Title:

Team Interdependence: Construct and Measurement Challenges

Abstract:

Background:

Teams are "interdependent collections of individuals who share responsibility for specific outcomes" (Sundstrom et al., 1990; p. 120), and they are used in work organizations to achieve difficult and complex goals. Indeed, the degree to which teams are interdependent serves an important role in team research. However, researchers use varying measures of interdependence (see Pearce, 1993; Staples & Webster, 2008; van der Vegt et al., 2001) that have received little systematic construct validation. Given the criticality of the interdependence construct in teams, the fact that there is conceptual and methodological confusion in this area is troublesome.

Methods:

In this study, we examined the reliability of various team interdependence measures and the intercorrelations among them. The members of 147 student project teams (N = 547) responded to six measures of team interdependence.

Results:

Preliminary results suggest that, although they are often used interchangeably by researchers, these interdependence measures are only minimally interrelated, suggesting that this construct and its measurement needs more serious attention.

Discussion:

Given that team interdependence measures were not strongly interrelated, this suggests these measures are not measuring the same underlying construct.

Conclusion:

More research is needed to compare these task-related measures to other types of interdependence, such as goal and reward interdependence. Furthermore, future studies should examine the predictive power of interdependence measures on team process variables.

Interdisciplinary Reflection:

Team research bridges the fields of psychology, business, and sociology. By understanding teams in the workplace, we can understand social processes, how individuals behave in groups, and how to properly design work tasks for optimal performance.