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When colleagues compete outside the firm

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Abstract

Research Summary: Collaboration among employees is the bedrock of an organization, but we suggest that it can be undermined by their extra-organizational affiliations. We point to the hidden but common constellation of two coworkers who are also affiliated with organizations that compete with one another. We hypothesize that such colleagues collaborate less with one another when performing on behalf of their shared employer. Using data from professional soccer, we provide empirical evidence. We outline implications for research on extra-organizational affiliations, intra-organizational collaboration, competition and rivalry, and social networks.

Managerial Summary: Imagine two soccer players who play for the same soccer club – but compete against one another when they perform on behalf of their national team (i.e., the two players have different nationalities). We show that the two soccer players collaborate less (i.e., play fewer passes to each other) at their club after encountering each other as opponents when performing on behalf of their national teams. This finding in the context of sports has implications for firms. Managers of the same firm may serve on boards of directors of companies that compete with each other, and employees may support political

parties that compete – eventually hindering internal collaboration.

KEYWORDS

collaboration, competition, conflict, employee mobility, multiplexity, rivalry

1 | INTRODUCTION

Collaboration among its employees is the bedrock of an organization. We focus on an organizational feature that is seemingly unrelated to collaboration but may undermine it: *employees' extra-organizational affiliations*. Coworkers' collaboration *inside* the firm can be hindered if extra-organizational affiliations make them competitors *outside* the firm.

Employees often have extra-organizational affiliations. Executives may serve on boards of other organizations, engineers may participate in standard-setting committees, and software programmers may moonlight on open-source projects. Extra-organizational affiliations may also be outside the professional domain: employees may be members of a church, supporters of a political party, or activists in a social movement. We suggest that such *extra*-organizational affiliations may have the unintended side effect of hindering *intraorganizational* collaboration.

Specifically, we point to a hidden but common constellation: *two coworkers have extra-organizational affiliations with organizations that compete with one another*. For example, while Carol Tome and Marvin Ellison were both C-level executives at Home Depot, Tome was on the board of UPS and Ellison on the board of its arch-competitor, FedEx. This is not uncommon. Examining board relationships among S&P 500 companies, we found that in 20% of the cases in which two members of a company's C-suite were also on other organizations' boards, those two organizations were competitors. The prevalence of this constellation is easily explained. Employees of the same company are likely to have a similar profile and are thus likely to be sought after by similar—and thus often competing—firms. The constellation is likely even more common once one also considers affiliations outside the professional domain. For example, coworkers may be affiliated with rival political parties, churches, or social movements. It is therefore crucial to understand whether this common constellation undermines intraorganizational collaboration. We hypothesize that if two coworkers have extra-organizational affiliations with organizations that compete with one another, it negatively affects their collaboration.

We suggest the effect to occur if two scope conditions are met. First, the employees identify strongly with the external organizations with which they are affiliated. Second, the competition between the two organizations must be intense. Only if both conditions are met the competition between the two organizations affect the coworkers' personal relationship.

We test our hypothesis in the context of professional men's soccer. We leverage data from the top five European leagues and the 2018 World Cup, which is organized by the Fédération Internationale de Football Association (FIFA). To operationalize our core concept of two coworkers affiliated with external organizations that compete with one another, we examine soccer players who play for the same club (e.g., Real Madrid) but for opposing national teams in the 2018 World Cup. This setting fulfills our two scope conditions: a player's identification with his national team is high and World Cup competition is intense. Drawing on a difference-in-differences analysis,

we examine how a player's collaboration with a club teammate changes after they face each other in the World Cup. As we will demonstrate, players have limited influence on whether they encounter each other in the World Cup, rendering our treatment quasi-exogenous.

Our results suggest that players who faced a club teammate as a member of an opposing national team do indeed collaborate less with that teammate in the next season. We demonstrate the robustness of our results and explore the underlying mechanisms and conditions. We discuss implications for research on extra-organizational affiliations, intraorganizational collaboration, competition and rivalry, and social networks.

2 | HYPOTHESIS

We hypothesize that colleagues' affiliations with external organizations that compete with one another negatively affect their intraorganizational collaboration with each other. Formally speaking, if individuals A and B are employed by Organization 1 and if A has an affiliation with Organization 2 and B has one with Organization 3, we suggest that if Organizations 2 and 3 compete with each other, A and B's collaboration on behalf of Organization 1 will decrease (see Figure 1). We next articulate the underlying logic.[1]

Our theory builds on an effect well established in a variety of contexts: if two organizations compete, the *interorganizational* competitive relationship can spill over to organizational members' *interpersonal* relationships with members of the competing organization (Hewstone et al., 2002; Sherif et al., 1961). The crux and novelty of our argument is that the affiliations with competing organizations are due to *extra*-organizational affiliations and that they can lead to an adversarial interpersonal relationship among coworkers.

To develop the argument and to specify the mechanisms and scope conditions of how and when the interorganizational competition between organizations with which two colleagues have extra-organizational affiliations can translate into an adversarial interpersonal relationship, we draw on the literature on *joint* affiliations—those in which two individuals are (or have been) affiliated with the *same* organization (e.g., colleagues who belong to the same sports club or attended the same college) (Carnahan et al., 2022; Carnahan & Somaya, 2013; Gubler, 2019; Gubler & Cooper, 2019; Mael & Ashforth, 1992; Sytch & Kim, 2021). This literature points to *identity* as a key mechanism to explain how (extra-)organizational affiliations change interpersonal relationships (Breiger, 1974; Grohsjean et al., 2016; Mael & Ashforth, 1992; Sytch & Kim, 2021). If people identify with the organization with which they have an (extra-)organizational affiliation, it affects how they perceive others (Brewer & Gardner, 1996; Sluss & Ashforth, 2008). Specifically, people perceive a person with whom they share an organizational affiliation as more similar and as a member of their ingroup (e.g., recognizing common background, shared interests, aligned goals) and thus as more likeable (Howard & Rothbart, 1980; Kogut & Zander, 1996; Sytch & Kim, 2021). Coworkers sharing an *extra*-organizational affiliation may thus develop an *additional* relationship with positive valence; for example, they are not just colleagues, but also fellow alumni. As a result, they have

[1]We calculated the percentage by combining information on all executives of all S&P 500 companies between 2000 and 2020 from Compustat's Execucomp database with data on board membership in S&P 500 companies for the same period from the BoardEx–North America database. We created all possible dyads of executives who were part of the same C-suite in the same year. We then identified for each dyad of executives whether they also served on the boards of competing S&P 500 companies. We define two firms as competitors if they belong to the same industry defined by the SIC code.

