

# **Pulling for the team: Competition between political partisans**

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## **Abstract**

At every level of politics, people form groups to compete for power and resources, including political parties, special interest groups, and international coalitions. Here we use economic experiments to investigate how people balance the desire for their group's victory versus their own expenditure of effort. We design an economic tug of war in which the side that exerts greater effort wins a reward. In Experiment 1, participants compete individually or in teams, which were assigned arbitrarily. In Experiment 2, participants compete individually or in teams based on their political party, Democrats against Republicans. In both experiments, we find that people shirked on teams: Participants exerted less effort in teams than in individual competition. The results support theories about free-riding in groups, and they depart from theories about the automatic potency of partisan motives. We discuss why it is difficult for groups, including political partisans, to mobilize toward a common goal.

Keywords: group competition, political partisanship, contest theory, shirking, free-riding

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## Introduction

In every arena of politics, people form teams to compete for power and resources. Citizens and legislators form political parties to vie for control of government, special interests form lobbies to influence legislation, and nations form coalitions to defend their borders. Political factions show many of the same patterns found in other kinds of teams, whether in sports, the workplace, or the marketplace. Like other teams, American political parties show both harmony and discord within them (Aldrich 1995; Cox & McCubbins 2007; Groenendyk 2013). On the one hand, many voters and legislators follow their party's stance on issues, leading to polarization in Americans' political views (Iyengar and Westwood 2015). On the other hand, the parties must constantly struggle to urge voters to participate (Green and Gerber 2015) and to solicit donations to their campaigns (O'Donnell 2016). Even after campaigns are won, the party's leaders can descend into infighting that hobbles their own efforts to implement new policies (Bendix and Mackay 2017).

Here we use economic experiments to study this fundamental issue at the root of political parties—the tension between the individual and the team (Aldrich 1995; Cox & McCubbins 2007; Groenendyk 2013). We draw on contest games (Dechenaux, Kovenock, and Sheremeta 2015) to design an economic experiment in which teams of participants compete for a reward. Contest games are used to model a variety of political phenomena, including elections, lobbying, and war (Chaudoin and Woon 2017). In a contest game, two opponents decide how much effort to expend to compete for a winner-take-all prize. We focus on contests between *teams*, since competition between political parties and other political groups is between teams rather than individuals. In contests between teams, a player must consider not only their opponent's moves but also the possible moves of their own teammates, whether they will charge forward or hold back. Hence, a team contest is a fitting model for political parties in which individuals face a collective action problem (Aldrich 1995), while competing against opponents who face their own collective action problem.

We use experimental contests to study the basic question of how people muster effort in team competition, including political competition. We test two opposing, broad perspectives found across the social sciences. One perspective emphasizes the power of ingroup psychology, holding that people have strong motives for advancing their group ahead of rival outgroups, showing a kind of team spirit. A second perspective oppositely emphasizes individual self-interest, holding that people often shirk, loaf, and free-ride rather than contribute to their group's efforts.

For ingroup psychology, theories about social identity (Tajfel and Turner 1979) and generalized reciprocity (Yamagishi, Jin, and Kiyonari 1999) maintain that people have a strong motive to help their ingroup, even minimal groups formed arbitrarily. Additionally, team competition has multiple features expected to enhance this motive, including group categorization, a clear outgroup, interdependent payoffs, and shared fate (Balliet, Wu, and De Dreu 2014). Moreover, prominent theories about political partisanship argue that people's partisan attachments further foster ingroup favoritism and outgroup hostility (Groenendyk 2013; Iyengar, Sood, and Lelkes 2012; Iyengar and Westwood 2015; Huddy, Mason, and Aarøe 2015; Mason 2015).

In contrast, another set of theories emphasize how people shirk in groups. Research from social psychology about the diffusion of responsibility (Latane and Nida 1981; Thomas et al. 2016) and social loafing (Karau and Williams 1993) finds that people often shirk in groups when others could do the work instead. In a similar vein, many experiments on

cooperation find substantial free-riding in groups (Fischbacher, Gächter, and Fehr 2001; Kurzban and Houser 2005), particularly when contributions are not enforced by punishments or rewards (Balliet, Mulder, and Van Lange 2011), which is consistent with evolutionary models of cooperation and free riding (Axelrod 1984; Gintis 2009). For political parties, some researchers argue that citizens' political partisanship does not always translate into active support and participation. Some partisans are ambivalent and critical toward their own party (Lavine, Johnston, and Steenbergen 2013), some citizens can view their party's stances with detached reflection (Arceneaux and Vander Wielen 2017), and some Americans favor their party mainly out of dislike for the opposing party (Abramowitz & Webster 2016) and may even dislike both parties (Klar and Krupnikov 2016).

