What team communication can tell us about team effectiveness

Marcella Hoogeboom, assistant professor at the University of Twente, explores how team dynamics affect team performance and seeks to answer the question: why is it that some teams show high levels of learning and are very effective, while other seemingly similar teams are less effective? Her work has been inspired by complex adaptive systems (CAS) theory, which investigates how teams interact with each other in the context of various types of tasks. It finds that the nature of team interactions changes as the types of tasks vary.

Dr Hoogeboom’s research is based on the belief that the way in which teams function is more complicated than simply aggregating their parts. Teams are adaptive systems and entities that change how they operate based on the context they are operating in. Using video recordings she examines team dynamics and real-time behaviour in team meetings. The team interaction patterns, that consist of minute behaviours, observed on film, are subsequently coded and analysed to delve deeper into team behaviour, deriving insights into team effectiveness and performance.

A COMPLEX ADAPTIVE SYSTEMS APPROACH

While a substantial amount of business management research has focused on leadership attributes, Dr Hoogeboom believes that there is a lack of analysis into behavioural interactions of leaders and their teams in the meetings which are such a regular feature of working life. She argues that the task context is an important and neglected parameter of teams’ analysis and that team interaction patterns (the behaviours that evolve and occur periodically so they can be considered a recurring pattern of behaviour) and team information sharing differ depending upon the type of task a team is working on. Different patterns are seen when teams are dealing with routine tasks (e.g. regular administrative activity), versus nonroutine tasks (e.g. a new strategic problem that the team must address).

Dr Hoogeboom wanted to expand the literature on CAS theory by going deeper into the impacts of team interaction patterns, how they affect team effectiveness and what impact the routine or nonroutine nature of the task at hand has on this. Taking a CAS approach provides an effective system for analysing recurring behaviour patterns.

EXPLORING TEAM MEETINGS AND MICRO-BEHaviours

In Dr Hoogeboom’s latest study, 96 individual teams in a large public sector organisation in the Netherlands were analysed. The teams comprised 1,395 members involved in financial administration data processing. The sample included meetings of teams working in both a routine task context and nonroutine task context. The researchers looked for 18 pre-defined micro-behaviours. These included defining one’s position, for example saying “I can’t help it, my boss wants it like that”, and providing negative feedback, for example, “I’m not happy with the way you did this”.

Other micro-behaviours included task monitoring, for example, “Are we going to meet the deadline?”, and showing personal interest, for example, “You must be happy about that”. Micro-behaviours also included body language, for example whether team members looked bored, nodded, or talked to others during the meeting.

Micro-behaviours were grouped into four meta-categories, or bigger conglomerates of behaviours that include similar type of specific behaviours, based on current leadership theory literature; whether the communication was transactional, entailing communication that is focused on setting performance expectations and goals and correcting deviations when patterned behaviours are not being met, whether it was transformational, meaning communication which involves encouragement, inspiration and motivation to innovate or create change, or an initiating structure type behaviour, meaning task-based communication, or whether it represented counterproductive behaviour.

Using theme pattern recognition software to analyse the results, team interaction patterns were identified. In total, 110,635 behavioural events were coded, and 7,879 behavioural patterns noted. As Dr Hoogeboom suggests, “This indicates that teams tend to engage much more in types of behaviour, that is patterns of team behaviours that are constantly recurring while interacting with others, although they are often not aware of it. Creating more awareness of the patterns of behaviour can enhance the teams’ understanding of how to become more effective.”

HOW DO TEAMS INTERACT?

Dr Hoogeboom set out to test six hypotheses about the way teams interact in meetings. Four hypotheses were confirmed. Results confirmed that information sharing explains the relationship between recurring patterns of team interaction and team effectiveness. It also explains the relationship between participative team interaction patterns and team effectiveness. Thus, when a team interacts in a certain way, this influences the degree of information sharing in the team, impacting their performance. Recurring patterns of team interaction were negatively related with team information sharing and performance, while engaging in participative interaction patterns was positive for higher levels of information sharing and performance. The contact of the task dictated the strength of the relationship between recurring and participative team interaction patterns and team information sharing.

Notably, the study highlights how critical it is for teams working in highly nonroutine or knowledge-intensive type tasks should avoid engaging in recurring patterns of behaviour; this will reduce the effectiveness of information sharing, and therefore performance, over time. The results showed that in these teams of knowledge workers, a high participation level from all members when they are interacting (e.g. more frequent shifts in who is speaking) supports greater information sharing and higher performance.

The results did not confirm the hypothesis that heterogeneous team interaction patterns (i.e. interaction patterns with high levels of behavioural variation) are positively related to team effectiveness through information sharing. The idea that task context influences the relationship between
behaviours occur when team members contribute to our understanding of what coding through a “meaningful taxonomy” Hoogeboom proposes that behavioural effectiveness, suggesting why some and team interaction as key indicators for overall team performance and effectiveness.

**PRACTICAL APPLICATION OF THE FINDINGS**

Dr Hoogeboom’s findings provide vital insights for enhancing team training and development programmes; they provide a system for how to build and sustain a high-performance team depending upon the specific task context. Developmental programmes can be targeted at employees based on the roles that they perform, and what interaction patterns will best support high performance in that environment. For example, specific training can be offered on the task-directed patterns of interaction that we know lead to higher performance levels. Her findings provide critical insights for the leaders of teams, who need to understand the significance of team information sharing and their recurring patterns of interaction, if they wish to reach high performance standards. Leaders of teams who perform nonroutine work need to be creative in keeping their information sharing mechanisms feeling fresh, and therefore more effective. Leaders can also be coached on how best to encourage high participation levels from their team members based on the study’s findings, so that no team member feels ‘out of the loop’. Leadership training interventions can support leaders to be more role-adaptive so that they can role model and facilitate effective ways of interacting for their teams. Leaders and team members as well as coaches can use Dr Hoogeboom’s system of behaviour coding to assess their individual interactions and how these are supporting or detracting from the team’s performance. This is because the codebook specifically includes behaviour that can be actually observed in a workplace environment.

She concludes: “The study shows that teams who can adapt quickly and who are more flexible or open toward each member’s input, especially when working in a nonroutine or knowledge intensive task context, exhibit higher levels of performance.”

**The most effective teams primarily have interaction patterns that are characterised by task-directed behaviours, such as information sharing and monitoring.**

are indeed functional. Using content analysis, the researchers shed light on which interaction patterns are functional and dysfunctional.

**IMPORTANCE OF TEAM INFORMATION SHARING AND INTERACTION**

Notably, this research highlights the importance of team information sharing and team interaction as key indicators for overall team performance and effectiveness, suggesting why some teams perform better than others. Dr Hoogeboom proposes that behavioural coding through a “meaningful taxonomy” contributes to our understanding of what behaviours occur when team members interact with one another. She says: “Team members tend to tailor their interactions to the nature of the work at hand. In a nonroutine or knowledge-intensive task context the effects of routinised or more rigid and recurring forms of interaction are even more detrimental for the amount of information sharing and performance. High levels of participation or team member switches during team meetings are even more important in a nonroutine team task context."

This study also finds different interaction patterns in the most and least effective teams. Dr Hoogeboom asserts: “The most effective teams primarily have interaction patterns that are characterised by task-directed behaviours, such as information sharing and monitoring.”

As such, Dr Hoogeboom’s research highlights the importance of team information sharing and team interaction as key indicators for overall team performance and effectiveness.

**References**

