it comparatively easier for us to interpret subject behaviour.[5]

We show that, on a task where male and female subjects perform about equally well, competing in teams leads to about a two-thirds reduction in the male-female competition gap. Potential explanations like the gender of one's teammate do not appear to account for the reduction in the gender competition gap. Instead, we find that women prefer to compete in teams, while men prefer to compete as individuals. Our results thus suggest that competing in teams may reduce both female undercompetition and male overcompetition.

Our results have important implications for competitive environments in the field. For example, research has shown that having women in positions of political power leads to allocations of goods preferred by female constituents (Chattopadhyay and Duflo 2004), goods that are underprovided when men are in power. However, women are much less likely than men to seek elective office, in large part due to lower levels of confidence about winning elections and succeeding after being elected (Lawless and Fox 2005). To obtain greater female participation in government, some countries pursue a supply-side strategy, specifically reserving positions for female politicians. Our results suggest that another way to obtain increased female participation in government would be to focus on the demand side by making electoral competition focus more on teams.

Institutions like proportional representation, where individuals compete as part of a larger group of candidates, may encourage greater female participation in electoral competitions. For example, countries that have party-list proportional representation, in which voters select a slate

[5] Dargnies (2010) finds that competing in teams eliminates the gender competition gap.

of candidates put forth by a party, generally have more than twice the female representation rate in their legislatures than countries that have single-member districts (Inter-Parliamentary Union, 2006). Two countries that elect some members under each system, Germany and New Zealand, illustrate the differences most clearly. In the 1994 German election, 13% of the representatives elected from single-member districts were women, while 39% of the representatives elected from party-list districts were women. In New Zealand in 1996, the corresponding numbers were 15% and 45% for the single-member and party-list districts, respectively (Matland and Studlar 1996; Amy 2005). These differences occur primarily because women are more likely to be candidates under proportional representation. To explain the greater prevalence of female candidates, scholars have argued that political parties may feel more pressure to nominate women when smaller parties who have more importance under proportional representation do so (Matland and Studlar 1996), or that it will be particularly conspicuous if women are underrepresented on an entire list of candidates (Amy, 2005). A greater female willingness to compete under team-based electoral competition could also help to explain the greater prevalence of female candidates under proportional representation.

More generally, our results are consistent with an emerging literature showing that group membership affects individual decisions and behaviours. Simply making group membership salient has been shown to significantly impact decision-making (Charness, Rigotti, and Rustichini 2007). Our results show that changing the focus to a two person group instead of individuals, but with no change in the underlying environment in which people perform, reduces the gender competition gap by two-thirds. Hence, changing the context in which competitions are conducted may be sufficient to reduce the gender disparities in competitive fields driven by individual choices to enter those fields.

II. Experimental Design

We employ a design similar to NV, using the same task – adding sets of two-digit numbers – since men and women have demonstrated similar aptitudes for that task. We also replicate the individual treatment of NV and use it as the basis of comparison for our team treatment. In NV and in our individual treatment, subjects added as many sets of five two-digit numbers as they could within a specified time period. Subjects had scratch paper that they could use to help them, but they could not use a calculator. They were paid based on the number of problems they solved correctly. Following NV, we also used four different compensation schemes to disentangle possible explanations for gender differences in competitive behaviour. These different tasks are described in detail below. We expand upon their design by including sessions where subjects face similar incentives but compete in two-person teams.

We conducted all sessions at the experimental economics laboratory at Loyola Marymount University in April 2007 using standard recruiting procedures. We conducted 12 sessions (eight team and four individual) with 16 students in each session, so that a total of 192 students participated in the experiment. In the team sessions, each subject was paired with one other subject, for a total of 64 teams. To maximize statistical power, an equal number of men and women participated in the experiment. Moreover, each subject was equally likely to be matched with a teammate of the opposite sex as with a teammate of the same sex. Under these constraints, subjects were randomly assigned to teams.

When subjects entered the lab, they were assigned to seats as in Figure 1.[6] In the team treatment, subjects were told to stand up and look at the person standing immediately across from them and that the person they were facing would be their partner throughout the experiment. For example, in Figure 1, Female 1 and Male 3 would stand up and see that they

[6] Complete instructions can be found in the online appendix.

were paired with each other. We assigned teams in this way to make subjects aware of their partners' genders while minimizing the chance that they were primed about the fact that gender was a focus of the experiment. After subjects saw their partner from across the divider, they were asked to sit back down. We then started reading the instructions for the first task.

