

Group communication and performance in diverse, distributed teams

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What makes some teams more effective than others?

Global executive
MBA program

- The actions suggested (theory & research)*
 - Data comparing higher versus lower performing teams*
 - Exploratory, descriptive*
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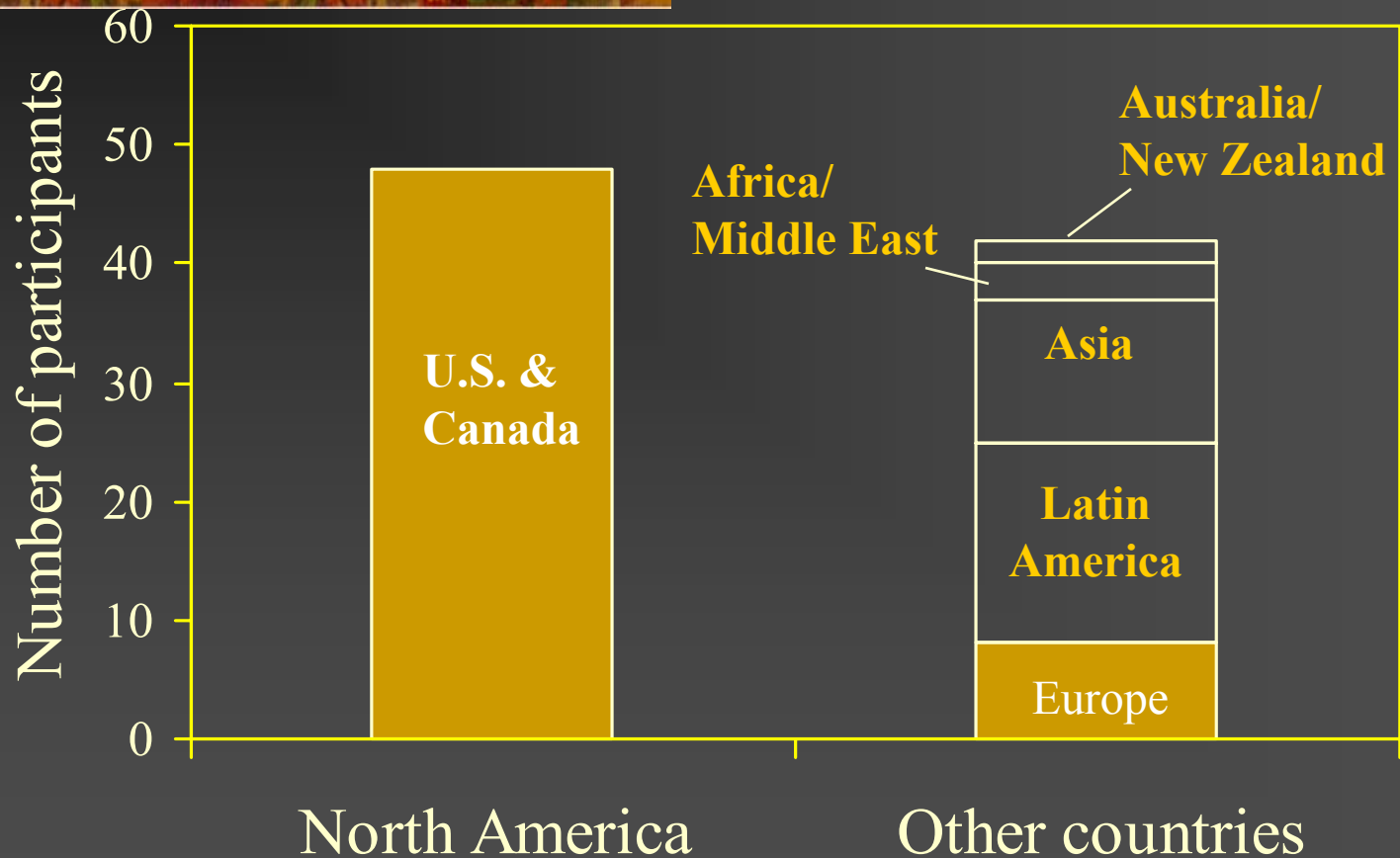
The Actions Suggested

