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SCIENCE BRIEFS

What Makes for a Great Team?

Research has identified five conditions that, when present, increase the probability of team effectiveness.

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Let us begin with a thought experiment. Think for a moment about one of the finest teams you have every seen--one that performed superbly, that operated increasingly well over time, and whose members came away from the group experience wiser and more skilled than they were before. Next, think about a different group, one that failed to achieve its purposes, that deteriorated in performance capability over time, and whose members found the group experience far more frustrating than fulfilling. In your view, what is most responsible for the difference between these two teams?

If you are like most people I've asked to perform this exercise, the first explanation that came to mind had something to do with the leadership of the two teams. Indeed, "great leader" is almost always a central feature of the image we conjure up when we think about a great team. And poor leadership is one of the first explanations that comes to mind when we contemplate a team that has gone bad. It is, for example, the coach who is celebrated when his or her team turns in winning performances game after game, season after season. And the standard remedy for an athletic team that experiences a string of losses is to fire the coach.

Our tendency to assign to the leader credit or blame for successes or failures that actually are team outcomes is so strong and pervasive that I'm tempted to add to the conceptual clutter of our field by calling it the "leader attribution error." And it is not just outside observers or bosses who over-attribute to leaders. Team members themselves, the people who actually generate the collective product, also are vulnerable (Corn, 2002; Pichanick & Roher, 2002). Indeed, research

has shown that the leader attribution error is muted only when there is significant ambiguity about whether a team's performance was a success or a failure (Meindl, 1990).

The leader attribution error is understandable because people generally assign causal priority more to things they can see (and leader behavior usually is quite salient) than to things that operate in the background (and structural and contextual features that shape team performance often go unnoticed). Even so, the error would be little more than a modestly interesting research tidbit except for what it has spawned: a veritable industry of training programs intended to help leaders learn and execute the behaviors and leadership styles that those who design the programs think facilitate team performance. Everything I know about leadership courses suggests that, when well executed, attendees absolutely love them. The problem is that research evidence that would document the benefits for team performance claimed by the offerers of such courses is hard to find. It may be hard to find because it does not exist.

Thinking Differently About Team Leadership

The pervasive focus on the team leader in explaining team performance is consistent with the widely-shared view that performance outcomes are directly shaped by group interaction processes which, in turn, are strongly influenced by the behavior and style of the team leader. This is a conventional input-process-output model, in which causality flows linearly from left to right, step by step. Yet, surprisingly, research on task-performing teams has failed to support the standard model (for a review, see Hackman, 1987). Indeed, there is evidence that, at least in some circumstances, causality flows in the opposite direction. In this unconventional alternative, how well a team is performing is viewed as one of the major influences on group interaction processes. Teams that are failing report more than their share of conflicts and other process problems, whereas those that are performing well view the going as significantly smoother (Staw, 1975). Moreover, the style of team leaders turns out to be powerfully shaped by the behaviors of those who are led: If members are behaving cooperatively and competently, leaders tend to operate more participatively and democratically, but if members are uncooperative or seemingly incompetent, leaders tilt toward a more unilateral, directive style (Farris & Lim, 1969; Lowin & Craig, 1968; Sims & Manz, 1984).

At the very least, causality runs in both directions--from leader to group, as in the conventional model, but also from group to leader, as in the unconventional alternative. Regardless of the direction of causal flow, however, both the conventional and the unconventional models posit linear, cause-effect relationships. Our research suggests that a robust and useful understanding of team leadership may require more than merely changing the direction of the causal arrows. Specifically, it may be necessary to focus less on the causes of group behavior and performance and more on the structural and contextual conditions within which groups form and develop over time.

Conditions Rather Than Causes

To think about the conditions within which groups chart their own courses is very different from conventional scholarly models. The basic idea is that certain conditions get established, whether deliberately or by happenstance, and groups unfold in their own idiosyncratic ways within those conditions. As I have argued elsewhere, the difference between creating favorable conditions and actively managing causal factors in real time is evident in the two different strategies that can be used by a pilot in landing an aircraft (Hackman, 2002). One strategy is to actively fly the airplane down, continuously adjusting heading, sink rate, and airspeed with the objective of arriving at the runway threshold just above stall speed, ready to flare the aircraft and touch down smoothly. The alternative strategy is to get the aircraft stabilized on approach while still far from the field, making small corrections as needed to heading, power, or aircraft configuration to keep the plane "in the groove." It is well known among pilots that the latter alternative is safer.

To be stabilized on approach is to have the basic conditions established such that the natural course of events leads to the desired outcome--in this case, a good landing. The same considerations apply to the design and leadership of social systems, including work teams. Rather than trying to pinpoint and directly manipulate specific "causes" of performance outcomes (the parallel of trying to fly the airplane down), scholars and practitioners would seek to identify the small number of conditions that increase the likelihood that a team will naturally evolve into an ever more competent performing unit.

What Conditions?

Our research has identified five conditions that, when present, increase the probability of team effectiveness. These conditions, which are described and discussed in detail in my recent book on team leadership (Hackman, 2002), can be briefly summarized as a series of five questions. The answers to these questions provide a quick assessment of the degree to which the conditions are present for a given team.

