

Team Adaptation to Structural Misalignment: Determinants of Alternative Change Mechanisms

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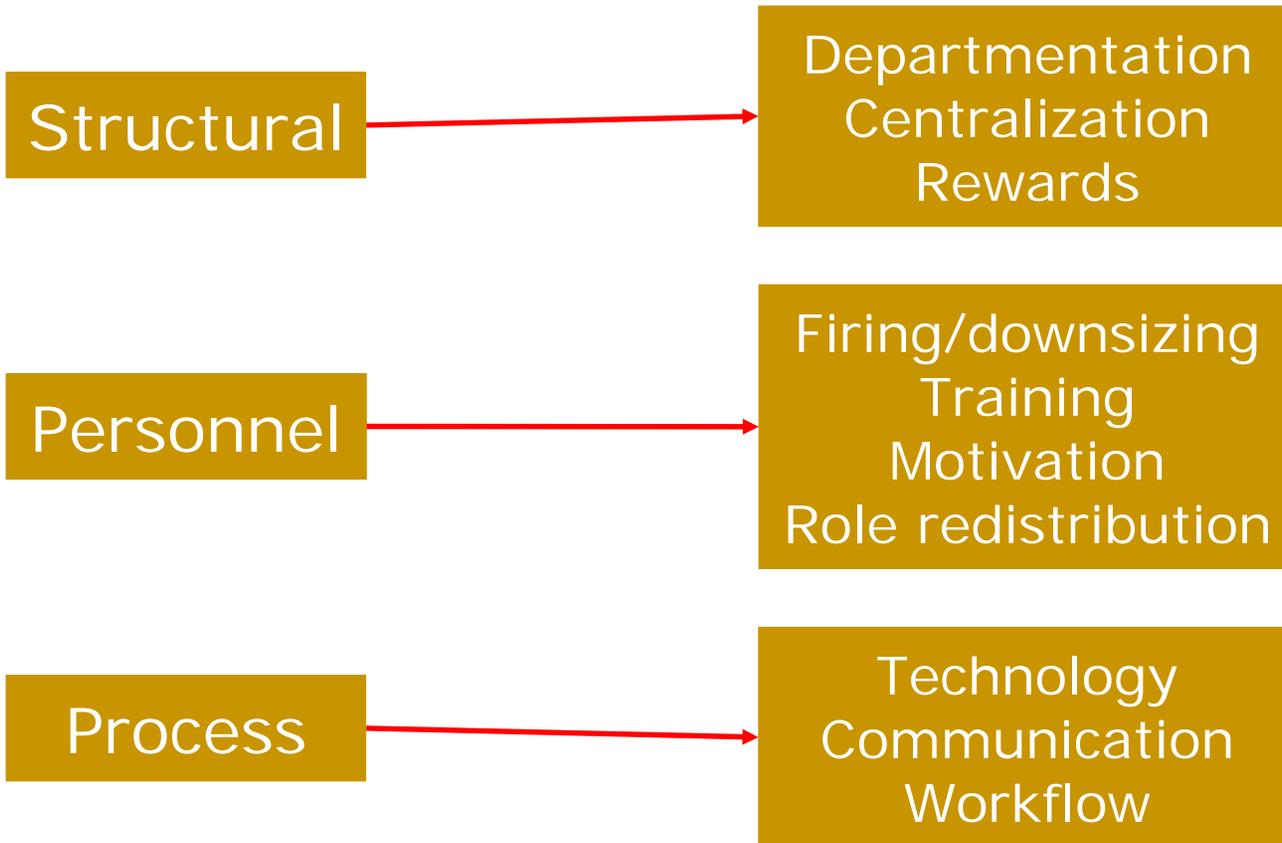


- ◆ No “one best way” to bring about good team performance (Taylor, 1911)
- ◆ Team structure should be aligned with the task environment (Burns & Stalker, 1961; Hollenbeck, 2000)
- ◆ Structure is overlooked as a possible change when teams are misaligned

A Typology of Change Mechanisms

Type of Change

Change Possibilities



A Typology of Change Mechanisms

- ◆ Not all changes are equally visible
 - Process and personnel are the figure
 - Structure is the ground

H1: In the absence of any intervention, teams that are structurally misaligned with their environment are most likely to make (a) process changes with greater frequency than personnel or structural changes, and (b) personnel changes with greater frequency than structural changes.



