

Teamwork

Across many work domains including business, education, science, technology, governance, and manufacturing, a majority of work is done, at least in part, by teams comprised of members with differing roles and expertise that exhibit interdependence on each other and their technological systems (Fiore & Wiltshire, 2016; Wildman et al., 2013). The science of teams is a multi-disciplinary endeavor that draws on multiple facets of human factors as well as the organizational, cognitive, and computational sciences. This area of inquiry is crucial to ensure that we are able to form, develop, and maintain teams that can cope and adapt to increasing complexity in the workplace.

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Not only this, but effective teamwork is also fundamental to solving many of the societal challenges we currently face such as the global COVID-19 pandemic, the risk of ecological collapse as a result of the unyielding imperative for economic growth, and widespread propagation of misinformation about public health and societal governance. Of course, these challenges are not directly addressed in the scope of this dossier, but facilitating the advancement of the science of teams is an effort, I argue, that can work toward these general aims. Thus, I am glad to present a few different aspects of teamwork research here.

The first article by Martine Bruijine and Marijke Melles combines design, healthcare, and teamwork. They discuss the Human-Centered Design (HCD) approach and summarize two case studies, which demonstrate team work can be scaffolded by innovative technological designs.

Next, the second article by Jan Maarten Schraagen and Lida David incorporates elements of systems thinking and explains the concept of resilience, how it applies to teams and teamwork with a particular focus on team communication. They discuss some of their work studying team communication in medical and spaceflight contexts, and discuss how to use methods that further the investigation of resilience in a team contexts.

Lastly, we have an article advancing best practices for providing teams with feedback based on work by Catherine Gabelica, for example, examining training and feedback for aviation crews. These are evidence-based, yet practical recommendations that can be readily adopted into many of our own current teamwork practices. And, by doing so, it can help to ensure that our teams are able to continue to perform well together in the future.

The study of teamwork is vast and growing regularly. By incorporating aspects of design, resilience and communication, and team feedback into this Teamwork Dossier, a few of the critical areas have been explored. Of course, future work is needed to not only progress the promising areas that our authors present, but also other aspects that integrate team dynamics, sensing technologies, and computational advances to better our understanding of what contributes to teams that are cohesive and effective (see for example Kozlowski, 2015; Stevens & Galloway, 2019; Wiltshire & Fiore, 2014).

References

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