One, is the group a real team, with clear boundaries, interdependence among members, and at least moderate stability of membership over time? Two, does the team have a compelling direction, a purpose that is clear, challenging, and consequential--and that focusses on the ends to be achieved rather than the means the team must use in pursuing them? Three, does the team's structure--its task, composition, and core norms of conduct--enable rather than impede teamwork? Four, does the team's social system context provide the resources and support that members need to carry out their collective work? And five, is competent coaching available to help members get over rough spots and take advantage of emerging opportunities, and is such coaching provided at times in the team life cycle when members are most ready to receive and use it? A diagnostic instrument, the Team Diagnostic Survey, provides quantitative measures of a team's standing on these five conditions (Wageman, Hackman, & Lehman, 2004).

Research confirms that the presence of the five conditions--real team, compelling direction, enabling structure, supportive context, and competent coaching--enhances team performance effectiveness. In a study of 64 analytic teams in the U. S. intelligence community, for example, Hackman and O'Connor (2004) found that 74 percent of the variance on a reliable performance criterion was controlled by these conditions.

Research also has shown that the order of the conditions is important. In a study of self-managing field service teams, Wageman (2001) obtained independent assessments of each team's design, the coaching behaviors of its leader, the team's level of self management, and its objectively measured performance. Team design was four times as powerful as leader coaching in affecting a team's level of self-management, and almost 40 times as powerful in affecting team performance. Moreover, Wageman found that "good" coaching (such as helping a team develop a task-appropriate performance strategy) significantly helped well-designed teams exploit their favorable circumstances but made almost no difference for poorly designed teams. "Bad" coaching (such as identifying a team's problems and telling members exactly what they

should do to fix them), by contrast, significantly compromised poorly designed teams' ability to manage themselves, worsening an already difficult situation--but did not much affect teams that were well designed. These findings confirm that even highly competent coaching cannot reverse the impact of a flawed team design (Hackman & Wageman, in press).

Leading Teams Well

The main work of team leaders is first to ensure that the team's basic performance conditions are sound and then to help team members take the greatest possible advantage of their favorable circumstances. There is no one best strategy or style for accomplishing this. Instead, team leadership involves inventing and competently executing whatever actions are most likely to create and sustain the five conditions identified above. Anyone who helps do that, including team members who hold no formal leadership role, is exercising leadership. What is important is that the key leadership functions get fulfilled, not who fulfills them and certainly not how they go about doing it (Hackman & Walton, 1986; McGrath, 1962).

Even so, our research does point to four personal qualities that appear to distinguish excellent team leaders from those for whom leadership is a struggle. First, effective leaders know some things--they are aware of the conditions that most powerfully shape team effectiveness. Second, effective leaders know how to do some things--they have skill in extracting from performance situations those themes that are most consequential for performance and in acting to narrow the gap between a team's present reality and what could and should be. Third, effective team leaders have emotional maturity sufficient for the demands of their role. Leading a team can be an emotionally challenging undertaking, especially in managing both one's own and others' anxieties. Emotionally mature leaders move toward anxiety-arousing states of affairs in the interest of learning about them, rather than move away to get anxieties reduced as quickly as possible. Finally, team leaders need a measure of personal courage. Leadership involves moving a system from where it is now to some other, better place. That means that the leader must operate at the margins of what members presently like and want rather than at the center of the collective consensus. This requires challenging existing group norms and disrupting established routines, which can elicit anger and resistance. Leaders who behave courageously can make significant differences in how their teams operate--but they may wind up paying a substantial personal toll in the bargain.

The four qualities just discussed are differentially amenable to training--and in the order listed. It is relatively straightforward to help team leaders expand what they know about the conditions that foster team effectiveness. It is more pedagogically challenging but entirely feasible to help them hone their skills in diagnosis and execution. To foster team leaders' emotional maturity is harder still, and perhaps is better viewed as a developmental task for one's life than as something that can be taught. Courage may be the most trait-like of the four attributes. Although there indisputably are individual differences in courage, it is beyond me to imagine how one might help leaders become more willing than they already are to take courageous actions with their teams, peers, and bosses to increase the chances that their teams will excel.

These four personal attributes may seem strange to those who are accustomed to thinking of leadership qualities mainly in terms of personality or behavioral style, and I offer my views in speculative spirit. But it is nonetheless true that the superb team leaders I have observed over the years have most, if not all, of these very qualities. It may be worthwhile to give new thought to old questions about how team leaders might be selected and trained on attributes such as these.

Conclusion

The challenge of our research findings for psychologists is to take more seriously than we have heretofore the implications of thinking about team dynamics in terms of conditions rather than causes. Moreover, we need to find ways of studying those dynamics that do not caricature them in order to make them amenable to study using conventional cause-effect conceptual models and research methodologies. The challenge for practitioners is to make sure that team leaders are carefully selected and competently trained, to be sure. But even fine leaders can make little constructive difference if they have little latitude to act--for example, if all team performance processes are dictated by technology or pre-specified operating procedures. It is the difference between a jazz musician and a section player in a symphony orchestra: The former has lots of room to improvise, whereas the latter must follow exactly a detailed score, and do so under the direct and constant supervision of a conductor. Team leaders should be more like jazz musicians.

Both scholars and practitioners compromise their own espoused objectives when they hold constant conditions that may be among the most substantial influences on their phenomena of interest. Yet we regularly do this: researchers do it to achieve experimental control, and practitioners do it to preserve established organizational structures, systems, and authority hierarchies. Until both scholars and practitioners break out of traditional ways of construing and leading social systems, we will remain vulnerable to the leader attribution error--and we will continue to mistakenly assume that the best leaders are those who stand on whatever podium they can command and, through their personal efforts in real time, extract greatness from their teams.

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