



Collaboration in medical teams

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Overview

- › Background: what did we do, and why did we do it?
- › Method: what did we measure and why?
- › Preliminary results: what have we found so far?
- › Future plans



Why study medical collaboration?

- > General reason: work = collaboration
- > Field-specific:
 - Division of complex labor
 - Quality of healthcare (e.g., Baggs et al., 1999)
 - Satisfaction with collaboration (e.g., Oosterhof, 2008)
- > Goals:
 - Testing and refining scientific models of collaboration
 - Link between fundamental and applied science
 - Development of instrument to 'diagnose' collaboration



What is medical collaboration?

- > Leever (2007): study among doctors and nurses
- > Five critical determinants of effective collaboration:
 - communication
 - mutual respect
 - professionalism
 - climate
 - quality of care



What is medical collaboration?

- › Leever (2007): study among doctors and nurses
- › Five critical determinants of effective collaboration:
 - communication
- › Research on group decision-making: information exchange (e.g., Stasser & Titus, 1985)
- › Groups as **motivated information processors** (e.g., De Dreu et al., 2008; Hinsz et al., 1997)
- › Motivated Information Processing in Groups (MIP-G; De Dreu et al., 2008)



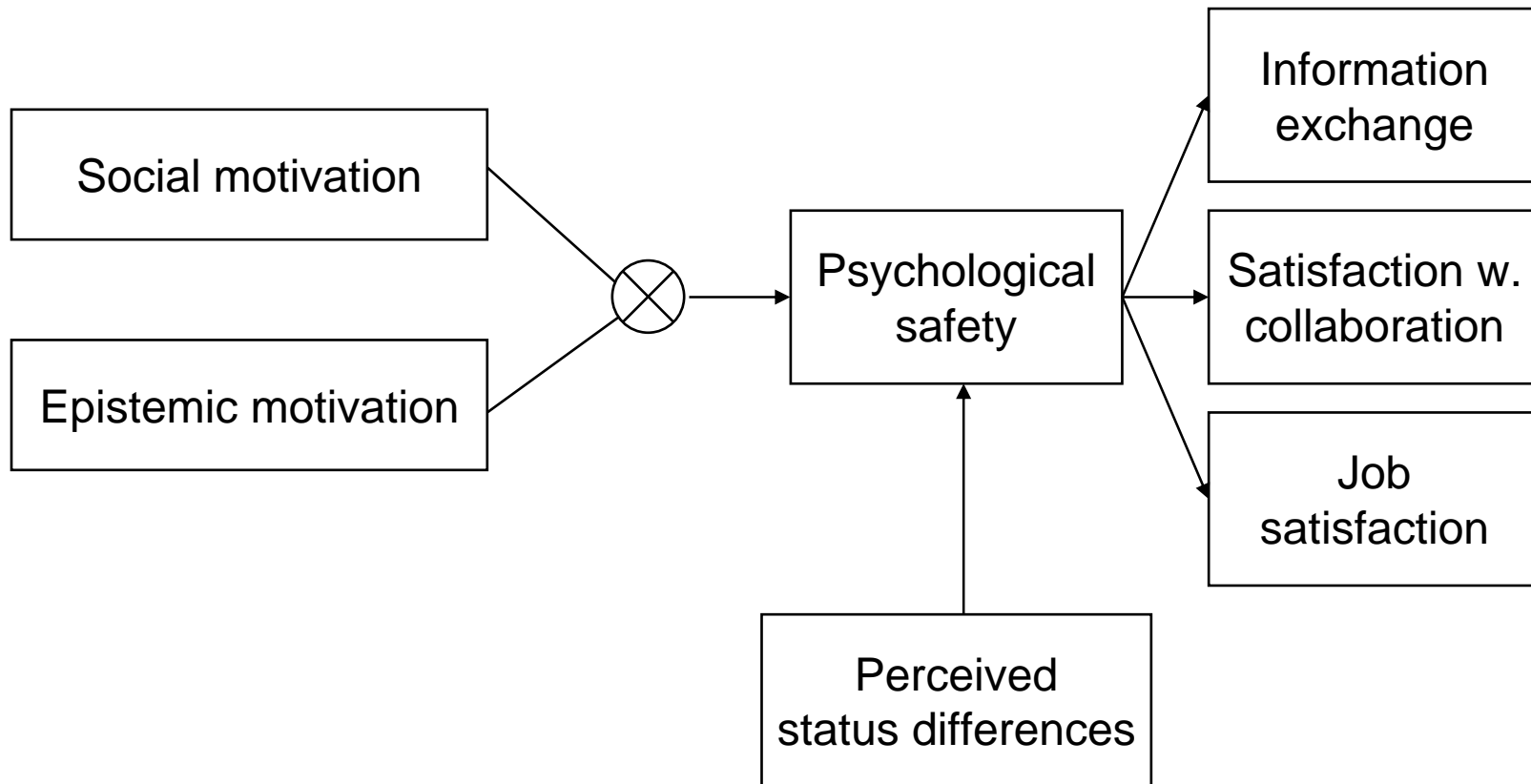
Motivated information processing

- > Motivation **energizes** and **gives direction**
- > Group performance is strongly affected by information exchange in the group (e.g., Stasser & Titus, 1985)
- > Information exchange is affected by motivation (e.g., De Dreu et al., 2008)
