The Science of Teamwork: What really matters?

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Considerations for the New World of Work

Presented at ATD SCC Chapter Sept 2020
In our time together – I hope to...

A. Share 2 quick observations about teams
B. Dispel 4 common myths about teams
C. Describe the seven drivers of teamwork -- the 7C’s
   • Share a few select research findings
D. Recommend a simple, proven way to boost effectiveness
E. Engage in Q & A

I’ll also leave you with a handout
“No individual can win a game by himself.”
- Pele
Observation #1

Organizations are using teams more than ever and collaboration expectations are rising:

- All types of teams: stable, temporary, co-located, virtual

Like it or not, the future of work involves teams!

Interestingly, less than 50% of companies report they have a dedicated L&D curriculum for developing teams (Brandon Hall, 2020)

Time spent in collaborative activities has ballooned 50% or more (Cross et al, 2016)

In 70% of companies, over half of work is done in teams (Brandon Hall, 2020)
Observation #2

Unfortunately, many teams perform sub-optimally

<table>
<thead>
<tr>
<th>Organizational View</th>
<th>Personal View</th>
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<tbody>
<tr>
<td>Ineffective teams hurt our results</td>
<td>Being on an ineffective team drains my energy – I don’t want to be on another team</td>
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92% view teams as critical, but only 23% view own team as effective (Davie, 2013)

The intensity of shared experiences, good and bad, is amplified (Boothby et al., 2014)
Four Myths About Teamwork
Four Common Myths

• Focusing on teamwork is a distraction ❌
• If team members like each other and maintain harmony, the team will be successful ❌
• Being a team player means suppressing individual excellence ❌
• Teams are always the answer ❌
What Really Drives Team Effectiveness?

Based on your experience with teams, what is it that makes a highly effective team so effective while other teams may struggle?
Fortunately, there is a strong, growing body of team research to help us!

We need to “crack the code” for team effectiveness...
The Science of Teamwork

Almost 50 meta-analyses published

“Teamwork makes the dream work in space flight.”
- CMDR Scott Kelly
Choose a Team to Think About

It could be a team that you lead or are (or were) a member of…

How does that team compare to what Scott is telling us?
The Seven “C’s” of Teamwork (Drivers)

<table>
<thead>
<tr>
<th>Driver</th>
<th>Key Question</th>
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<tbody>
<tr>
<td><strong>1. Capability</strong></td>
<td>Right <strong>people</strong> with the right mix of KSA’s?</td>
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<tr>
<td><strong>2. Cooperation</strong></td>
<td>Constructive <strong>attitudes</strong> about this team?</td>
</tr>
<tr>
<td><strong>3. Coordination</strong></td>
<td>Demonstrate necessary teamwork <strong>behaviors</strong>?</td>
</tr>
<tr>
<td><strong>4. Communication</strong></td>
<td>Exchange <strong>info</strong> effectively with each other and outside?</td>
</tr>
<tr>
<td><strong>5. Cognition</strong></td>
<td>Possess a <strong>shared understanding</strong> (e.g., priorities, roles, vision)?</td>
</tr>
<tr>
<td><strong>6. Coaching</strong></td>
<td>Leader and/or team members demo <strong>leadership behaviors</strong>?</td>
</tr>
<tr>
<td><strong>7. Conditions</strong></td>
<td>Have favorable <strong>conditions</strong> (e.g., resources, culture)?</td>
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Based on my work with Professor Eduardo Salas from Rice University
Capability = Knowledge, skills, and attributes (including personality)
Findings Related to Competence

• **Individual competence** matters – hard to overcome big talent gaps
  • Smart (Stewart, 2006), talented (Aguinis & O’Boyle, 2014), and capable helps

• But, adding **stars** won’t always boost performance (Swaab et al., 2014)
  • In interdependent teams (and chicken coops), too many stars can hurt performance
“Cooperative” attitudes such as collective efficacy, trust, respect, psychological safety, and cohesion
Findings re: Collective Efficacy

- **Collective Efficacy** is the belief that our team will be successful.
- Collective Efficacy **predicts** team performance:
  - Meta-analysis of 67 prior studies (Gully et al., 2002)
  - When interdependence low then self-efficacy is more important (Katz-Navon & Erez, 2005)