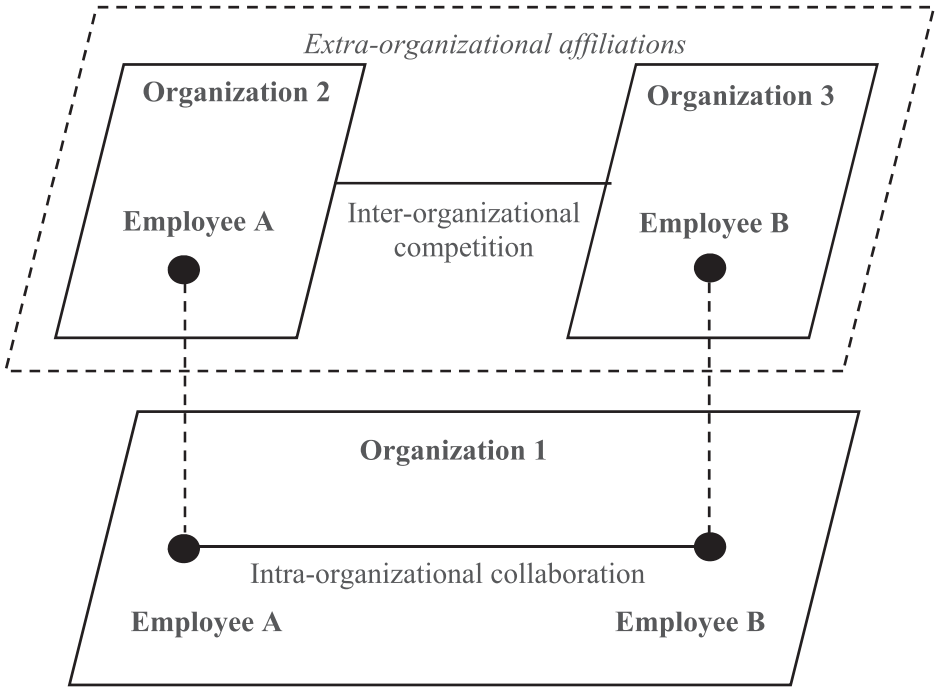

FIGURE 1 Schematic illustration of two employees' extra-organizational affiliations with competing organizations.

a multiplex relationship and the additional relationship anchored in the joint extra-organizational affiliation spills over—positively affecting their other interactions.

The same logic may apply to the constellation we theorize about, but with the opposite effect. If two colleagues are affiliated with external organizations that compete with each other, it may *negatively* affect how they perceive each other—still as colleagues but *also* as outgroup members and competitors. Thus, instead of having a uniplex relationship of positive valence—that is, a purely collegial relationship—they now have a *bivalent multiplex relationship*.

We suggest two important scope conditions for this change in colleagues' perception of each other and the emergence of a parallel adversarial relationship: *identification* and *competition*. First, while employees often identify with organizations to which they belong (Ashforth et al., 2008; Kogut & Zander, 1996), an employee must identify quite strongly with the organization with which he or she has an extra-organizational affiliation to let the competition it faces affect his or her personal relationships. Second, the competition between the organizations with which the colleagues are affiliated must be intense (e.g., zero-sum). Otherwise, it will have only a limited impact on the external organization with which the focal colleague is affiliated and will be unlikely to affect the colleagues' interpersonal relationship.

Building on research on multiplexity (Ertug et al., 2023; Ferriani et al., 2013; Ingram, 2023; Ingram & Roberts, 2000; Kuwabara et al., 2010; Li & Piezunka, 2020), we suggest that the adversarial relationship negatively affects the collegial relationship by impeding the individuals' willingness to collaborate at work. While research has often focused on positive spillovers (e.g., family or friendship ties facilitating business interactions) (Ingram & Roberts, 2000; Uzzi, 1996), the potential for negative spillover has recently come under scrutiny (Durand et al., 2024; Kuwabara, 2011; Operti et al., 2020; Thatchenkery & Piezunka, 2024). Building on

this proposition, we suggest that the adversarial relationship that results from the colleagues' extra-organizational affiliations with organizations that compete with one another harms their collaboration. We hypothesize:

> **Hypothesis.** Colleagues' extra-organizational affiliations with organizations that compete with one another reduce their intraorganizational collaboration.

3 | METHODS

3.1 | Empirical setting

Testing our theory requires a (quasi-)exogenous assignment of the treatment as well as detailed information on employees' collaboration. This is challenging, as both competition and employees' extra-organizational affiliations are typically endogenous and interpersonal collaboration is seldom well documented. We did, however, find such a setting—professional men's soccer. A rich literature has leveraged the granular data available on professional sports to study collaboration and competition (Bothner et al., 2007; Fonti et al., 2023; Gaessler & Piezunka, 2023; Grohsjean et al., 2024; Operti et al., 2020; Piezunka et al., 2018; Ross & Sharapov, 2015; Willer et al., 2012). Professional soccer, in particular, is an established setting for management research (e.g., Carlsson-Wall et al., 2024; Glennon et al., 2022; Greve et al., 2020; Moliterno et al., 2014; Silberzahn et al., 2018).

We study collaboration among teammates (i.e., colleagues) in soccer clubs (i.e., their employers) in the top five European men's soccer leagues. There are 20 clubs in the English, French, Italian, and Spanish leagues and 18 in the German Bundesliga (e.g., Manchester United, Paris Saint German, Juventus Turin, Real Madrid, and VfB Stuttgart). To determine the seasonal league champion, each club plays the others twice, once at their home stadium and once at their opponent's stadium, yielding 306 matches per season in the German Bundesliga and 380 in the other leagues combined. Matches for all leagues take place between August and May.

While players are employees of their clubs, they can have extra-organizational affiliations if nominated for their national team in tournaments like the World Cup. The 2018 tournament took place in Russia between June 14 and July 15, with 32 national teams participating. All teams but Russia qualified for participation by succeeding in the World Cup qualification. Russia, as the host nation, qualified automatically. The tournament consisted of a group stage and a knockout stage, with 64 matches in total. In the group stage, teams were divided into eight groups of four teams each. FIFA hosted an event on December 1, 2017, in which the groups were determined by a random draw. Teams in each group played one another once. Each team, therefore, played three matches in the group stage, at the end of which the top two teams from each group advanced to the knockout stage to compete in single-elimination matches. Figure 2 shows a timeline of the events.

3.2 | Data

Our primary data source was data from the sports analytics company Wyscout on all clubs in the top five European men's soccer leagues for the seasons 2017/18 and 2018/19. At the match

FIGURE 2 Timing of events.

level, the data include information such as the teams, result, referee, and stadium as well as a time-coded feed of all events for each of the 3652 matches played in the two seasons in the five leagues. Events include goals, shots on goal, fouls, and—key for us because they represent collaboration—*passes*. The data also include team-level information on coaches and players and player-level performance metrics and career data.[2]

We use Wyscout data to determine teammates' affiliations with national teams in the 2018 World Cup. These data entail time-coded match-level information on all players and events in the 64 matches and team-level information such as coaches and match squads.

3.3 | Sample construction and unit of analysis

In line with prior research, we operationalize collaboration by studying passes between teammates (Day et al., 2012; Grohsjean et al., 2024; Morales et al., 2022). We distinguish passes from player A to player B (A → B) from passes from player B to player A (B → A). Relying on directed dyads allows us to account for differences in two players' level of collaboration and to capture asymmetries within a dyad; for example, in terms of identification with the national team. Our sample, therefore, contains observations for each directed dyad of club teammates who were on the field in a match at the same time. To compare the passing behavior among teammates in the season before the 2018 World Cup (2017/18) and the season after (2018/19), we keep in our sample only those dyads that played on the same team in both seasons. We further eliminated dyads that included a goalkeeper as either pass giver or pass receiver (see Model 1 in Table A1 in the Online Appendix for robustness).

