

# Shared knowledge in complex teams

## Citation for published version (APA):

Sander, P. C. (2016). *Shared knowledge in complex teams: an investigation of the shared mental model construct*. Maastricht University. <https://doi.org/10.26481/dis.20160331ps>

## Document status and date:

Published: 01/01/2016

## DOI:

[10.26481/dis.20160331ps](https://doi.org/10.26481/dis.20160331ps)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

## **Shared Knowledge in Complex Teams**

### **An Investigation of the Shared Mental Model Construct**

1. Organizations should support teams by providing time and platforms for team members to understand each other's tasks and discuss how to cooperate, so that these team members develop and maintain shared knowledge structures and perform effectively as a team (this dissertation).
2. Inexperienced team members who have less than 10 years of work experience are more sensitive to external circumstances – such as the organizational context – during the development of shared knowledge structures than experienced team members (this dissertation).
3. Due to providing structured and guided breaks in task execution, team members that work in a datalink setting can both profit from concise communication via text-based messages while still being able to develop shared knowledge about their team functioning (this dissertation).
4. While a shared mental model and standardized communication between team members contribute to effective team performance, these team characteristics are limited in helping team members in adapting to an unforeseen unique change in the task environment (this dissertation).
5. To understand the shared mental model of a complex team, we must apply multiple methods, such as observations, communication analysis and scenario-based questionnaires, to elicit the shared knowledge structures of the team members.
6. Efficient teamwork within a team and between multiple teams is a prerequisite for successful air traffic management in the future.
7. The whole is greater than the sum of its parts (based on Kurt Koffka, Gestalt psychologist).
8. TeamTris is a potential tool to train team competences of aspirant air traffic controllers early in the training program (this dissertation).