- **Membership** - Value heterogeneity. Background diversity offers resources for learning and problem solving (Hackman 1988, Schunnet al 2002).
 - **Communication** – Communicate often (Reagans & Zuckerman 2001). Contribute equally. Avoid dominance by a few or social loafing by others (Van de Ven & Delbecq 1971, Price 1987).
 - **Trust** – Trust in the competence and motives of teammates. Trust promotes cooperation and task accomplishment (Jarvenpaa & Leidner 1999).
 - **Identity** – Build a sense of team. Think as “we” rather than “I” to keep the team focused and meet group goals (Pratt & Foreman 2000).
 - **Learning** – Seek and provide information to one another. Posing questions and sharing information will enhance learning (Edmondson et al. 2001).
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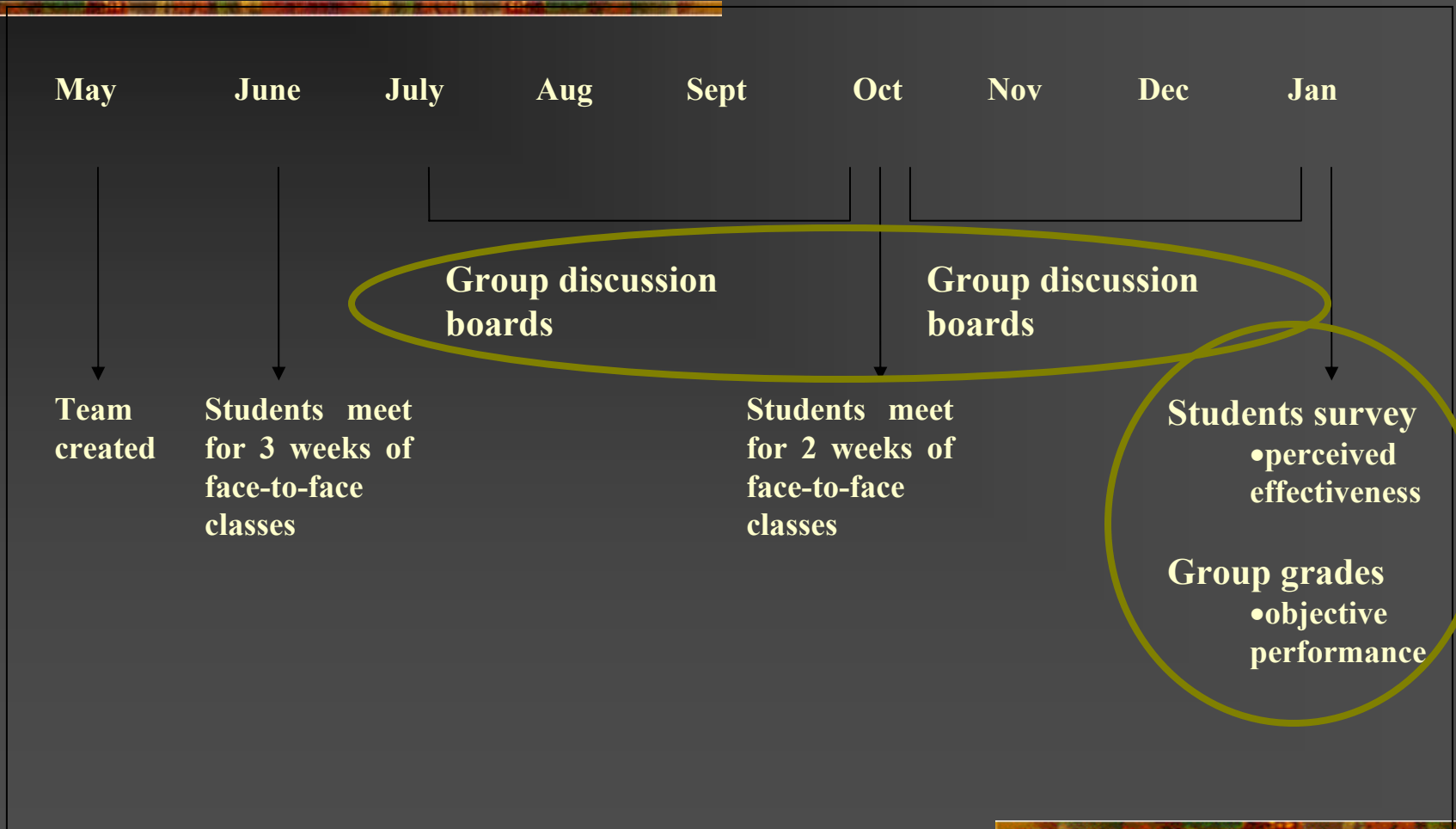
The Setting