[2]We cross-validated a subsample of our data on all matches in the Premier League in our two seasons with match-level data from the British sports analytics company Opta Sports. Pairwise correlations greater than .99 of key match-level data such as goals, shots on goal, fouls, and passes confirm the high quality of our data.

3.4 | Empirical specification and variables

Using a difference-in-differences design, we compare changes in the number of passes across two consecutive seasons between treated dyads—teammates who competed against each other on opposing national teams in the 2018 World Cup—and untreated dyads—teammates who played in the World Cup on different national teams that did not play against each other. We divide our sample into pre- and post-World Cup seasons: 2017/18 and 2018/19. Our difference-in-differences estimation takes the following form:

(I) $Collaboration_{it} = \beta_0 + \beta_1 \ Post \ World \ Cup_t + \beta_2 \ Competing \ extra\text{-}organizational \ affiliations_i \times Post \ World \ Cup_t + X_{it} + \gamma_i + \lambda_c + e_{it}$, where $Collaboration_{it}$ equals the number of successful passes from player A to player B in directed dyad i in match t. Although players' roles, their playing position, and match tactics may influence passing behavior, players still have agency with respect to whom to pass to. Consequently, measuring the number of times a player passes the ball to a teammate captures well his willingness to collaborate (Day et al., 2012; Morales et al., 2022).

β_2, the coefficient of interest, is the interaction term between *Competing extra-organizational affiliations*$_i$, which equals 1 if the players of dyad i faced each other on the field during the 2018 World Cup, and *Post World Cup*$_t$, which equals 1 if the focal match took place after the World Cup.

We include a set of dyad-level controls X_{it}, a fixed effect for the dyad (γ_i), and a set of dummy variables for the effect of the coach on a team (λ_c). Since our model includes dyad fixed effects and our treatment is at the dyad level, the variable *Competing extra-organizational affiliations* is omitted. The vector of dyad-level controls X_{it} includes the number of minutes a dyad played together in a match (*Dyad's joint minutes in the match*), as teammates who spend more time together on the field have more opportunities to pass to each other, and a dummy variable *Dyad's team plays at home*, which equals 1 when the dyad's team played in their home stadium, as research has found playing at home associated with more passes (Greve et al., 2020). The dyad fixed effects γ_i allow us to control for unobserved time-invariant dyad characteristics (e.g., joint attendance of a youth soccer academy, compatibility in playing styles, and similarity in talent). Our analysis thus captures within-dyad variation over time. As teams may change their coach during our observation period, we include a set of coach-team dummy variables to capture differences in a team's playing style under a specific coach (Moliterno et al., 2014).

We choose ordinary least squares (OLS) regressions with multiple fixed effects (i.e., dyad and coach-team fixed effects). As the underlying variation in our treatment comes from player nationality, we two-way cluster our standard errors by the home country of the pass-giving and pass-receiving players (Abadie et al., 2023). We run all regressions using the reghdfe command in Stata 18 (Correia, 2014).

3.5 | Treatment and control groups

Our *treatment group* includes 142 dyads in which the pass giver and pass receiver were teammates in 2017/18 and 2018/19 but faced each other in the 2018 World Cup. For example, in seasons 2017/18 and 2018/19, Lionel Messi and Ivan Rakitić both played for Spanish league club FC Barcelona, yet at the 2018 World Cup, Messi, playing for Argentina, faced Rakitić, playing for Croatia. A general challenge in testing the effect of extra-organizational affiliations on intraorganizational collaboration (or other outcomes, for that matter) is that people typically self-select and/or are selected into (extra-)organizational affiliations, rendering the treatment

endogenous (Hurst et al., 2024; Park et al., 2024). In our setting, however, the selection into treatment is quasi-exogenous. Whether two players encounter each other in the World Cup is largely outside their control and partly due to chance.

There are three reasons for this. First, the pass giver and pass receiver must be nominated by their national team coaches both for the World Cup and for the specific Cup game in which they encounter each other. Although individual players can increase *their own* efforts to be nominated for a national team, they have little influence over whether *their club teammates* are nominated for national teams. Second, the national teams of both players need to qualify for the World Cup. While individual players can obviously help, an individual player's performance is not sufficient to send a team to the World Cup. Certainly, a player has no influence on whether his club teammates' national teams qualify. Third, whether two national teams face each other in the tournament is, in part, based on random draws by FIFA.[3] Hence, even if players have agency in whether they participate in the World Cup or play in a match, they have no influence against whom they play.

We compare the passing behavior of players in the treatment group against a default *control group* of 842 dyads in which (a) both players were teammates in 2017/18 and 2018/19 and (b) both players participated in the World Cup, but (c) their national teams did *not* play each other (e.g., because they were selected into different groups in the group stage and never made it to the knockout stage). For example, in seasons 2017/18 and 2018/19, Toni Kroos and Sergio Ramos were teammates in Spanish league club Real Madrid. Although both played in the World Cup—Kroos for Germany and Ramos for Spain—their teams never played each other. So, each player in the control group has an extra-organizational affiliation with a national team competing for the World Cup, but the organizations do *not compete directly* against one another.

We constructed our control group in this way for several reasons. First, as players in the treatment and control group are all members of national teams, they are more likely to be similar in ability.[4] Second, only including in the control group dyads of players who played in the World Cup helps minimize the plausibility of alternative explanations. One might, for example, argue that players increase their effort and pass more often before the World Cup to increase their chance of being nominated for the national team or that players are tired after the World Cup and consequently pass less often.[5] Third, the construction of our control group renders our

[3]The process was as follows: All 32 teams were divided into four pots of eight, with one team selected from each pot to form a group in the World Cup. Pots were determined by each national team's October FIFA World ranking, ranging from the highest-ranked teams (Pot 1) to the lowest (Pot 4). Hence, while teams could, in theory, influence the pot to which they were allocated (e.g., by performing well), actual encounters at the group stage were the result of a random draw. Further, if teams were able to master the group stage (ending up either first or second place in their group), in the following round of 16 matches they faced runner-up teams from other groups. This process assures that teams cannot influence whom they will face at the knockout stage (e.g., by intentionally performing worse), given that all participating teams are incentivized to give it their all to end up first in their group.

[4]Using player ratings provided by the *Guardian* (Christenson, 2018) for every player in the 2018 World Cup as a proxy for players' performance reveals that players in the treatment and control groups are indeed comparable. The average rating is 6.3 for the treatment group and 6.1 for the control group.

[5]We also examined whether the players in the treatment and control groups played a comparable number of games in the World Cup; otherwise, there may still be a difference in terms of tiredness. They do indeed play a comparable number of games in the World Cup: an average of 5.78 for players in the treatment group and 5.64 for players in the control group. We also run a robustness check in which we only include pass givers and pass receivers who were in the starting 11 in the match, with results similar to our main results, as shown in Model 2 in Table A1 in the Online Appendix.

test rather conservative; even if the two teams with which the focal players in the control group are affiliated did not play each other, they still competed indirectly in striving to win the World Cup. Our results are best interpreted as capturing the effect of direct versus indirect interorganizational competition, where both teams want to win the World Cup but do not play each other for it. Finally, given that players in the treatment and control group are only those who played in the World Cup, the assignment of dyads to treatment or control groups is quasi-exogeneous, being in part a consequence of the random draws by FIFA. Taken together, we see that the control group is composed of highly comparable player dyads where the main difference is the concept of interest and an important scope condition of our theory: whether two players in a dyad are (also) affiliated with two organizations that *compete* with one another.