To test these theories, we examine participants' expenditure of effort in team competition compared to individual competition, holding constant a player's budget and the prize at stake. We examine whether participants' effort in teams exceeds or falls short of their effort in an individual competition with the same stakes. Theories about team spirit predict greater effort in teams than individual competition, whereas theories about shirking oppositely predict less effort in teams than individual competition.

We describe the competition to participants as a tug of war to make it concrete and easy to understand. The tug of war is also an apt analogy for political competition. Pulling on the rope is analogous to a citizen's effort to vote, donate to a campaign, or protest against opponents. The prize is analogous to the political stakes such as who wins an office, who pays less taxes, or who receives government health care. In the experiment, two teams pull on opposite sides of a rope and the team that pulls harder wins the prize. Each player starts with the same budget of cash and decides how much to spend to pull the (imaginary) rope and how much to keep for themselves. The team that spends more money pulls harder and wins the prize (ties are decided by a coin flip), which pays an additional cash reward to each player on the winning team. In different conditions, participants play tug of war in individual competition or in teams of three, holding constant the amount of the budget and the reward per player.

In Experiment 1, we start by examining participants' effort in neutral teams in which players are grouped arbitrarily. If team spirit is readily evoked even in minimal groups (Tajfel and Turner 1979), then we will see enhanced effort in teams even when the team divisions are arbitrary. This would suggest that very basic ingroup motives are sufficient to motivate the kinds of collective effort we see in political parties. In Experiment 2, we examine political teams in which American participants are assigned to teams based on their political party, Democrats against Republicans. By posing the game as a competition between political partisans, we examine effort in teams when the psychology of partisanship is invoked.

(See Online Appendix A1 for a review of contest theory and the general rationale for economic experiments.)

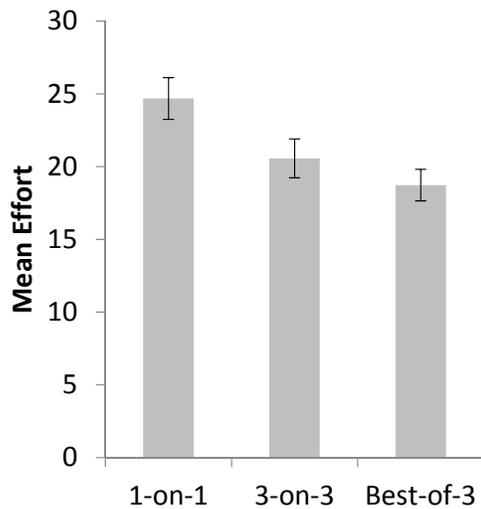
### **Experiment 1**

We recruited  $n = 312$  participants (age:  $M = 36.1$ ,  $SD = 11.8$ ; 41.3% female) online with Amazon's Mturk (see supplemental methods in Online Appendix A2). Participants were randomly assigned to one of three between-subject conditions: 1-on-1, 3-on-3, or best-of-3 competition. In all conditions, participants compete for a prize worth 50 cents (per player for teams). They compete by choosing how much of their 50 cent endowment to spend on effort; they keep the remaining money which adds to their bonus payment. The winner is the side that expends more effort (an all-pay auction mechanism), or the team that wins 2 out of 3

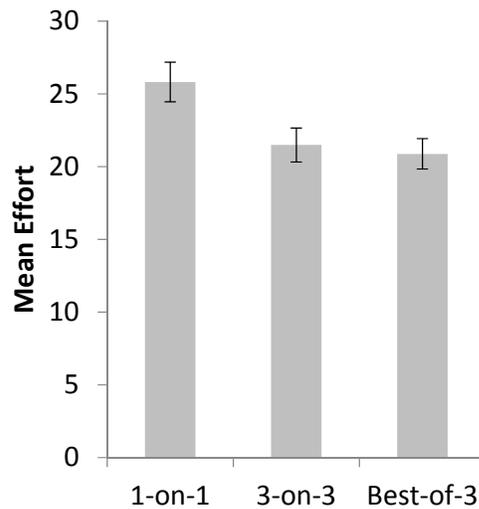
matches in the best-of-3 condition. The losing side gains no reward from the competition. To make the competition engaging and easy to understand, we described the game as a tug of war (Online Appendix A2 and A6).

Figure 1 (panel A) shows the results. Participants exerted less effort in 3-on-3 competition than 1-on-1 competition,  $t(206) = 2.11, p = .036, d = 0.29$ . This difference indicates that participants shirked in the team competition relative to the efforts they made in the individual competition. Similarly, participants exerted less effort in best-of-3 competition than 1-on-1 competition,  $t(203) = 3.33, p = .001, d = 0.47$ . We observed no difference in effort between the 3-on-3 and best-of-3 competitions,  $t(209) = 1.07, p = .29, d = 0.15$ , indicating that participants' effort did not depend on the particular form of team competition. We also looked more closely at the distributions of effort and found that participants were more likely to exert low effort in team competition than individual competition, whereas high effort was more frequent in individual competition than team competition (Online Appendix A3).