- 18 groups, 5 members in each group
 - 90 global executives in a global executive MBA program.
 - Ages 28-58 (mean=38 years)
 - 11 women, 28 countries (of origin)
 - Each team – members from multiple countries, located in at least two different continents
 - Various professions (high-level generalists and some specialists)
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Country of origin



The team experience



The Data

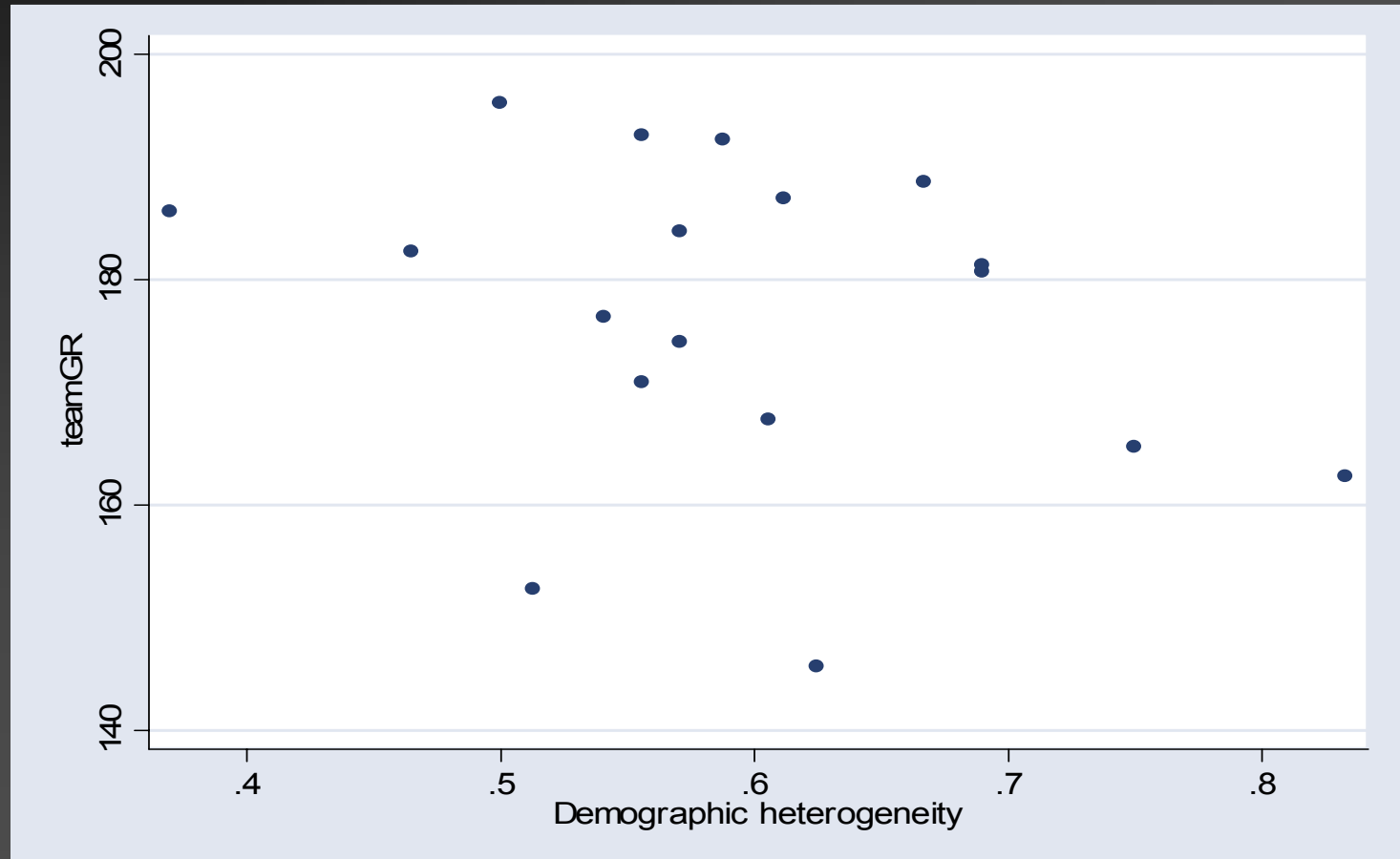
- Membership (group structure)
 - *Heterogeneity & subgroup strength*
 - Communication
 - Message *volume* and *evenness* across members
 - Patterns of participation over time
 - Coding of six weeks of discussion
 - *Trust* (benevolence: pos vs. neg beliefs that others will fulfill expectations; competence: pos vs. neg belief in group skills and capacities;)
 - *Identity* (group words, individual words)
 - *Learning* (information seeking, information providing)
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The Results: group membership