The different tasks proceeded as follows:

Piece rate compensation (Task 1): In the individual treatment, subjects were told that they would be paid $0.50 for each problem that they answered correctly. In the team treatment, subjects were told that they would receive $0.25 for each problem that they solved correctly and $0.25 for each problem that their partners solved correctly. They were then given five minutes to solve as many adding problems as they could.[7]

Tournament compensation (Task 2): In the individual treatment, subjects were told that they would be competing against the other three individuals in their row. For example, Female 1 would compete against Female 2, Male 1, and Male 2. If a subject solved the most problems of the four people in her group, she would receive $2 for each problem that she solved correctly. As in all of the competitive tasks, the subjects were instructed that, if there was a tie, one of the high scorers would be randomly chosen as the winner.

In the team treatment, subjects were told that their *team* would be competing against the other three *teams* in their seating area. In other words, the Female 1/Male 3 team would compete against the Female 2/Female 3 team, Male 1/Male 4 team, and the Male 2/Female 4 team. If a subject's team answered more problems than any of the other three teams, she received $1 for each problem that she solved correctly and $1 for each problem that her partner solved correctly.

[7] We follow NV and use terms like "piece rate" and "tournament" in the experiment to make our results comparable to theirs. These terms may create framing effects, however, if subjects perceive the term "tournament" to be particularly associated with men. These framing effects could account for our findings if, relative to men, women were more likely to perceive tournaments as referring to a team activity. An informal survey run by an anonymous referee suggests instead that women may be slightly more likely to think of "tournament" as referring to individual competition. We thank the referee for raising this issue and conducting the survey.

Choice of compensation (Task 3): In the individual treatment, subjects were instructed that they would again be answering as many adding problems as they could in five minutes, but that they would first choose whether they wanted to be paid according to the piece rate or the tournament.

In the team treatment, subjects were also told that they would again be answering as many adding problems as they could in five minutes. Each subject was instructed that she could choose whether she wanted to be paid according to the piece rate for her team's performance or to be paid according to the tournament for her team's performance. Subjects were instructed that one of the two team members' decisions would be chosen at random to be the decision for the group. This method was implemented to ensure that strategic considerations did not influence subjects' decisions about whether to choose the piece rate or the tournament for their team.

In both the individual and team treatments, subjects were told that they would receive payment if their performance exceeded that of the Task 2 performances of the other individuals or teams in their group. The fact that subjects competed against others' earlier tournament performances removed the strategic complications involved with potentially competing against others who may have chosen the piece rate for Task 3.

Choice of compensation for prior performance (Task 4): In Task 4, subjects were asked to choose their compensation schemes based on their perception of a *past* performance. In the individual treatment, subjects chose whether they wanted to be paid according to the piece rate for their earlier performance on Task 1 or if they wanted to enter their Task 1 performance into a tournament against the Task 1 performance of the other three subjects in their row. For the team treatment, subjects could choose whether they wanted to be paid according to the piece rate for their team's Task 1 performance or whether they wanted to enter their team's Task 1 performance into a tournament against the other three teams' Task 1 performances. As in Task 3, one team member's decision was chosen at random and implemented for the team.

The reason for the inclusion of this task, as discussed by NV, is to distinguish between the hypothesis that differences in the choice to compete arise from differences in competitive preferences or from other factors such as overconfidence, risk aversion, or feedback aversion.[8] Since the taste for competition should influence the willingness to compete in Task 3, but not in Task 4, it is possible to isolate gender differences in competitive tastes by comparing the Task 3 and Task 4 choices. Moreover, by comparing the Task 3 and Task 4 choices between the individual and team treatments, we can isolate how competing in teams changes those gender differences in competitive preferences.

After all four tasks were completed we elicited subjects' beliefs about how well they performed by asking them to guess where they, or their team for the team treatment, ranked on a task from first place to fourth place. Subjects were told that they would be paid $1 for a correct guess and that any ties in ranking would be randomly broken. This item was included to isolate confidence as a potential explanation for any differences in behaviour across treatments.