4 | RESULTS

Table 1 shows the summary statistics for our treatment and control groups and Table 2 reports the results of our difference-in-differences analysis on the main effect. Models 1 and 2 show our main results without and with control variables, respectively. In line with our hypothesis, we find in both specifications—as indicated by the negative coefficient of the interaction term—that having extra-organizational affiliations with organizations that compete with one another negatively affects intraorganizational collaboration in the post-Cup season ($\beta = -.376$ and p-value = .009 in Model 1; $\beta = -.312$ and p-value = .000 in Model 2). The effect is substantial: the average number of passes between treated players in the post-Cup season drops by about 11%.

To check the validity of our empirical design, we conducted an event study to investigate whether the trends *before* treatment were similar for the treatment and control group. The results are visualized in Figure 3, which shows the point estimates and the 90% confidence intervals of the average mean differences in the monthly number of passes between members of our treated and control groups. The dotted line indicates May 2018—the last month before the World Cup. While the point estimate for April 2018 is slightly below zero (p-value <.085), all others in the pre-Cup period are statistically indistinguishable from zero, providing some support for the parallel trends assumption of our difference-in-differences model.[6]

Following prior research (Mora Villarrubia & Reggio, 2012), we ran a fully flexible model testing whether our pretreatment coefficients *jointly* differ from zero (Stata command dqd). The p-value for our dependent variable *Collaboration* is .77, indicating that our treatment and control groups have common pretreatment dynamics and present no violation of the parallel trends assumption.

In line with prior research (Choudhury et al., 2024), we also conducted a sensitivity analysis of the event study, using an approach, suggested by Rambachan and Roth (2023), with bounds on relative magnitudes (Stata command honestdid). The results, shown in Figure 4, indicate

[6]Our event study shows that the effect is quite long-lasting. There are several potential reasons. It could be that the adjustment in people's perception is long-lasting; club teammates who have encountered each other on opposing national teams may recategorize the other person and their relationship (e.g., from a relationship of positive valence with a colleague to an adversarial relationship with a competitor). It is also plausible that the change in perception is short-lived, but the members of the dyad develop routines which are based on their changed perceptions (Aime et al., 2010; Chen & Garg, 2018) but then outlast them.

TABLE 1 Summary statistics for treatment and control group across both seasons.

	Treatment group ($N = 4912$)		Control group ($N = 29{,}678$)		
Variable	**Mean**	**SD**	**Mean**	**SD**	***p*-Value**
Number of passes	3.17	3.90	3.84	4.42	.000
Post World Cup	0.46	0.50	0.46	0.50	.264
Dyad's joint minutes in the match	69.87	30.41	69.00	30.30	.062
Dyad's team plays at home	0.48	0.50	0.50	0.50	.034

that the breakdown value for the significant effect on *Collaboration* is $\bar{M} = 1.0$, implying that our results are robust enough to allow for posttreatment violations of parallel trends up to the maximum violation in the pretreatment period.

Although the event study suggests that the pre-Cup trends are similar for the treatment and control groups, we can theoretically expect that some of the treatment group—players on national teams scheduled to encounter each other in the announced group-stage matches—may already change their behavior after the group stage announcement on December 1, 2017. We investigate this further as part of the robustness checks.

4.1 | Robustness: Statistical model

To probe the robustness of our statistical model, we replace the OLS model with a Poisson pseudo-maximum likelihood (PPML) model, which is particularly useful in models with positive count outcome variables, such as the number of passes (Greene, 2008). We run the PPML regression with dyad fixed effects and team-coach dummies and cluster the standard errors by the home country of the pass giver and pass receiver. As different dyads do not spend the same amount of time in a match, we use the variable *Dyad's joint minutes in the match* as an exposure parameter. To run the analysis, we use the ppmlhdfe command in Stata 18 (Correia et al., 2020). In line with the results for the OLS regressions, the coefficient of interest is negative ($\beta = -.077$ and p-value = .001 in Model 3), indicating the robustness of our results to an alternative estimation technique.

4.2 | Robustness: Control group

Although our default treatment and control groups have the outlined advantages, they come with the risk that we might overestimate our effect if there is a substitution effect between them. As some pass givers are in both groups, they could substitute the passes to a pass receiver in the treatment group with passes to a pass receiver in the control group.[7] Our estimated effect might then be driven not only by a reduction in collaboration within treated dyads but also by an increase in collaboration within control dyads. Put differently, if such a substitution occurred, we would have the problem that the control group would also receive treatment but

[7]We thank the reviewer for highlighting these possibilities and helping us render our results robust.

TABLE 2 Results of difference-in-differences models on intraorganizational collaboration.

	Model 1 Results without controls	Model 2 Results with controls	Model 3 Alternative empirical specification: Poisson model	Model 4 Alternative dependent variable	Model 5 Alternative control group: all non–World Cup players	Model 6 Alternative unit of analysis: undirected dyads
Competitive extra-organizational affiliations × Post World Cup	−0.376	−0.312	−0.078	−0.310	−0.407	−0.624
	[.009]	[.000]	[.000]	[.001]	[.000]	[.005]
Post World Cup	−0.031	0.017	−0.002	0.015	0.107	0.034
	[.785]	[.787]	[.872]	[.811]	[.000]	[.848]
Dyad's joint minutes in the match		0.054	1	0.054	0.034	0.108
		[.000]	(exposure)	[.000]	[.000]	[.000]
Dyad's team plays at home		0.283	0.087	0.285	0.176	0.565
		[.000]	[.000]	[.000]	[.000]	[.000]
Constant	3.781	−0.123	−2.752	−0.125	−0.061	−0.244
	[.000]	[.512]	[.000]	[.505]	[.204]	[.644]
Dyad FE	Yes	Yes	Yes	Yes	Yes	Yes
Coach-team FE	Yes	Yes	Yes	Yes	Yes	Yes
Empirical specification	OLS	OLS	PPML	OLS	OLS	OLS
Observations	34,590	34,590	34,566	34,590	288,479	17,291
Adjusted R-squared	0.337	0.450		0.451	0.406	0.486
Log pseudolikelihood			−75,292			

Note: All models, except Model 3, show OLS regressions with dyad and coach-team fixed effects. Standards errors are clustered by the home country of the pass giver and pass receiver. Model 3 shows a PPML regression with dyad, coach-team, and match-day–league fixed effects and standard errors are clustered by the home country of the pass giver and pass receiver. Exact p values are reported in brackets. The coefficients in Model 4 are roughly twice the size of those in Model 2, as the dependent variable is the sum of the number of passes between two players in a dyad.