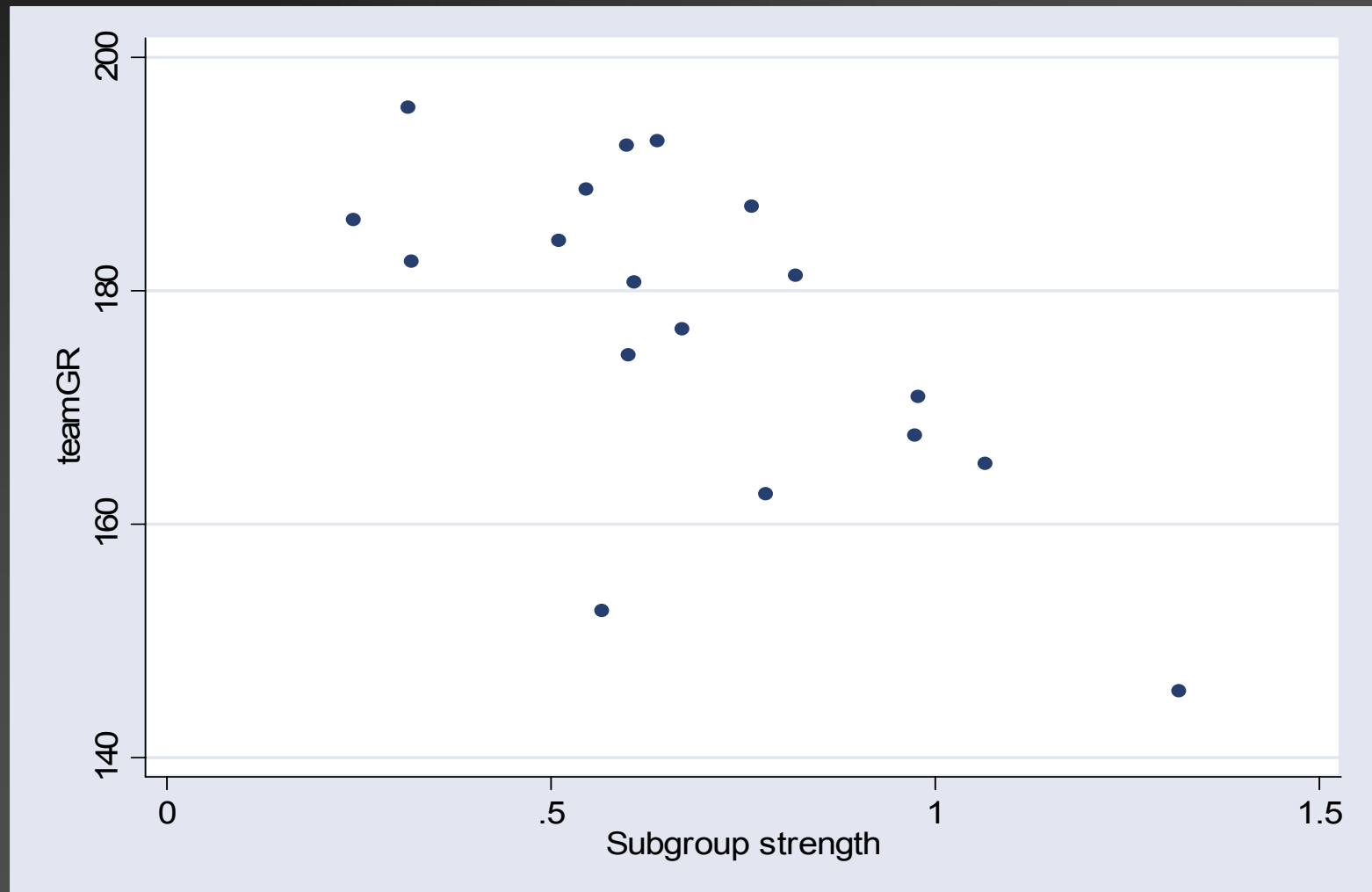
- *Heterogeneity* did not affect performance ($r = -.30$)
- *Subgroup strength* negatively affected performance ($r = -.66$) (Gibson & Vermeulen 2003)