To determine which of the four main tasks was chosen for payment, we had a subject randomly choose a number from a hat at the end of the experiment. Experimental payments averaged $15 on an hourly basis.[9]

III. Basic Experimental Results

While we are primarily concerned with gender differences in the team treatment, we start by confirming two baseline facts in the data. First, we demonstrate that men and women are

[8] Overconfidence in one's own performance and overconfidence in one's group's performance are separate, but related concepts. See Klar and Giladi (1997) for more on confidence in one's other group members.

[9] Based on pilot sessions, we had anticipated somewhat higher subject payments. Payments ended up lower than our forecasts due to the fact that the lower-paying tasks, Task 1 (4 times) and Task 2 (5 times), happened to be chosen for payment more often than the higher-paying tasks, Task 3 (1 time) and Task 4 (2 times). Payments tended to be higher for Task 3 and Task 4 because high-performing subjects were more likely to enter the tournament, with lower-performing subjects choosing the piece rate.

similarly able at performing the adding task. Second, we replicate Niederle and Vesterlund's (2007) finding that, in an individual treatment, men will choose to compete more often than women of similar abilities.

Performance and Gender

There is no significant difference between male and female subjects in terms of their performance on the piece rate task (Task 1), both for the individual and the team treatments. A Mann-Whitney test for the equality of the distributions gives a *p*-value of .566 for the individual treatment and .939 for the team treatment. The cumulative distribution functions for male and female subjects are almost equivalent for Task 2, as well ($p = .602$ for the individual treatment and $p = .629$ for the team treatment).[10]

In Table 1, we report the mean number of problems solved in the individual and team treatments for Tasks 1 and 2, broken down by gender. For example, the first row describes the mean performances for Task 1. In the individual treatment, men answered an average of 8.72 problems in Task 1 compared to 8.09 problems for women. The difference of .63 problems is insignificant at conventional levels ($p = .446$). In the team treatment, we find a smaller gender difference in performance of .03 problems ($p = .959$). While this reduction in the gender performance difference could reflect changes in effort between the treatments, the change in the gender difference in performance from the individual to the team treatment of .59 problems is relatively small and insignificant ($p = .565$). We find a similarly insignificant change in the gender difference from the individual to the team treatment for the Task 2 tournament (.67 problems, $p = .554$). By running simulations that randomly match individuals and teams against each other, we can estimate the probabilities that female subjects and male subjects, on average, would win the tournament. We ran 1000 simulations randomly matching individuals and teams

[10] Graphs of the cumulative distribution functions can be found in the online appendix.

against each other. In the individual (team) treatment, male subjects had a 26% (27%) chance of winning the tournament, compared to a 24% (23%) chance for female subjects.

Gender Differences in Competitive Preferences

In the individual treatment, despite the fact that men and women were equally likely to win the tournament, we replicate NV's finding that there are large gender differences in the choice about whether to enter the competition. As reported in the third row of Table 1, 81% of male subjects chose to enter the tournament, compared to only 28% of female subjects. Despite no significant differences in aptitude, male subjects in the experiment are almost three times more likely than women to compete on the basis of their individual performances. This gender gap is significant at the 1% level ($p < .001$).[11]

As reported in the first three columns of the fourth row of Table 1, we find a smaller gender difference of 16 percentage points in Task 4 ($p = .199$), when subjects decided whether to compete on the basis of a previous performance. We will use subjects' Task 4 choices below to examine the reasons underlying the larger gender differences in the Task 3 choices.

The differences in the Task 3 choices are reduced significantly by having subjects compete in two-person teams. As reported in columns 4 through 6 of Table 1, when deciding to compete on the basis of team performance, 67% of men choose to compete compared to 45% of women. While this difference represents an elimination of around two-thirds of the gender competition gap, there continues to be a significant gap ($p = .013$). The 31 percentage point decrease in the gender gap from the individual to the team treatment is significant at the 5% level ($p = .031$).

One possible explanation underlying the previous results concerns the gender of one's

[11] These gender differences are somewhat larger than those reported by NV, who found a gender gap of 38% compared to our gap of 53%, although we cannot reject the hypothesis that the gap for our population equals their point estimate. Still, our larger gap suggests that our student population may have a larger gender gap than theirs.

teammate. It may be the case that females perceive males to be better at the task, or perhaps vice versa, and the fact that team competition reduces the gender competition gap might then actually reflect a female preference for competing with male or female teammates, or possibly a male aversion to competing with female teammates. To address this concern, we designed the experiment so that each of the 128 subjects in the team sessions had an equal chance of having a teammate of the same sex as of the opposite sex. As a result, we observe 32 cases in which men competed with male teammates and 32 cases in which men competed with female teammates. Likewise, we observe 32 cases in which women competed with male teammates and 32 cases in which women competed with female teammates.