 - **Epistemic motivation**: the motivation to know
 - **Social motivation**: optimal outcomes for self or group
- > Do these also affect collaboration in medical teams, and if so, how?



Core hypotheses:

- > When doctors and nurses have **high epistemic motivation** and a **prosocial motivation**, team members will contribute and share information...
- > ... because they feel **psychologically safe** to do so
- > The more team members perceive **status differences**, the less safe they will feel...
- > ... and therefore, information exchange will decrease





Method

- > Questionnaire study in (so far) 31 medical teams
- > Measurements:
 - Epistemic motivation (NFC; Webster & Kruglanski, 1994)
 - Social motivation (DUTCH; De Dreu et al., 2001)
 - Psychological safety (Edmondson, 1999)
 - Information exchange (De Dreu, 2007)
 - Perceived status differences
 - Satisfaction with collaboration
 - Job satisfaction



Preliminary results



Overall correlations (team level)

	1	2	3	4	5	6	7
1. Epistemic motivation							
2. Social motivation							
3. Psychological safety							
4. Perceived status differences							
5. Information exchange							
6. Satisfaction with collaboration							
7. Job satisfaction							



Overall correlations (team level)

	1	2	3	4	5	6	7
1. Epistemic motivation	-						
2. Social motivation	.13	-					
3. Psychological safety	.24	.53					
4. Perceived status differences	-.14	-.66					
5. Information exchange	-.13	.38					
6. Satisfaction with collaboration	-.02	.35					
7. Job satisfaction	-.05	.07					



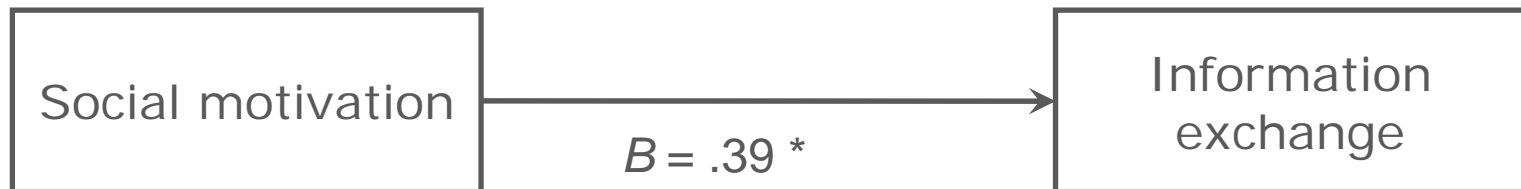
Overall correlations (team level)