◆ Providing information on the typology

- Training can reduce decision biases (Kahneman & Tversky, 1973; Fong, Krantz, & Nisbett 1986)
- Availability heuristic (Kahneman & Tversky, 1974)

H2: When teams that are structurally misaligned with their environment are informed of the typology of changes, they will be more likely to choose to make a structural change relative to personnel or process changes.

◆ Providing structural feedback

- Increases both salience and legitimacy of structural change
- Extension of biofeedback (Waldstein, Manuck, Ryan, & Muldoon, 1991)

H3: When teams that are structurally misaligned with their environment are provided with feedback on their structural alignment, they will be more likely to choose to make a structural change.

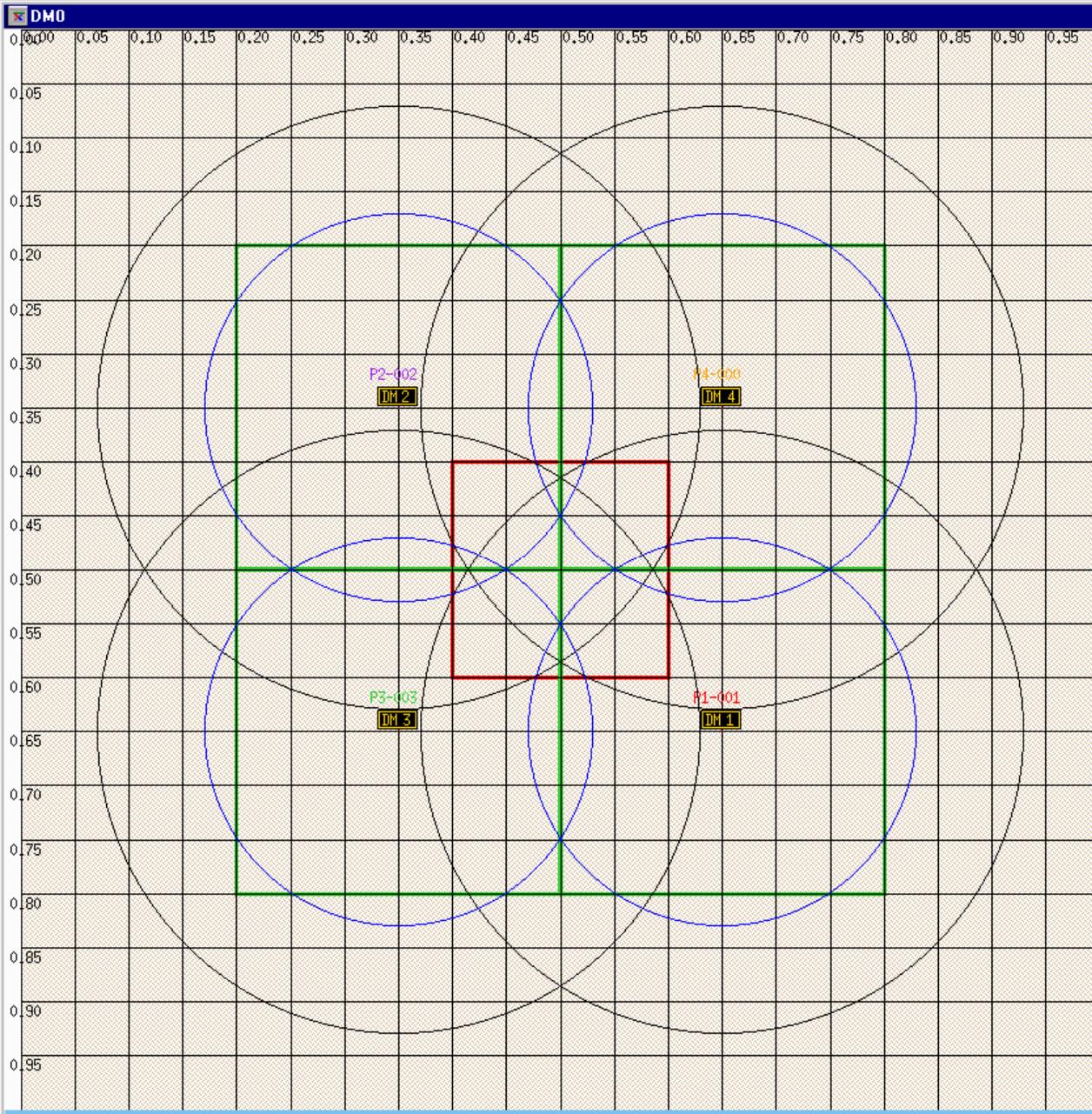
- ◆ Task performance
 - Performance is contingent upon structure matching environment (Burns & Stalker, 1961)
 - Correct diagnosis of problem should improve performance

H4a: When teams that are structurally misaligned with their environment choose to change structure, they improve their task performance.