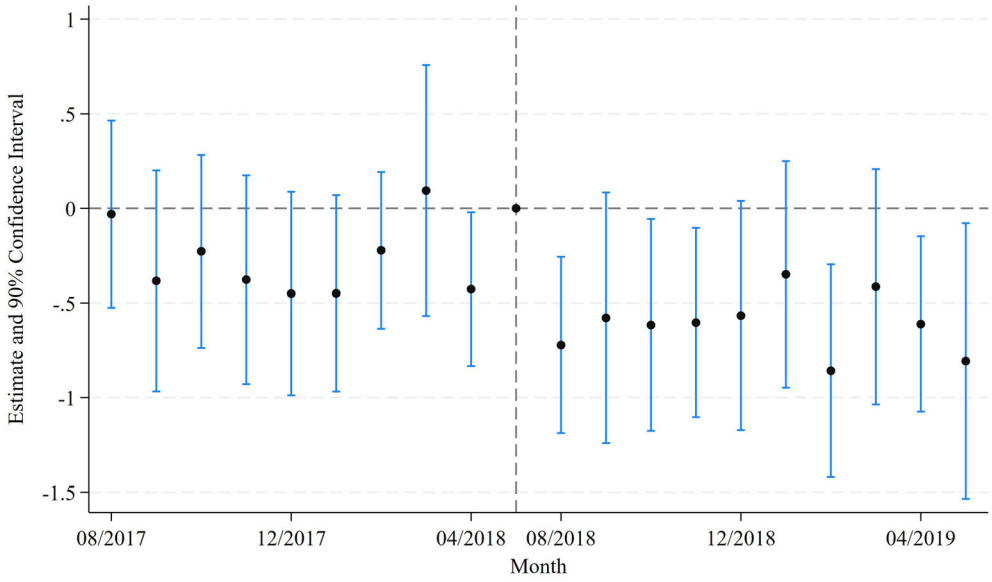

FIGURE 3 Event study plot. Graph shows the point estimates and the 90% confidence intervals of the average mean differences of the number of passes between treated and control groups at the month level. Dotted line indicates month in which the World Cup took place.

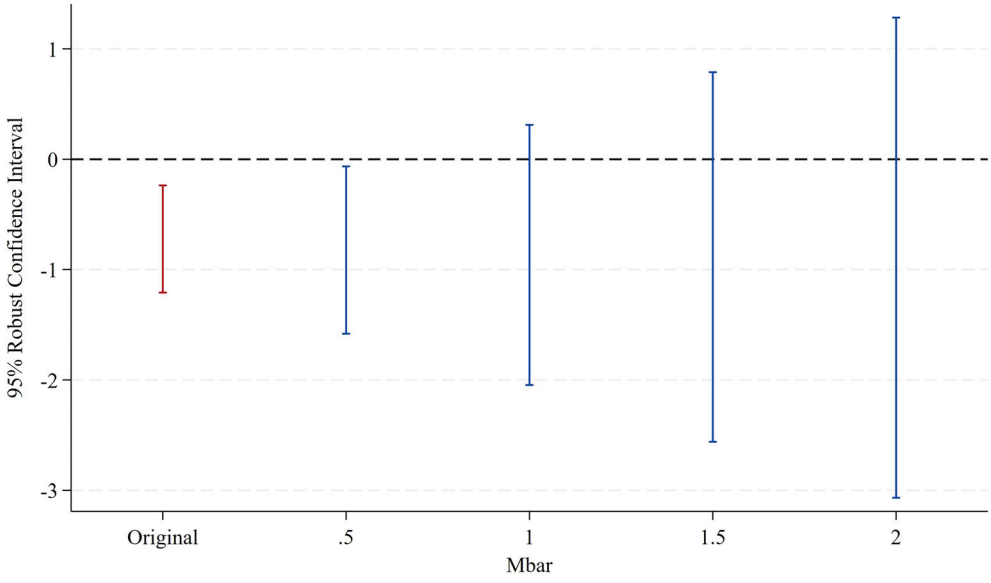

FIGURE 4 Sensitivity analysis for posttreatment parallel trends.

in the other direction, which would result in an overestimation of our effect. We therefore run an additional test comparing our treatment group with an alternative control group of 10,981 dyads in which neither the pass giver nor the pass receiver played in the 2018 World Cup. Consistent with the default analysis, the coefficient of the interaction term is again negative

($\beta = -.407$ and p-value = .001 in Model 4).[8] The comparable effect size also increases confidence in the precision of the point estimate of our default analysis. Beyond addressing the specific issue of overestimating the effect of reduced collaboration, this result also suggests that our results are not sensitive to a chosen control group.

4.3 | Robustness: Asymmetric dyads

We also probe our results' robustness with respect to our conceptualization of collaboration. While our default analysis distinguishes the number of A → B passes from the number of B → A passes, we further test our theory using nondirected dyads (i.e., the dyad is counted once and all passes aggregated). In line with our results for directed dyads, we consistently find a negative coefficient of the interaction term ($\beta = -.606$ and p-value = .001 in Model 5).

4.4 | Robustness: Placebo tests

To further strengthen identification, we ran a placebo test in which we (a) randomly assigned treatment dates and (b) randomly allocated dyads to the treatment and control groups. We reran the specification 5000 times and found that the average of all placebo estimates does not statistically differ from zero. In fact, at $p = .05$, only .058% of our randomly generated estimates are significantly smaller than zero. This result further supports our evidence that players' extra-organizational affiliations with national teams that compete with one another negatively influence subsequent intraorganizational collaboration.

4.5 | Robustness: Alternative treatment—Group-stage announcement

In our default analysis, we tested whether players' collaboration changed after they played each other in the World Cup. Alternatively, we leveraged the announcement of the group stage (for further details, see the section on treatment and control groups and footnote 11). Since the announcement was made on December 1, 2017, it was already known *during* the 2017/18 season which national teams would play each other in the group stage of the World Cup. Even if players do not yet know whether they and their club teammates will be nominated to play in the World Cup—that is announced later—they may nevertheless form expectations of which of their club teammates they might end up playing against in the group stage. We therefore leverage the group-stage announcement as an alternative treatment that lets us address limitations of our default analysis[9] and informs our analysis of the mechanisms behind the effect.

[8]We further explored this problem by running a regression in which we only keep our default control group in the sample and check the coefficient of the post-Cup dummy. Were the suggested substitution effect to exist, the coefficient of the post-Cup dummy would be positive. However, as shown in Model 1 in Table A2 in the Online Appendix, it is statistically indistinguishable from zero ($\beta = .018$ and p-value = .793).

[9]First, doing so allows us to render our analysis robust to concerns of selection bias, as restricting our analysis to the 2017/18 season allows us to capture changes in the collaboration of all dyads, even those that we drop from our default analysis if at least one of the players leaves his club team after the World Cup. Second, it allows us to address a limitation of our default analysis that the group-stage announcement already reveals to a certain degree who will be in the treatment and who will be in the control condition. We thank the reviewer for highlighting these possibilities and helping us render our results robust.

We replace the *Post World Cup* dummy used in the default analysis with a *Post group-stage announcement* dummy which equals 1 if the game between two clubs takes place after the group-stage announcement. Moreover, we examine in this analysis the passing behavior of players during the 2017/18 season and divide this season into a period before and after the group-stage announcement.