Variables	Beta
Membership	
<i>Heterogeneity</i>	.125
<i>Subgroup strength</i>	-.739**

Heterogeneity and performance



Subgroup strength & performance

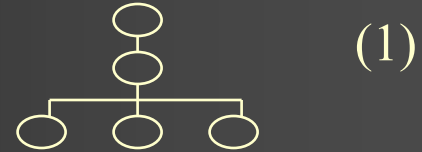
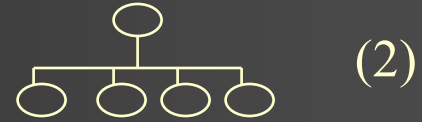
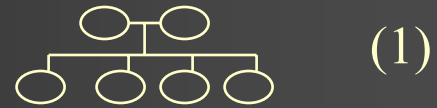
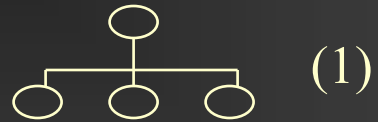


Group Communication

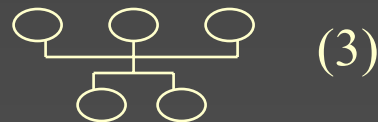
- Volume and evenness of communication did not affect performance.
- Groups with more hierarchical communication patterns performed better

Variables	Beta
Communication	
<i>Subgroup strength</i>	<i>-.620**</i>
<i>Volume</i>	<i>.311</i>
<i>Unevenness</i>	<i>.296</i>
<i>Structure (hierarchy)</i>	<i>.740**</i>