- ◆ Contextual performance
 - Activities that support the social and psychological environment (Borman & Motowidlo, 1993)
 - “Healthy” teams should engage in more of these activities

H4b: When teams that are structurally misaligned with their environment choose to change structure, they improve their contextual performance.

- ◆ Research Participants and Task
 - 312 undergraduate students in 78 four-person teams
 - Distributed Dynamic Decision-making (DDD) simulation (Miller, Young, Kleinman, & Serfaty, 1998)
 - Two 30-minute simulations with a predictable environment
 - Divisional structure in first simulation



DDD3: MSU2

OBSRV: 

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Offense	+200	+200	+1000
Defense	+10000	+10000	+50000

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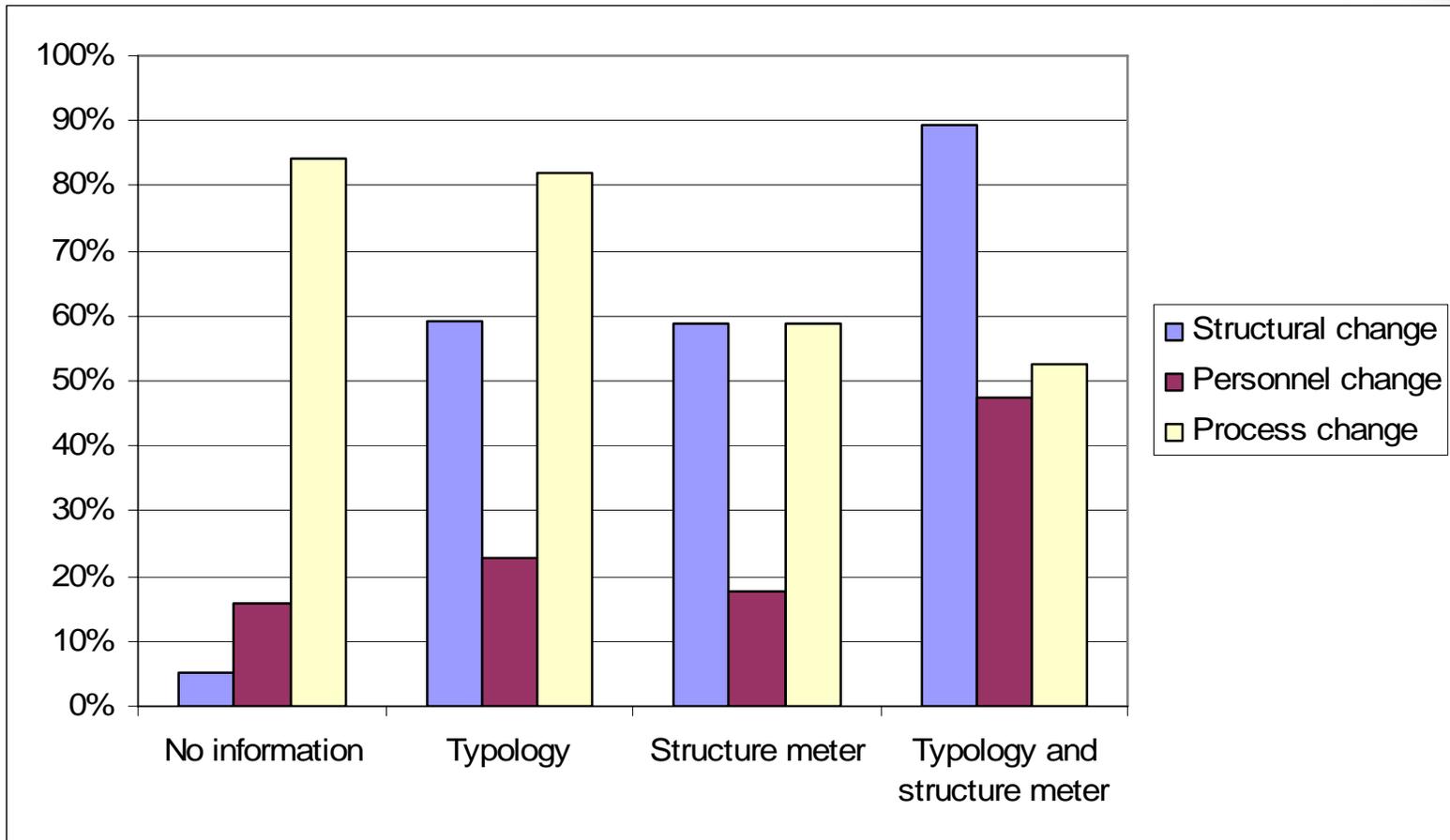
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- ◆ Manipulations and Measures
 - 2 x 2 design
 - » Information on the typology
 - » Structural feedback
 - Change decision: Consensus on what to change
 - Task performance
 - » Identification speed
 - » Attack speed
 - » Friendly fire kills
 - » Missed opportunities
 - Contextual performance
 - » Helping
 - » Communication