Table 3 shows the results. In Model 1, we compare the behavior of all dyads that are at risk to directly compete against each other in the group stage of the World Cup to the behavior of dyads that are not (i.e., the control group). In line with our hypothesis and main results, we find a negative coefficient of the interaction term *Expected direct group-stage competitors* × *Post group-stage announcement* ($\beta = -.346$ and p-value = .010 in Model 1), indicating that players who expect to compete against each other in the group stage pass to each other less often after the announcement.[10]

Overall, this analysis reveals that while our default treatment group did not change its collaboration behavior before the World Cup, those dyads that expected to compete against each other in the group stage already passed to each other less often after the announcement and thus before the World Cup.

4.6 | Mechanism: Identity

Building upon prior work, we theorized identity to be a key mechanism and boundary condition underlying our hypothesis. We suggested that the two colleagues need to strongly identify with the external organizations to which they are affiliated so that the competition between those organizations affects the colleagues' relationship. In the following, we investigate whether our effect is indeed stronger if players identify more strongly with the national team on which they play. We present the corresponding results in Models 1–5 in Table 4. We construct the binary variable *Identification with the extra-organizational affiliation*, which equals 1 if the pass giver in the dyad has a strong identification and 0 otherwise. We use four proxies related to identification to construct this variable.

For our first proxy, we leverage our knowledge that some players in our treatment group have single citizenship while others have multiple citizenship. Research suggests that dual citizenship lowers national identification (Glazer, 2010), which, in our setting, translates into a decrease in a player's identification with his national team. Players with single citizenship are held to identify, on average, more strongly with their national team. We test this idea by splitting our treatment group into two groups and comparing dyads in which the pass giver has single citizenship (*Identification with the extra-organizational affiliation* equals 1) with dyads in which the pass giver has

[10]We further run an analysis that includes all dyads in the treatment group that competed directly against each other either in the group stage or in the knockout stage in the World Cup and compares them to all dyads that did not. The coefficient of the interaction term *Expected World Cup competitors* × *Post group-stage announcement* is indistinguishable from zero ($\beta = -.025$ and p-value = .824 in Model 2), suggesting that dyads who will directly compete against each other in the World Cup do not, on average, change their behavior before the World Cup, even after the group-stage announcement. The fact that we do not find a change in behavior for the treatment group that is most similar to the treatment group in the default analysis further supports the assumption behind our default analysis that the trends *before* the World Cup are similar for the treatment and control groups.

TABLE 3 Exploring the announcement effect.

	Model 1	Model 2
Expected direct group-stage competitors × Post group-stage announcement	−0.346	
	[.010]	
Expected World Cup competitors × Post group-stage announcement		−0.025
		[.824]
Post group-stage announcement	0.238	0.239
	[.009]	[.010]
Dyad's joint minutes in the match	0.051	0.052
	[.000]	[.000]
Dyad's team plays at home	0.193	0.212
	[.000]	[.000]
Constant	−0.180	−0.239
	[.394]	[.228]
Dyad FE	Yes	Yes
Coach-team FE	Yes	Yes
Observations	24,512	26,932
Adjusted *R*-squared	.472	.471

Note: All models show OLS regressions with dyad and coach-team fixed effects. Standards errors are clustered by the home country of the pass giver and pass receiver. Exact *p* values are reported in brackets.

multiple citizenship (*Identification with the extra-organizational affiliation* equals 0).[11] In line with our idea, we find a negative coefficient of the interaction term ($\beta = -.550$ and *p*-value = .002 in Model 1), indicating that the suggested effect is stronger for players with a single citizenship.[12]

As an alternative operationalization of identification, we examine how long players had lived in the country for which they played, reasoning that they would identify more with the national team the longer they had lived in the country. We split our treatment group into two groups and compared dyads in which the pass giver had lived in the country for above the median time (*Identification with the extra-organizational affiliation* equals 1) with dyads in which the pass giver had lived in the country less than the median time (*Identification with the extra-organizational affiliation* equals 0). Again, we find a negative coefficient of the interaction term, suggesting that players who have lived longer in the country of their national team pass

[11]Roughly, 33% of players in our sample have dual citizenship. This is a higher share than in the average population. The reason is that national teams specifically target high-performing players whose current citizenship is with a different country, but who may be eligible to a dual citizenship—allowing them to perform on behalf of the other national team. The underlying process fits our theoretical mechanism, as such an "adopted nationality" is less likely to be a source of strong identification than a first nationality.

[12]To rule out multiple citizenship being correlated with player quality, we correlated a dummy variable indicating multiple citizenship with a player's quality. We use two variables to measure a player's quality: his market value at the time of the World Cup and the rating for his performance in the World Cup (Christenson, 2018). The pairwise correlation between multiple citizenship and market value at the time of the World Cup is .09 and the pairwise correlation between multiple citizenship and rating is .04. Hence, the correlation between a player's quality and his multiple citizenship is very low.

TABLE 4 Testing the mechanisms.

	Model 1 Pass giver has a single citizenship	Model 2 Years pass giver lived in the country	Model 3 Pass giver's tweets about national team	Model 4 Pass giver has a child	Model 5 Dyads on the field versus dyads on the bench
Identification with the extra-organizational affiliation × Post World Cup	−0.550	−0.248	−0.825	−0.207	
	[.002]	[.096]	[.059]	[.193]	
In-person encounter × Post World Cup					−0.382
					[.001]
Post World Cup	0.000	−0.186	−0.093	−0.186	0.028
	[1.000]	[.131]	[.693]	[.211]	[.704]
Dyad's joint minutes in the match	0.046	0.046	0.045	0.046	0.048
	[.000]	[.000]	[.000]	[.000]	[.000]
Dyad's team plays at home	0.342	0.344	0.259	0.345	0.285
	[.000]	[.000]	[.022]	[.000]	[.018]
Constant	−0.042	−0.048	0.038	−0.045	−0.134
	[.872]	[.849]	[.906]	[.859]	[.640]
Dyad FE	Yes	Yes	Yes	Yes	Yes
Coach-team FE	Yes	Yes	Yes	Yes	Yes
Observations	4912	4912	2743	4912	6892
Adjusted *R*-squared	.421	.420	.399	.420	.445

Note: All models show OLS regressions with dyad and coach-team fixed effects. Standards errors are clustered by the home country of the pass giver and pass receiver. Exact *p* values are reported in brackets.

less often to club teammates against whom they played in the World Cup after the tournament than they did before it ($\beta = -.248$ and p-value = .096 in Model 2).

We also proxy identification with the national team by a player's social media activity during the World Cup—specifically, activity on Twitter (now X). Social media activity is a common way for actors (including athletes) to garner attention, seek acclaim, or evoke approval for their organizations' and their own activities (Durand et al., 2024; Heavey et al., 2020). We assume that players who mention their national team more often in their tweets identify more strongly with it. We investigate this by dividing our treatment group into dyads in which the pass giver tweets about his national team above the median amount (*Identification with the extra-organizational affiliation* equals 1) and dyads in which the pass giver does not (*Identification with the extra-organizational affiliation* equals 0). As shown in Model 3 in Table 4, we again find a negative coefficient of the interaction term, suggesting that players who tweet more about their national team pass less often to club teammates against whom they played in the World Cup after the tournament than they did before it ($\beta = -.825$ and p-value = .059 in Model 3).