Hierarchies



Inverted hierarchies

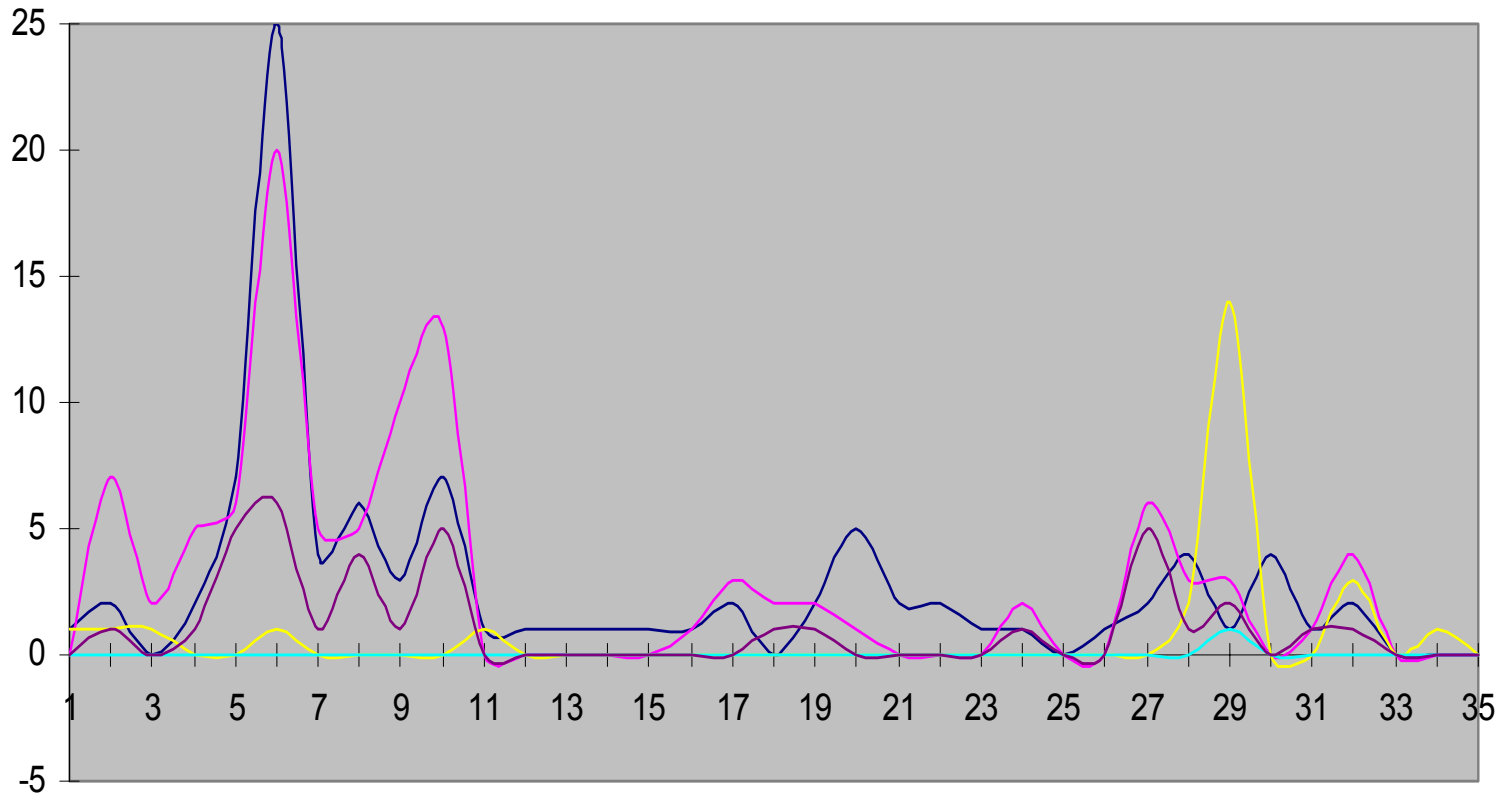


Patterns of Participation

- *Participation phases* – Higher performing groups had 2 distinct periods of high communication separated by low communication. Lower performing groups had fewer distinct phases.
 - *Number of dominants* – higher performing groups had few dominant (3 or less) communicators; lower performing groups had more dominants (4 or more).
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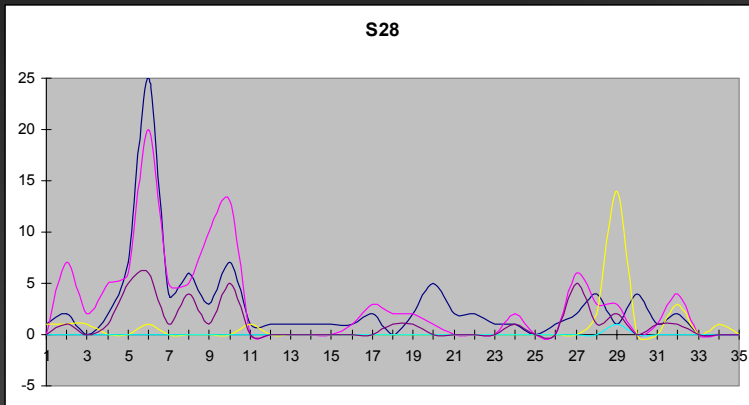
Participation phases and dominants