A. Experiment 1, Tug of War



B. Experiment 2, Political Tug of War



**Figure 1.** Mean (*SE*) effort (cents) for the tug of war in Experiment 1 (panel A) and the political tug of war in Experiment 2 (panel B). For reference, the contest theory predictions are 25 in 1-on-1, 8.33 in 3-on-3, and 12.5 in best-of-3 competition (Online Appendix A1).

Overall, participants shirked on teams by expending less effort in team competition than individual competition. This finding is consistent with theories about shirking in groups such as diffusion of responsibility and free-riding, whereas it is inconsistent with theories about team spirit such as social identity theory and generalized reciprocity.

## Experiment 2

In Experiment 2, we test whether forming teams based on political partisanship can boost team spirit beyond participants' efforts in individual competition. We used the same tug of war game except with a political framing. Participants first answered which political party they most support (Democrat/Republican/Independent-Other). Participants' partisanship determined their opponent(s) in the game. If participants chose

Independent/Other, then they decided whether to compete on the Republican side, the Democrat side, or stay out of the competition (earning a flat payment but no bonus from the game).

We recruited participants on Mturk and excluded from analysis those who chose to stay out of the political competition ( $n = 23$ ), yielding a final sample of  $n = 412$  (age:  $M = 34.9$ ,  $SD = 10.3$ ; 44.4% female). As in Experiment 1, participants competed in 1-on-1, 3-on-3, or best-of-3 competition. Additionally, we varied the intensity of partisanship framing in three levels of increasing intensity: the partisanship condition; the added quote condition, which additionally presented a quote from the party's presidential candidate; and the added prompt condition, in which participants read the quote and wrote about whether it was important to support their party (Online Appendix A4 and A6). Moreover, these experimental sessions were conducted in the week preceding the 2016 U.S. Presidential Election, which is expected to further add to the intensity of partisan motives (Iyengar, Sood, and Lelkes 2012).

Participants' effort did not differ across partisanship, added quote, and added prompt conditions (Online Appendix A5), so we combined the data across them. We found no differences in effort between Democrats and Republicans, and no differences between participants who initially chose Independent/Other and those who immediately selected a party. Also, we found no effects of a participant's partisanship strength on their effort (Online Appendix A5).

Figure 1 (panel B) shows the main results. Participants exerted less effort in 3-on-3 competition than 1-on-1 competition,  $t(271) = 2.41$ ,  $p = .017$ ,  $d = 0.29$ . Participants also exerted less effort in best-of-3 competition than 1-on-1 competition,  $t(276) = 2.88$ ,  $p = .004$ ,  $d = 0.35$ . These results show that participants shirked in teams relative to individual competition, even with intense partisan cues. Last, we observed no difference in effort between the 3-on-3 and best-of-3 competitions,  $t(271) = 0.39$ ,  $p = .70$ ,  $d = 0.05$ , which like in Experiment 1 suggests that participants' effort did not depend on the particular form of team competition. The distributions of effort showed the same pattern (Online Appendix A5).

Finally, we tested whether the political framing promoted greater effort compared to the non-political game in Experiment 1. The results show that average effort did not differ between the political competition and non-political competition in all cases: 1-on-1 competition,  $t(238) = 0.56$ ,  $p = .58$ ,  $d = 0.073$ ; 3-on-3 competition,  $t(239) = 0.52$ ,  $p = .61$ ,  $d = 0.067$ ; and best-of-3 competition,  $t(241) = 1.41$ ,  $p = .16$ ,  $d = 0.18$  (see Online Appendix A5 for complementary regression analyses).

Overall, we find that participants shirked on political teams compared to individual competition. Moreover, participants' effort in political teams (Experiment 2) did not differ from non-political teams (Experiment 1), showing that the partisanship framing did little to increase participants' effort. This experiment used intense partisan cues at a time when U.S. political competition was at an extreme peak just before the 2016 Presidential Election. However, participants still shirked in teams, and no less than with a neutral framing of the game. These results suggest that to boost costly effort in competition, more is needed than framing, political identity, and a salient political conflict. Moreover, this observation suggests that it can be difficult to boost political effort even during a highly contested and consequential election. In short, the political frames in the present experiment, including inspirational quotes from presidential candidates and a writing prompt about political participation, were not sufficient to mobilize participants to exert costly effort for their political team.