For our last proxy, we reasoned that players with children may identify more strongly with the national team. Like any parent, soccer players may seek to build a legacy (Erikson, 1964), which may influence their behavior (Dahl et al., 2012). Winning an international tournament with the national team is often seen as important for building such a legacy. Model 4 therefore tests whether the effect of competing extra-organizational affiliations is stronger for players who have at least one child. We manually collected the information on players' children from online resources including Wikipedia, newspapers, club websites, fan magazines, and players' social media channels. While some players or their partners had pictures with a newborn in their social media channels, we sometimes had to figure out the birthday; for example, by counting the candles on the birthday cake. To cross-validate the collected information, two author worked independently on the task. We split our treatment group into dyads in which the pass giver has at least one child (*Identification with the extra-organizational affiliation* equals 1) and dyads in which the pass giver has no child (*Identification with the extra-organizational affiliation* equals 0). Although the coefficient of the interaction term points in the right direction, it is not statistically different from zero ($\beta = -.207$ and p-value = .193 in Model 4). However, the coefficient becomes negative ($\beta = -.360$ and p-value = .074) if we compare dyads in which the pass giver has at least one son with dyads in which he does not.

Finally, our effect should be stronger if players directly encountered a club teammate as a direct opponent in a World Cup match. Encountering a coworker in a competitive activity heightens one's categorization of that coworker as an outgroup member and as a competitor whose identity conflicts with one's own. To investigate this, we compare our treatment group from the default analysis (i.e., all dyads that competed directly against each other in the World Cup) with an alternative control group of dyads whose teams played each other in the World Cup although the focal players themselves were not together on the field (e.g., one was injured or benched). Thus, the only difference between dyads in the treatment and control groups is that the former encountered each other on the field while the latter did not. In line with our suggested mechanism, we find a negative effect of in-person encounters on players' subsequent collaborative behavior ($\beta = -.382$ and p-value = .001 in Model 5).[13]

[13]We also examined whether our suggested effect is stronger when the World Cup encounter was physically more intense. Specifically, we examine the effect of (a) two players directly competing for the ball and (b) a foul play between them, either of which puts them in very close physical proximity. Overall, our analysis reveals that physically more-intense interactions on the field do not strengthen our effect. We show the results in Table A3 in the Online Appendix. We thank an anonymous reviewer for this suggestion.

5 | DISCUSSION

We suggest that the outlined findings shed light on research on extra-organizational affiliations, collaboration, competition and rivalry, and social networks.

5.1 | Extra-organizational affiliations: A hidden but common source of competition

It is common that employees have extra-organizational affiliations. For example, an organization's executives can be on other organizations' boards (Carpenter & Westphal, 2001; Mizruchi, 1996) or on the boards of ventures (Garg, 2013; Garg et al., 2018), engineers participate in standard-setting committees (Dokko & Rosenkopf, 2010; Ranganathan et al., 2018), programmers moonlight in open-source software projects (Dahlander & Wallin, 2006; Lifshitz-Assaf & Nagle, 2022), academics work for funding agencies (Kolympiris et al., 2019; Lampraki et al., 2024), and company employees pursue entrepreneurial activities (Jain et al., 2009; Raffiee & Feng, 2014). Extra-organizational affiliations may also be outside the professional domain: employees may be members of a church (Gubler, 2019; Sitzmann & Campbell, 2021), supporters of a political party (Bermiss & McDonald, 2018; Fos et al., 2023), or activists in a social movement (Rheinhardt et al., 2023). In brief, it is common that employees have extra-organizational affiliations.

The outlined commonality increases the occurrence of the theorized constellation. One factor that further increases the chance of such a constellation is that employees of a given company are often sought after by similar kinds of—and thus potentially competing—firms. Our analysis of professional men's soccer and of board interlocks in the S&P 500 shows the theorized constellation to be quite common. Thus, while it is hidden—in part because it requires tracking collaborative and competitive networks at the organization and the individual levels—it is nevertheless detrimental to collaboration.

This calls for a reassessment of the effects of extra-organizational affiliations. A rich body of research has studied the effects—generally the positive effects—at the individual[14] and organizational[15] levels. The identified negative side effect may, however, outweigh these positive effects, as intraorganizational collaboration is a key driver of organizational and individual performance (Carnabuci & Operti, 2013; Reagans et al., 2005; Samila et al., 2022; Tzabbar et al., 2022).

[14]At the individual level, such affiliations can boost job performance (Panos et al., 2014) and benefit careers (Balachandran & Wezel, 2020; Demetry, 2017; Raffiee & Feng, 2014), but may also undermine performance by drawing time, effort, and commitment away from the person's primary job (Sessions et al., 2021).

[15]Studies of various kinds of extra-organizational affiliation reveal their organization-level consequences. For example, research on board interlocks shows that they facilitate access to strategic information and opportunities (Cheng et al., 2021); inform firms' strategic choices (Davis & Greve, 1997; Geletkanycz & Hambrick, 1997); foster firms' legitimacy (Mizruchi, 1996); and help firms coordinate their decisions and thereby reduce competition (Westphal & Zhu, 2019). Research on standard-setting committees illustrates that organizations benefit from their employees' extra-organizational affiliations, as the affiliated employees can influence committee decisions in the organization's favor (Leiponen, 2008; Ranganathan et al., 2018). Research on open-source software shows that allowing programmers to engage in open-source software projects outside of work helps organizations attract valuable talent (Shah & Nagle, 2020), increases their absorptive capacity and productivity (Nagle, 2018), and cuts product development and sourcing costs (Dahlander & Magnusson, 2005; Gambardella & Von Hippel, 2019).

Our examination of extra-organizational affiliations also contributes to research on agency conflicts. As agents, the employees we study (the players) serve two principles: their club and their national team. While research on agency conflict has focused on employer–employee conflicts (Eisenhardt, 1989; Piezunka & Grohsjean, 2023), we investigate the challenges of multiple principles (Garg, 2013; Levinthal & Workiewicz, 2018; Siggelkow, 2004) by highlighting identity as an underlying mechanism. The agent's identity changes by affiliation with another principal, creating difficulties in collaboration.

5.2 | Collaboration and competition

The outcome of interest in our study is *collaboration*. Research has identified factors that aid and undermine it, including colleagues' traits (Ertug et al., 2022), joint history (Levin et al., 2011; Reagans et al., 2005), and embeddedness (Fernandez et al., 2000; Reagans et al., 2004); company culture (Goldberg et al., 2016) and environment (Asgari et al., 2022; Howard et al., 2016; Mawdsley et al., 2022; Toh & Polidoro, 2013); departmental boundaries (Clement & Puranam, 2018); and office layout (Bernstein & Turban, 2018). Our study illustrates that collaboration can be undermined if two colleagues have extra-organizational affiliations with organizations that compete with one another.