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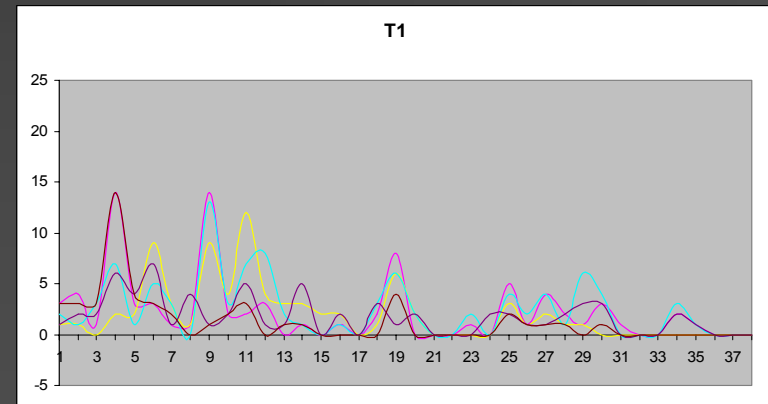
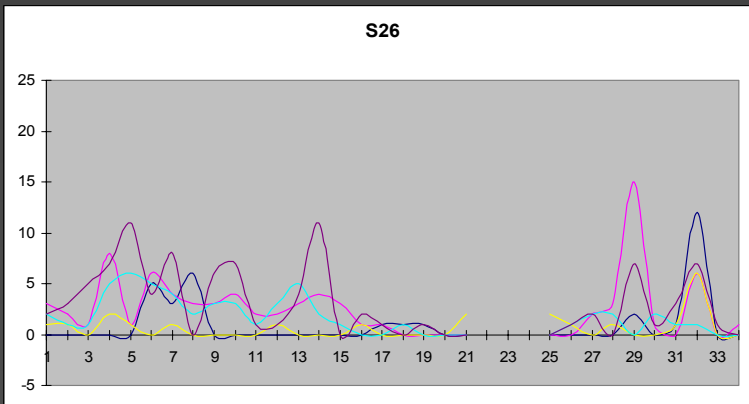
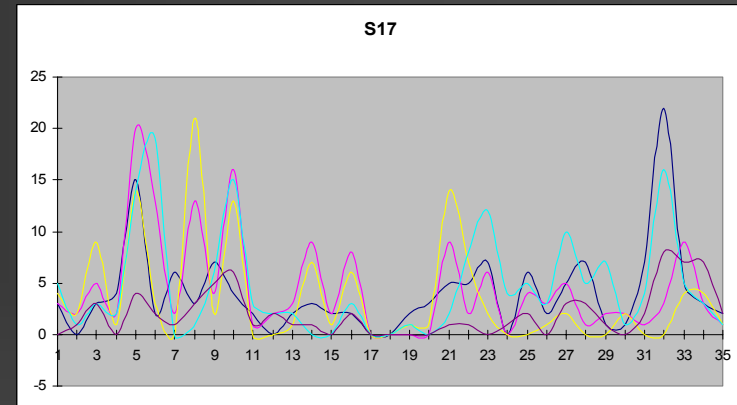


Participation *phases* (2 versus more) and *dominants* (1-3 versus 4-5)

High



Low



Identity, Trust, and Learning

- Higher performing groups expressed....
 - Less negative benevolence
 - More positive and negative competence
 - More individual identity
 - More information providing statements
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Identity, Trust, Learning

Trust	Beta (standardized)
Subgroup strength	-.421**
Benevolence-based (positive)	.013
Benevolence-based (negative)	-.270*
Competence-based (positive)	.424**
Competence-based (negative)	.256*
Identity	
Subgroup strength	-.512**
Group words	-.015
Individual words	.438**
Learning	
Subgroup strength	-.591**
Information seeking	.042
Information providing	.441**

Conclusion

- Subgroups may create fault-lines in distributed, cross-national teams. (Geographic distribution may magnify this effect – Cramton & Hinds 2003).
- Communicating more, more evenly, or more often may not facilitate performance in long-term distributed teams. Hierarchical communication patterns can be effective.
- Communication of individual identity may be more important to group performance than group identity.
- It is important for team members to express trust, sharing both positive and negative comments about the team's competence. Negative comments about team member's motives, however, hurts performance.
- Learning-oriented communication (information providing/“push”) may be importantly related to team performance.

Implications for cognitive IS research

- Coordination of individual efforts may be more important to task success than managing “group” cognitive factors (shared identity, shared understanding, benevolent trust).
 - Group cognitive factors may influence perceived effectiveness more than task success.
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