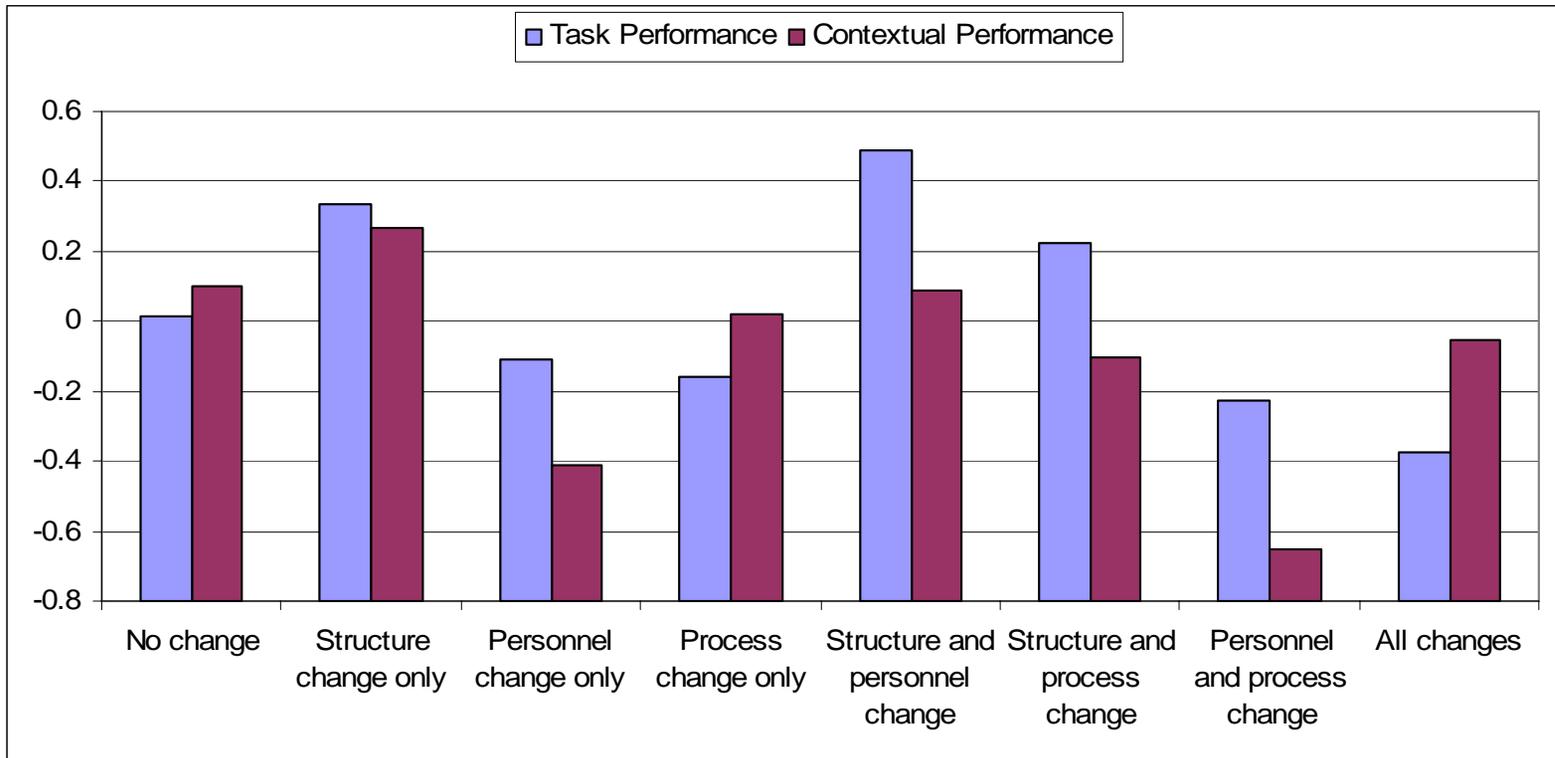
Results



Results

	<i>Task Performance</i>	<i>Contextual Performance</i>
Time 1 Performance	.49**	.64**
Structural Change	.25**	.20*
Personnel Change	-.12	-.28**
Process Change	-.17*	.07
<i>F</i>	10.28**	12.50**
<i>R</i> ²	.32	.38