	1	2	3	4	5	6	7
1. Epistemic motivation	-						
2. Social motivation	.13	-					
3. Psychological safety	.24	.53	-				
4. Perceived status differences	-.14	-.66	-.68	-			
5. Information exchange	-.13	.38	.50	-.69	-		
6. Satisfaction with collaboration	-.02	.35	.44	-.71	.85	-	
7. Job satisfaction	-.05	.07	.49	-.23	.28	.16	-



Safety and information exchange

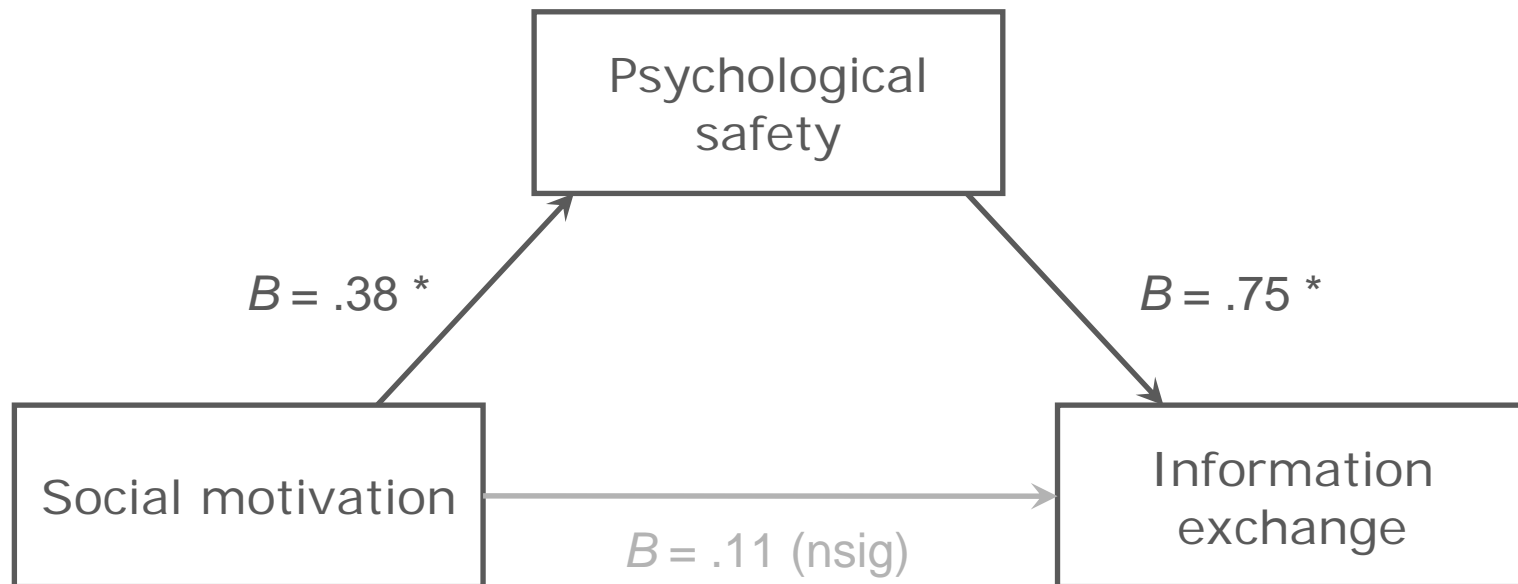
- › Hypothesis: motivation affects information exchange through psychological safety