We contribute to research on the co-occurrence of collaboration and competition (Adner et al., 2020; Clough & Piezunka, 2020; Hannah & Eisenhardt, 2018; Hoffmann et al., 2018; Klapper et al., 2024; Piezunka et al., 2018; Thatchenkery & Piezunka, 2024). While the two are seemingly at odds, they frequently co-occur, as they share antecedents (Ingram & Yue, 2008). We contribute by highlighting a neglected affiliation-focused mechanism underlying the co-occurrence of collaboration and competition. Because collaborating coworkers are likely to have similar knowledge, they are more likely to be affiliated with external organizations involved in similar activities and therefore in competition with each other. They are similar—and so the same kind of—and often competing—organization are likely to offer them the opportunity to enter an extra-organizational affiliation with them. Further abstracting suggests that the outlined linkage between similarity, collaboration, and competition underlies many imbalanced triads. This phenomenon has been given a lot of attention recently by scholars examining competition among firms partnering with a common firm (Cox Pahnke et al., 2015; Katila et al., 2022; Ozmel & Guler, 2015; Piezunka & Grohsjean, 2023).

5.3 | Social networks: Perception, embeddedness, and multiplexity

We contribute to the literature on perception in networks (Brands & Kilduff, 2014; Casciaro, 1998; Kilduff et al., 2024; Kilduff & Krackhardt, 1994; Thatchenkery & Piezunka, 2024)—specifically, to research on the question of whom an actor perceives as a competitor or rival (Durand et al., 2024; Kilduff et al., 2010; Kilduff et al., 2012; Porac et al., 1989). We point to a neglected source of interpersonal competition (or rivalry): competition among external organizations with whom coworkers are also affiliated. Our research also confirms findings on asymmetry in the perception of rivalry (Thatchenkery & Piezunka, 2024) and points to a particular origin: people differ in their identification with the organization with which they have an extra-organizational affiliation—potentially resulting in an asymmetric perception of competition.

Our study also illustrates how the relationship between two colleagues is embedded in a broader set of relationships. Research has shown how the structural context of a relationship shapes that relationship (Gulati & Gargiulo, 1999; Hallen et al., 2014; Uribe et al., 2020). Our study contributes to research showing that interpersonal relationships are embedded in inter-organizational networks (Grohsjean et al., 2016; Sherif et al., 1961). We thus contribute to an emerging body of research on how an organization's environment shapes internal collaboration (Asgari et al., 2022; Howard et al., 2016; Mawdsley et al., 2022; Toh & Polidoro, 2013).

Our study, which tracks interpersonal and interorganizational networks to examine how they are linked, demonstrates the value of cross-level network analysis. We track the bi-partite network composed of an organization and its employees. Research has shown how interpersonal relationships shape interorganizational relationships (Broschak, 2004; Rogan, 2014); our work illustrates how interorganizational networks—specifically, interorganizational competition—shape interpersonal relationships.

Multiplexity has generally been associated with the strengthening of relationships (Methot & Rosado-Solomon, 2019; Uzzi, 1996). Research has often compared uniplex and multiplex relationships of positive valence (e.g., collaborators vs. befriended collaborators). In contrast, we examine how multiplexity can undermine collaborative relationships (Ertug et al., 2023; Kuwabara et al., 2010; Operti et al., 2020); we compare uniplex relationships of positive valence (being club teammates) to bivalent multiplex relationships (being club teammates but also members of opposing national teams).

Our study illustrates when cross-domain spillovers take place. While the actors we study are supposed to compartmentalize their behavior—their interactions in one domain should not affect their interactions in the other, institutionally separated domain—we provide evidence of the spillover of professional relationships across domains. We also shed light on the conditions for these spillovers; their occurrence depends in part on actors' identification and on the occurrence of personal encounters.

Methodologically, because our "treatment of multiplexity" is quasi-exogenous, we contribute to the effort to strengthen the identification of causal effects in social networks (Hasan & Koning, 2019; Hernandez et al., 2022; Kleinbaum, 2012; Maoret et al., 2022). Research on multiplexity tends to be subject to endogeneity concerns as the added layer may have occurred endogenously. For example, a professional relationship between coworkers brings about their friendship. Under such circumstances, analyzing the effects of multiplexity—and, thus, treating it as an independent variable—does not allow for causal interpretations since the multiplex ties are nonrandom.

5.4 | Managerial implications

Our research reveals a potential but neglected negative side effect of extra-organizational affiliations: they can decrease intraorganizational collaboration. Managers may want to reassess and coordinate such affiliations. They may also want to invest in a more accurate perception of their networks (Casciaro, 1998; Krackhardt, 1990; Thatchenkery & Piezunka, 2024), as they can benefit from seeing who is affiliated with whom and how the organizations with which people are affiliated are themselves linked.

Managers may also want to limit spillovers. Even if they cannot prevent certain extra-organizational affiliations, such as an employee's involvement in a pro-choice or pro-life movement, they may try to reduce spillover—say, by discouraging discussion of

certain topics at work. For example, the leadership of the software company Basecamp announced on April 26, 2021, that employees should not use internal communication platforms to discuss their political position or affiliation; they explicitly pointed to the frictions that were caused by debates. Managers may also try to establish or strengthen a common organizational identity to counteract the effects of other identities that may be in conflict.

5.5 | Boundary conditions

We have pointed out and examined two scope conditions: identity and competition. These raise the question whether features of our setting bound our findings. The actors we study are young and highly competitive male soccer players; there may be less or even no spillover for less-competitive actors or those better at compartmentalizing. Our findings may also be bounded by the kind of competition we study—a very prestigious tournament of intense interest to fans around the globe. A less-prestigious, less-important competition may result in less spillover. Moreover, athletes may identify more strongly with their national teams than, say, executives do with organizations on whose boards they serve, as only the best are chosen to play for their national team. For almost any type of extra-organizational affiliation, one can easily imagine instances in which our theory is likely to apply or not apply. Our main effect is likely to be contingent on environmental factors and may thus change over time as the environment changes. For example, if you had asked us a few years ago whether national affiliations cause friction among members of a university, we would have expected at most a light effect. Today, due to the wars being fought between Russia and Ukraine and between Israel and Palestine, nationality is a frequent source of intense friction on campuses.

Our findings may also be bounded by temporal dynamics. We theorize and examine situations in which two players are *simultaneously* employed by the same club, but also have extra-organizational affiliations with two organizations that compete with one another. Employees' (extra-)organizational affiliations may, however, be sequential (Carnahan et al., 2022; Carnahan & Somaya, 2013; Gubler, 2019; Gubler & Cooper, 2019; Mawdsley & Somaya, 2016) and our theory may not extend to these. In addition, the effect of extra-organizational affiliations with organizations that compete with one another may vary over time; for example, if the intensity of competition changes. Employees who support opposing political parties, for example, may feel more strongly about this around elections than at other times. However, it might also be that our theorized effect is persistent over time as employees develop new collaboration routines.

6 | CONCLUSION

Our study illustrates how extra-organizational affiliations, which often serve an organization as bridges to other organizations, can also be a source of friction within an organization. We certainly do not want to encourage anyone to build fewer bridges or tear any down. Rather, we hope our paper provides guidance on how to better leverage extra-organizational affiliations by avoiding those that do cause friction. If two coworkers find themselves affiliated with two organizations that compete with one another, we encourage them to compartmentalize: Compete outside, collaborate inside!

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from Wyscout. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from the authors with the permission of Wyscout.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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