

Responsibility in Teams

work in progress

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Abstract

This paper provides a rationale for why holding responsible fewer rather than more members of a team increases team success. Team members can freely coordinate on who should do what. The outside world cannot observe what happened within the team but only whether the team was successful or not. In case of failure, one or several members of the team may be sanctioned; their reputation or image may suffer or they may lose their yearly bonus. Sanctioning, however, cannot be arbitrary. A team member can appeal against unfair sanctions; sanctions are repelled if this team member did not violate any norm (or if this violation is unlikely). If the organization places little emphasis on protecting the right of ‘innocent’ team members and team cohesion is low, holding the whole team formally responsible is optimal. Otherwise, assigning responsibility to one member is optimal.

Introduction

Teams are well known to be plagued by free rider problems (Alchian and Demsetz, 1972; Holmström, 1982). In practice, these problems are sometimes overcome by selecting one team member and holding this person responsible for the joint team output.¹ Often, it does not even matter who is given the responsibility, as long as it is given to some member. This works even if team members

¹Who is accountable also plays a key role to explain when groups can overcome the tragedy of the commons (Ostrom, 2010).

have ample opportunity to communicate and hence do not need any responsibility assignment to solve coordination problems. The success of responsibility assignments suggests that team members can in principle tackle the free rider problem. But why and when is an accountable team member necessary for these forces to be unleashed? Why and when does holding the whole team accountable for the team output not work?

The paper argues that two factors play a crucial role. The first factor is team cohesion. In a very cohesive team, members trust each other a lot and are willing to exchange favors. In less cohesive teams, getting other members to cooperate is more time consuming or difficult. We find that assigning responsibility to one member is more attractive the more cohesive the team.

The second crucial factor is the organizations' civility, i.e., the willingness to punish innocent people. A football club and its peaceful supporters may, for example, be sanctioned by the football association for misbehavior of hooligans who associate with this club.² On the other hand, courts typically presume an accused innocent until proven guilty. We find that civility renders the case of having a single responsible member more attractive.

These findings are derived in a team production setting in which only the output of the whole team is observable. Members of the team may be sanctioned in case that the team project fails; their reputation or image may suffer or they may lose their yearly bonus if the project is not successful. Whether someone will be sanctioned and who will be sanctioned is the decision of the supervisor (principal). To this team setting, we add two ingredients. First, team members can appeal against 'unfair' sanctions. Sanctions are only upheld for a team member if there is sufficient proof that this team member has violated a norm. Otherwise, sanctions are revoked. Second, team members can help each other and this help is more or less reciprocated depending on team cohesion. We also assume that team members move sequentially to show that responsibility assignment matters even in the absence of coordination problems.

The paper distinguishes between formal and real responsibility. By formally assigning a team member responsibility, the supervisor reserves the right to sanction this member later. Members that are not given responsible cannot be hold responsible later and not be sanctioned. A team member is really responsible for the team's failure to meet some target outcome if this member has violated a stable norm that supports this target outcome. (As a stable norm supporting a target outcome, we

² For an example, see here.

take here a subgame-perfect Nash equilibrium that leads to this target outcome.)

For the intuition of why civility and team cohesion matters for the optimal assignment, consider a team of two members: A and B. If both members are assigned formal responsibility, the supervisor reserves the right to sanction both. Since only the team output is observable, the supervisor cannot identify whether A or B caused the shortfall. Sanctioning A runs the risk of punishing someone ‘innocent’: A might not actually be responsible. The supervisor’s power to sanction is thus curbed by the civility of her organization. If civility is so high that sanctioning members who are not responsible is ruled out, no incentives can be provided to team members at all. If collective punishments are very much tolerated, the efficient outcome can be produced and team members will help each other to generate this outcome.

Still, output can also be achieved in organizations with high civility by assigning responsibility to only one member, say A. Doing so transforms the problem substantially. Member B is ‘off the hook’ and will not contribute anything beyond what he wants to contribute under any norm (or in any subgame-perfect Nash equilibrium.) In other words, A is not only formally but also really responsible for the team output. If the team output is not achieved and the supervisor sanctions A, even an organization who has no tolerance toward punishing innocent will confirm this sanction. This renders sanctions very effective. On the other hand, sanctions can only provide incentives for A. The only reason for B to help with the team outcome is team cohesion. If B is unwilling to return favors to A, very little can be achieved by having A as the responsible. If team cohesion is high, A can buy the support of B and a high benefit can be generated by assigning responsibility to A.

Our finding that assigning responsibility to several agents has lower effects than assigning responsibility to only one agent can explain why ‘markets’ as an institution lead to more ‘immoral’ behavior. Falk and Szech (2013) find that subjects are more likely to engage in immoral behavior (killing an animal) when this behavior is the result of a market transaction. In order to make this point, they compare a treatment in which one subject is held individually accountable for the death of the animal with one, where the animal is killed when two subjects agree on a trade. In the light of our finding, the lower willingness to pay for the life in the second case may be explained by the diffused responsibility. While such diffused responsibility is a feature of markets, it may also occur in other institutions, for example in work teams. Our prediction would be that the willingness to engage in immoral behavior would be reduced in such institutions as well. We intend to complement

our theoretical study with an experiment testing its predictions.

Sorry, the following sections are not yet in a presentable format

References

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