**Tip**: Pay extra attention to this when new tasks, team members, challenges.

**Tip**: Allocate time to discuss and celebrate wins.

Our team can save lives!
Psychological Safety

“A sense of confidence that the team will not embarrass, reject, or punish someone for speaking up” (Edmonson, 1999)

Or for seeking feedback, asking questions, requesting help

No one wants to appear ignorant, incompetent, negative or intrusive
Interesting Findings About Psychological Safety

Meta analysis – 136 samples, over 5000 groups (Frazier et al., 2016)

- Leadership behaviors
- Peer support
- Role clarity

Psychological Safety

- Engagement, satisfaction & commitment
- Information sharing
- Learning behaviors
- OCBs
- Performance

- Google in-house research
- Costa Concordia
### Four Tips for Creating Psychological Safety

- **✓ Admit a mistake or a way you can improve**
- **✓ Thank someone for a dissenting view**
- **✓ Don’t tolerate a teammate saying disparaging things about another teammate**
- **✓ Be careful about your facial expressions when teammates are talking**

**TIPS**

No “stink eye” or lemon faces!
Communication \quad = \quad Information exchange
Interesting Findings re: Communication

- **Info sharing** a key to team success
- Meta analysis of 150 studies – quality more important than quantity (Marlow, et al 2018)
- Meta analysis of 72 studies (Mesmer-Magnus & DeChurch, 2009)
  - Keys: Sharing of *unique* info (not just talking) and *closed loop* communications (to ensure understanding)
- Be aware...
  - People naturally assume others “know” stuff

**Tip:** Get in the habit of asking, “who else should know about that?”
Cognitions = Shared understanding
Interesting Findings re: Shared MMs

• Teams that possess a **Shared Mental Model** (SMM) perform better, particularly when coordination is required
  
  • Meta-analysis - 23 studies ([DeChurch & Mesmer-Magnus, 2010](#))

• SMMs allow for “implicit coordination”
  
  ▪ Quiet kitchen
  ▪ Blind pass in basketball
  ▪ Scalpel ready before request
Eight Things You Need SMMs About…

<table>
<thead>
<tr>
<th>Eight Types of Shared Mental Models</th>
<th>Question Answered</th>
<th>Related to…</th>
</tr>
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<tbody>
<tr>
<td>Where are we headed?</td>
<td>Vision, Purpose, Goals</td>
<td></td>
</tr>
<tr>
<td>What’s important?</td>
<td>Priorities</td>
<td></td>
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<tr>
<td>Who should?</td>
<td>Roles</td>
<td></td>
</tr>
<tr>
<td>How to?</td>
<td>Tasks, Norms, Interdependencies</td>
<td></td>
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<tr>
<td>Why to?</td>
<td>Rationale</td>
<td></td>
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<tr>
<td>Who knows?</td>
<td>Expertise</td>
<td></td>
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<tr>
<td>What if?</td>
<td>Contingencies, If-then</td>
<td></td>
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<tr>
<td>What’s up?</td>
<td>Situation, Cues</td>
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Tip: Can’t answer one of these Qs? Ask.

Which SMM could be stronger on your team?

Chat
One Simple but Powerful Tool...

The best teams are rarely great on day one. They become great by learning and adjusting.
Debriefs: Enable Adjustments, Build Teamwork, Drive Performance

Constructive team discussions

When done right, **debriefing works**

- Meta analysis – **on average 20 to 25% better**! (Tannenbaum & Cerasoli, 2013; Keiser & Arthur, 2020)
- Military study (Smith-Jentsch, Cannon-Bowers, Tannenbaum, & Salas, 2008)

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See handout for tips
A Few Debriefing Tips…

TIP: Conduct periodic debriefs...not just after bad experiences

TIP: Discuss teamwork and not just taskwork

TIP: Leaders...ask questions before telling
Breakout Session

• Share a **troubling teamwork challenge** your organization faced and how you overcame it

• Identify a **question** or two to post in the chat window for Scott

I’ll answer as many questions as possible in the time we have
Interested in learning more about the science of teamwork?

Visit [www.teamsthatwork.com](http://www.teamsthatwork.com) for book info and a free team advisor.