Altogether, 72% of men chose to compete when matched with a male teammate, compared to 63% when matched with a female teammate, an insignificant difference ($p = .433$). The analogous difference is even smaller for female subjects. 47% of female subjects chose to compete when paired with a male teammate as compared to the 44% of female subjects who chose to compete when paired with a female teammate. This difference is also insignificant ($p = .806$). If we pool the data for all 128 subjects in the team treatment, we find that 59% of subjects compete when matched with a male partner, compared to 53% when matched with a female partner ($p = .480$). Overall, and for both male and female subjects, a teammate's gender appears to have little effect, and no significant effect, on the decision about whether to compete. Nevertheless, while we cannot reject the hypothesis of equality, the small differences suggest there may be some small preference for competing with male partners.

To examine gender differences in the decision to enter the competition while controlling for performance, we combine the results from the individual and team treatments into a probit regression. We report the probit results in Table 2. In Panel A, we consider subject decisions for Task 3, while Panel B reports results for Task 4. The independent variables are a female dummy, a dummy for whether the subject participated in a team session, an interaction between the female and team dummies, the number of problems that the subject answered correctly in the Task 2 tournament, and the increase in performance for the subject between Task 1 and Task 2.

For Task 3, we first replicate Niederle and Vesterlund's results for our subjects who participate in the individual treatment. The probit results in column 1 confirm the summary statistics in Table 1. Controlling for performance, female subjects continue to be 53% less likely to enter the tournament in the individual treatment.

The specification in Column 2 of Table 1 considers all the subjects from both the individual and team treatment. The coefficient estimates confirm the summary statistics previously discussed. Controlling for performance, women are 52.7% less likely than men to choose to compete under the individual condition. As indicated by the coefficient on the interaction term between the female and team dummies, compared to the individual condition, female subjects are 33.1% more likely to compete in the team condition. This reduction in the gender competition gap is significant (p = .031). As suggested by the summary statistics, the probit results indicate that competing in teams eliminates about two-thirds of the gender competition gap seen when subjects compete as individuals.

IV. Why Teams Reduce the Gender Competition Gap

Several explanations could account for the fact that women show a greater willingness to compete in teams than as individuals, while men show the reverse behaviour. First, risk aversion could drive our finding that teams reduce the gender competition gap, although its overall effect on behaviour is ambiguous, since risk may be increased by uncertain teammate ability, but decreased by essentially averaging two performances. Additionally, if women were less averse to feedback in teams since there is no individual-specific information, feedback aversion could explain the reduction that teams cause in the gender competition gap.

Second, differences in confidence could also explain the gender differences in behaviour. Prior experimental evidence suggests that men are more prone to having excessive confidence in themselves (Bengtsson, Persson, and Willenhag 2005), an effect that may be muted when they compete in teams. Third, women could simply be more comfortable competing in teams rather than as individuals.

To test the competing hypotheses underlying our empirical results, we consider the results from Task 4, in which subjects decided whether or not to compete on the basis of *previous* performance. In our individual treatment, we find that 44% of the men and 27% of the women chose to compete. In the team treatment, we find that 48% of men and 31% of women chose to compete. We thus find a 17 percentage point gender gap for Task 4 both for the individual and team treatments, suggesting that competing in teams has no effect on the gender gap when competing on the basis of a prior performance. These results suggest that any risk aversion, feedback aversion, and confidence in the team's performance – which would affect the decision to compete both in Task 3 and in Task 4 – do not explain the decrease in the gender competition gap from the individual to the team treatment.