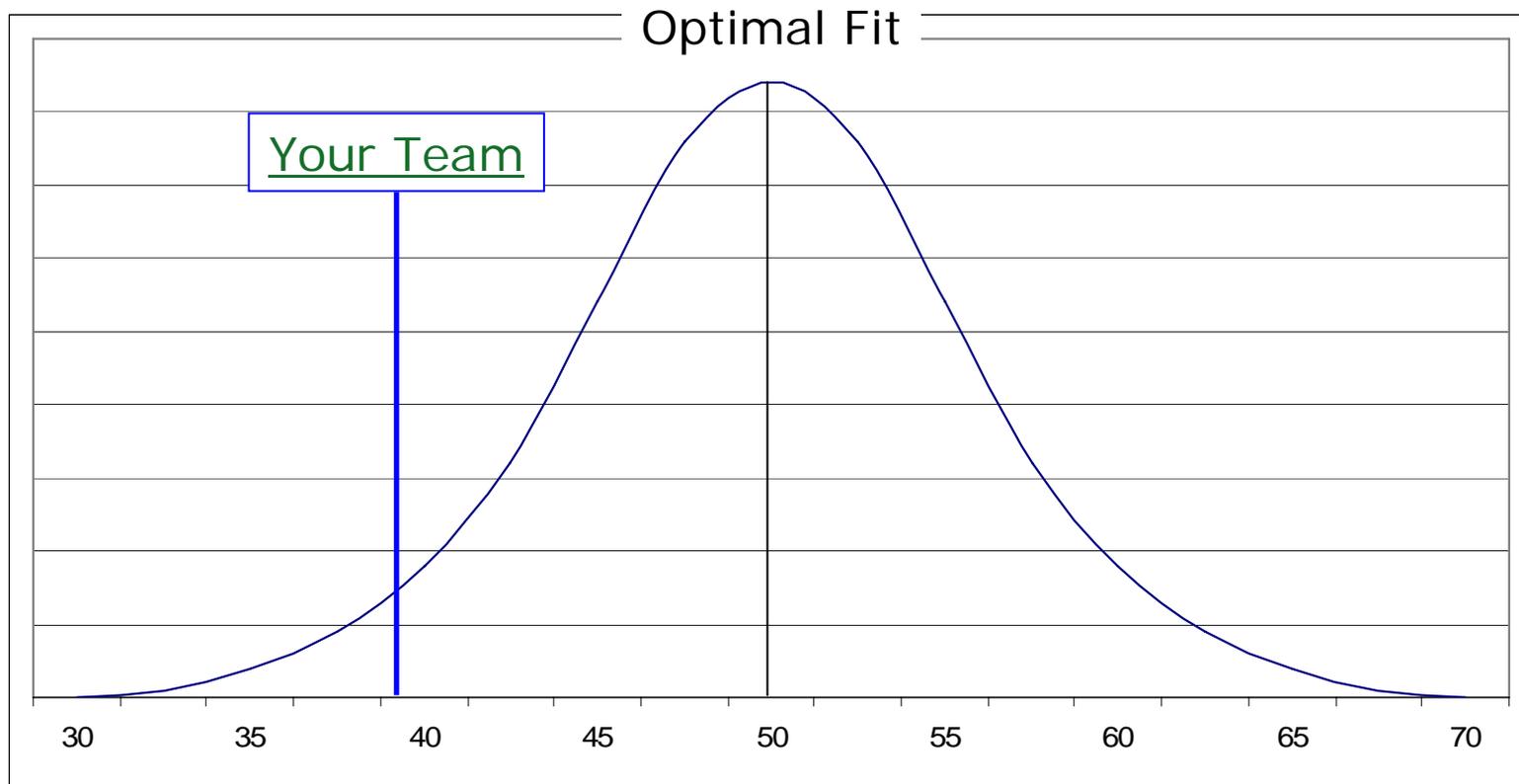
Results



◆ Future research

- Feedback on other structural dimensions
- Feedback on personnel and process
- Various feedback formats
- Person x feedback interactions
- Aligned with environment

Structural Feedback



Change Frequencies

