

Editorial

The Science of Team Effectiveness

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Teams are ubiquitous. Whether we are talking about software development, Olympic hockey, disease outbreak response, or urban warfare, teams represent the critical unit that “gets things done” in today’s world. In an era characterized by complexity, technological sophistication, and the need for rapid response, collaboration among team members has led to sensational outcomes that could not be accomplished by individuals alone. Leaps forward in areas from innovative product design to drug development to international negotiation have come from team efforts. Yet the challenges of teamwork have the potential to create problems. For example, the 2004 9/11 Commission report documents the failure of our intelligence and law enforcement agencies to manage and share information effectively across teams as a key factor leading to our susceptibility to terrorist attacks. Similarly, the 2003 Space Shuttle Columbia accident analysis showed that NASA employees valued technical excellence but did not have a team-oriented culture that valued safety, respect, and open communication.

Because we place so much importance on the work of teams, one predominant question arises: How do we build and manage effective teams? There is a great demand for knowledge about what makes them succeed. While you can walk into any bookstore and find books by authors who recount their strong personal opinions about how teams work, we have access to an extensive science that provides evidence-based conclusions about how teams function. Kozlowski and Ilgen have reviewed decades of research on important teamwork processes and team performance and factors that are most likely to influence the way that teams perform. These authors provide a comprehensive review and analysis of the current body of literature on team effectiveness, as well as guidance on where we should direct our future research efforts.

The best teams are well designed up front, yet just because a team has the right people doesn’t mean that it will be successful. Kozlowski and Ilgen present the science behind team effectiveness: what we know about the way team members interact that leads to success. The authors present the evidence for team cognitive factors and behavioral, motivational, and affective processes that create a collaborative advantage. The authors have done an outstanding job of not only summarizing the vast body of research on team performance but also providing an organizing

framework for understanding different streams of research and their contributions to our knowledge of how teams operate.

The first half of the manuscript tells us about the characteristics of effective teams. We learn that the best teams are able to leverage the knowledge and expertise of their members, are cohesive and confident, allocate their resources appropriately, and coordinate their collective actions well. The worst teams do not have a collective mindset that incorporates their strategic imperative. Their inability to manage conflict diverts attention from core tasks, they can’t learn from mistakes, and they don’t back each other up when needed. The second half of the manuscript responds to the question: So if we know what types of teamwork processes are important for teams, how can we leverage them to promote effectiveness? Kozlowski and Ilgen describe research findings related to team leadership, training, and design interventions that tell us when each is valuable and for what purposes. The authors ground their review in the idea that teams are typically embedded in larger systems: How a team functions has as much to do with its ability to understand and adapt to changing circumstances of the environment in which it operates as it does with how the team itself accomplishes its goals.

From reading this manuscript, readers can determine where we need to target future research efforts. Kozlowski and Ilgen identify several areas for “vigorous and rigorous” theory development that will direct scientists to understudied but important areas for future research. For example, we understand that teams that have ability to learn from their experiences will perform better, but we don’t yet know how to create teams that are primed for learning. Similarly, there is research that links team emotions and mood to team performance, but we need to know much more about the factors that determine team affect. Importantly, the authors also show how and where the research reviewed might be used to guide policy and practice in such areas as management education and corporate and military training programs.

In summary, Kozlowski and Ilgen provide both the architecture for a better understanding and the details about those teamwork processes and interventions that will enhance team effectiveness. It is certain that those who are involved in designing, managing, or working in teams will benefit from this report.