These results are further illustrated in Panel B of Table 2, in which we estimate a probit model for the Task 4 decision. The results show that, controlling for performance, women are about 15.4% less likely to choose to compete, which is consistent with the 17% gender difference seen in both the individual and team treatments. Not surprisingly, the results also show an insignificant near-zero effect for the gender*team interaction term, indicating that competing in teams has no effect on the gender difference for Task 4.[12] Introducing a control for

[12] If we test the hypothesis that the gender*team interaction is the same for Task 3 and Task 4 – which we did by stacking the data for the two tasks and then estimating a probit model – we obtain a *p*-value of .10.

a subject's choice in guessing where her individual or team's performance ranked in column 3 somewhat reduces the gender effect for Task 4, suggesting that any gender differences in Task 4 (for the individual and the team treatments) come from gender differences in perceived performance.[13]

While risk aversion, feedback aversion, and confidence cannot explain the team-caused reduction in the gender competition gap, competitive preferences can. If, relative to men, women prefer to compete in teams rather than as individuals, we would see exactly the behaviour observed in our experiment: the gender competition gap declines when subjects have to decide whether to enter an upcoming competition but is unaffected when subjects have to decide whether to have their previous performance compared to others' previous performances.

To test the hypothesis that competitive preferences explain the reduction in the gender competition gap, we estimate two additional probit models where the dependent variable is a subject's decision about whether to compete in Task 3. To the independent variables we included earlier, we add controls for a subject's predicted performance elicited at the end of the experiment and then a dummy for whether they chose to compete in Task 4.

The results in columns 3 and 4 of Table 2 (Panel A) confirm that competitive preferences are driving the gender differences that we observe between the individual and team treatments. The coefficient for the female*team interaction term remains almost the same across the different specifications as it was in columns 1 and 2 of Table 2, indicating that controlling for risk aversion, feedback aversion, and confidence has no effect on the reduction in the gender gap caused by having subjects compete in teams. Competing in teams thus appears to reduce the

[13] To confirm that confidence is not a primary factor in the gender gap reduction that team competition causes in Task 3, we also estimated an ordered probit model where the dependent variable is a subject's guessed rank for either her individual or team performance. The results indicated that women are significantly less confident than men across treatments (p = .034), and that the gender differences in confidence are not significantly reduced by moving from the individual treatment to the team treatment (p = .587).

gender competition gap because women have a taste for entering a competitive environment as part of a team.

V. Conclusion

Prior research shows that significant gender differences may exist when people are given the choice to compete. Generally, women have been shown to compete too little based on the quality of their performances. In contrast, men appear to compete too much. Our experimental evidence demonstrates that team competition reduces the gender competition gap. It is important to note that our team manipulation was a conservative one. Each subject was paired with a partner they did not interact with beyond standing and seeing him/her at the beginning of the experiment. Given that we observe a two-thirds reduction in the gender competition gap even with this mild inducement of teams, it may be the case that an extension of our experiment allowing for teams with members that are either working together or have a prior relationship may find an even larger effect on competitive preferences.

The experimental results in this paper have important implications for how competitive mechanisms can be designed to ensure that women are adequately represented in positions of power. Our findings suggest that one way to achieve increased female participation in competitive fields could be to design those environments to focus on teams rather than individuals.

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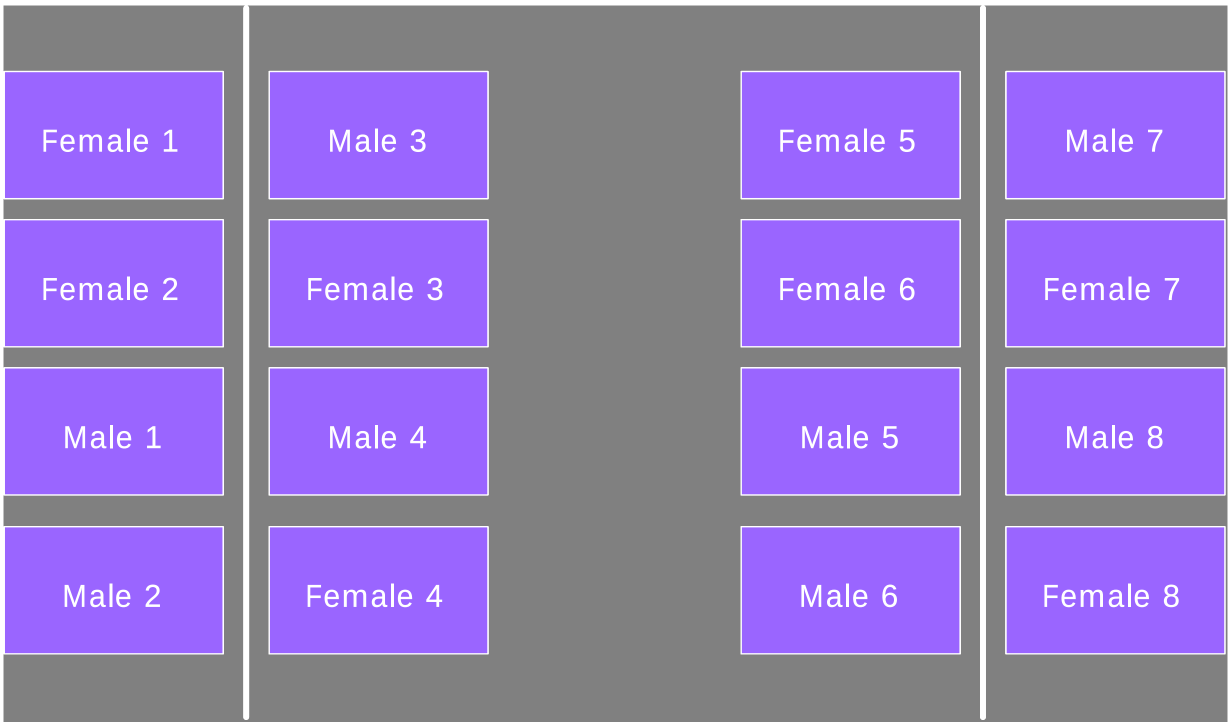