Safety and information exchange

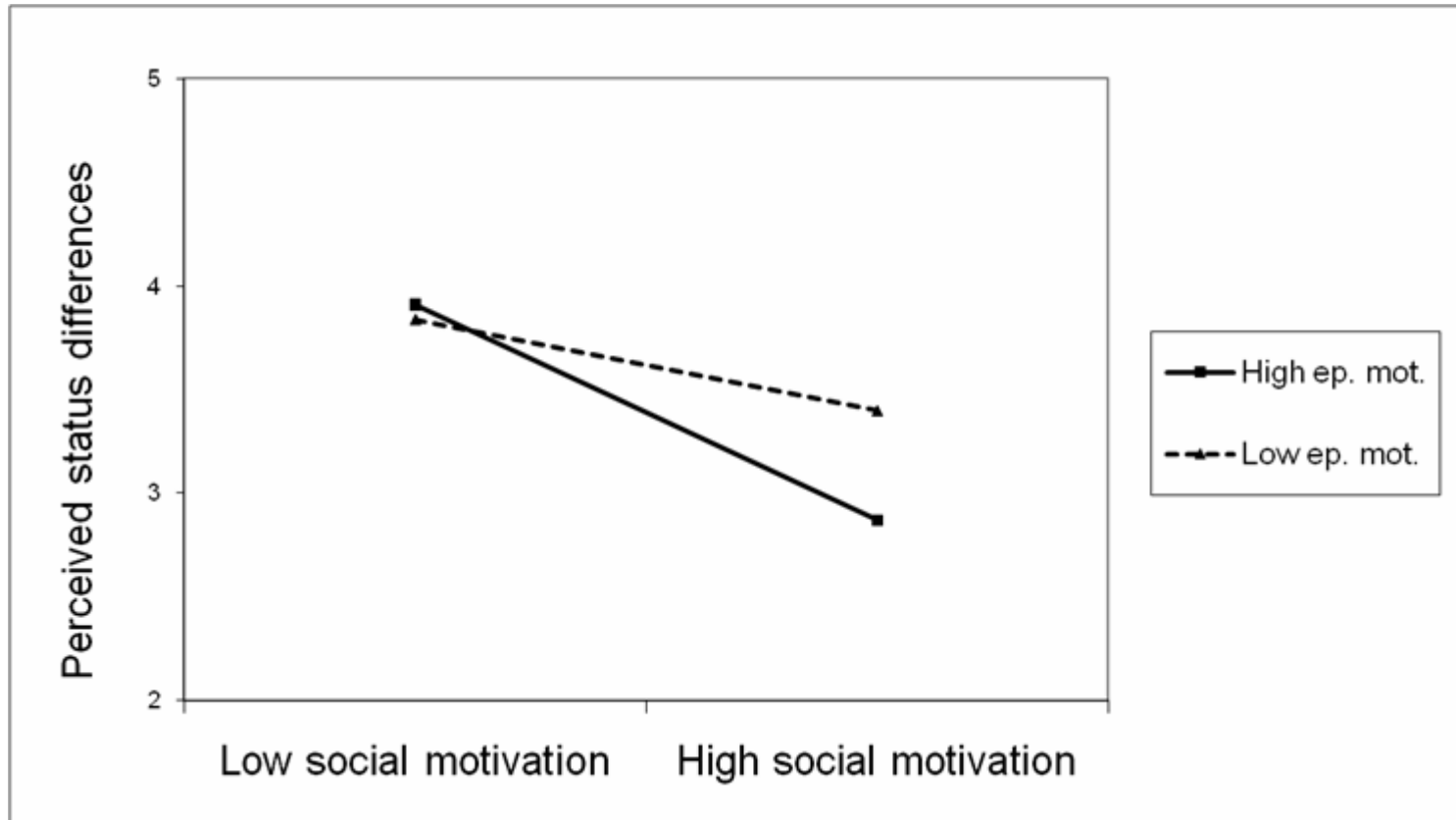
- › Hypothesis: motivation affects information exchange through psychological safety





Social and epistemic motivation

- › Hypothesis: social and epistemic motivation interactively affect psychological safety, information exchange, etc.
- › However, perceived status differences were highly correlated with these outcome variables
- › So... how are perceived status differences affected by social and epistemic motivation?





Conclusions so far:

- › Collaboration between doctors and nurses *is* affected by (social) motivation
- › Psychological safety appears to mediate this relation
- › Perceived status differences are an important additional outcome variable...
- › ... which in turn is interactively affected by epistemic and social motivation!



Future plans

- › Analyze the current dataset using multilevel techniques
- › Continue this research project with a new sample and a refined questionnaire
 - More attention for status differences?
 - Actor-partner interdependence model?
 - More attention for actual processes in collaboration?
 - Other outcome variables?



Thank you for listening!

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