## General Discussion

In two experiments with an economic tug of war, we found that participants exerted less effort in team competition than in individual competition. Essentially, participants pulled for themselves more than they pulled for the team. In Experiment 1, participants competed in neutral teams that were assigned arbitrarily. The player's budget and the reward per player were held constant across three types of competition: 1-on-1, 3-on-3, and best-of-3 contests. Participants contributed less money toward victory in both forms of team competition than in individual competition. In Experiment 2, participants competed in political teams that were formed based on their political party. Again, participants contributed less money in both forms of team competition than individual competition. Moreover, participants' effort in political teams did not differ from their effort in neutral teams in Experiment 1.

These results are consistent with theories about shirking, and more broadly with theories about individuals' self-seeking motives within a group. The literature on diffusion of responsibility finds, similarly, that people are less likely to help when others could take on the burden instead (Latane and Nida 1981; Thomas et al. 2016). Research on cooperation such as experiments on the public goods game finds substantial free-riding in groups, especially when cooperation is not enforced by punishments or rewards (Balliet, Mulder, and Van Lange 2011). More generally, the theoretical literatures in economics, game theory, and evolutionary biology all emphasize the potent force of individuals' self-seeking motives in shaping both cooperation and internal discord in groups (Gintis 2009). The present experiments build upon previous research on shirking to include cases of team competition with a clear ingroup and outgroup, in addition to teams formed based on political partisanship.

In contrast, the present results depart from theories about team spirit such as social identity theory (Tajfel and Turner 1979) or generalized reciprocity (Yamagishi, Jin, and Kiyonari 1999), and more specifically, political identity and adversarial partisan motives (e.g., Iyengar et al. 2012). The team competitions in the present experiments had multiple features that these theories predict will enhance ingroup motives, including group categorization, a clear outgroup, interdependent payoffs, and shared fate. Yet, participants still shirked in team competition. Experiment 2 invoked partisan motives in a tug of war between Democrats and Republicans. The political framing included inspirational quotes from presidential candidates, a writing prompt about supporting the party, and timing during the week before the 2016 Presidential Election. Nevertheless, participants continued to shirk in political teams.

This finding of partisan shirking resonates with other strands of political psychology about why partisan motives do not always drive citizens' political behavior. For instance, some citizens are ambivalent toward their party (Lavine, Johnston, and Steenbergen 2013), some citizens affiliate with a party largely out of dislike for the opposing party (Abramowitz and Webster 2016), and some citizens dislike both parties (Klar and Krupnikov 2016).

Given the departure from previous research on ingroup psychology, we note a few differences from the current methods. First, in the classic studies on social identity, participants allocate rewards to ingroup and outgroup members, they cannot keep rewards for themselves (Tajfel and Turner 1979). Hence, helping is not costly and the participant chooses which others to help rather than choosing between helping and shirking. Similarly, many studies on partisan biases use surveys in which participants do not need to exert costly effort to express ingroup favoritism or outgroup hostility (e.g., Iyengar, Sood, & Lelkes 2012). Second, in another literature, researchers examine costly helping in cooperative games

(Balliet, Wu, and De Dreu 2014), and some of this work looks at political partisanship (Carlin and Love 2013; Fowler and Kam 2007; Iyengar and Westwood 2015). These studies generally find that people are more cooperative toward ingroup members, although there are some mixed results. But importantly, participants in these studies are not posed with a rivalry between groups. The participant decides how much to help others, rather than how much to help one side against another side. Of course, all of this research shows important patterns in ingroup behavior, but for studying competition between political groups, specifically, we suggest that costly effort and the presence of opposing sides are core elements to include in experiments.

Despite the current results, we do think it is possible to stimulate team spirit to levels of effort that equal or exceed individual competition. Everyday observations appear to show numerous cases of inspired teamwork. We think the intriguing question is what key ingredients are sufficient to generate team spirit. From these experiments, it would seem that categorization, a clear outgroup, interdependence, and shared fate are not sufficient to elicit high effort toward the team's success. Many additional factors remain to be tested in future research. For instance, if teammates could make repeated, sequential contributions, then they could display and observe each other's commitments to the team, potentially fostering greater effort. Or, if teammates could communicate during the game, then they could encourage each other and a leader might emerge to rally the team.

The shirking that we see in political teams might point to something that candidates and campaign managers know all too well. If political partisanship, social categorization, and shared fate were enough to inspire group effort, then candidates could readily get citizens to vote and donors to fund their campaigns. Instead, a candidate needs much more than partisan motives and an outgroup to win an election. They need to meet personally with supporters, call donors, canvass neighborhoods, give speeches, hold rallies, promise favors, and advertise across multiple media channels. For instance, a U.S. presidential candidate requires a massive, billion dollar campaign to mobilize constituents to support them.

The present experiments may hint at why it can be so difficult to rally political support: because people are prone to shirk in teams, including in competitions between political partisans. Future research can continue to use variations of the tug of war game to better understand how teammates can rise together toward a common goal, as well as how to diminish the sense of team spirit when the costs of fierce competition become too great.

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