Figure 1: Seating Arrangement in the Lab

Table 1: Summary statistics

	Individual			Team			
	Male	Female	Difference	Male	Female	Difference	Difference-in-Difference
Task 1 Performance	8.72	8.09	.63	9.09	9.06	.03	-.59
	(3.45)	(3.05)	[.81]	(3.59)	(3.22)	[.60]	[1.03]
Task 2 Performance	11.38	10.31	1.07	10.44	10.05	.39	-.67
	(4.50)	(3.24)	[.98]	(4.14)	(2.95)	[.64]	[1.13]
Task 3 Choice	.81	.28	.53***	.67	.45	.22**	-.31**
(Fraction choosing tournament)	(.40)	(.47)	[.11]	(.47)	(.50)	[.09]	[.14]
Task 4 Choice	.43	.28	.16	.48	.31	.17**	.02
(Fraction choosing tournament)	(.50)	(.46)	[.12]	(.50)	(.47)	[.09]	[.15]

Notes: Standard deviations are in parentheses. Standard errors for differences are in brackets.
* p<.10, ** p<.05, *** p<.01 for the t-tests of the hypothesis that the difference is zero.

Table 2: Probit Results for Decisions to Enter Competition (Marginal Effects Reported)

A. Dependent variable: Choice of tournament in Task 3
(1 = tournament, 0 = piece rate)

	(1)	(2)	(3)	(4)
Female	-.531***	-.527***	-.511***	-.512***
	(.108)	(.107)	(.114)	(.115)
Team		-.166	-.182	-.186
		(.115)	(.122)	(.123)
Female*team		.331**	.344**	.353**
		(.138)	(.141)	(.140)
Tournament	.044*	.013	.003	.004
	(.026)	(.012)	(.013)	(.013)
Tournament - Piece Rate	.005	-.003	.014	.017
	(.030)	(.015)	(.016)	(.017)
Guessed rank			-.186***	-.137**
			(.049)	(.055)
Chose piece rate for Task 4?				.178*
				(.089)
Pseudo-R^2	.272	.102	.159	.173
N	64	192	192	192

B. Dependent variable: Choice of tournament in Task 4
(1 = tournament, 0 = piece rate)

	(1)	(2)	(3)
Female	-.144	-.154	.026
	(.120)	(.122)	(.140)
Team		.040	.134
		(.103)	(.108)
Female*team		-.017	-.127
		(.151)	(.156)
Piece rate	.031*	.014	-.007
	(.019)	(.011)	(.011)
Guessed rank			-.397***
			(.058)
Pseudo-R^2	.054	.030	.254
N	64	192	192

Notes: Standard errors are in parentheses. Team refers to a dummy variable that is one for the team sessions. Tournament refers to Task 2 performance. Tournament - piece rate refers to change in performance from Task 1 to Task 2.
* $p<.10$, ** $p<.05$, *** $p<.01$