

**Enabling innovation in organizations: 2007
leading edge consortium session**

**Chair: Leaetta Hough, Michael Frese, William
H. Mobley**

Talks:

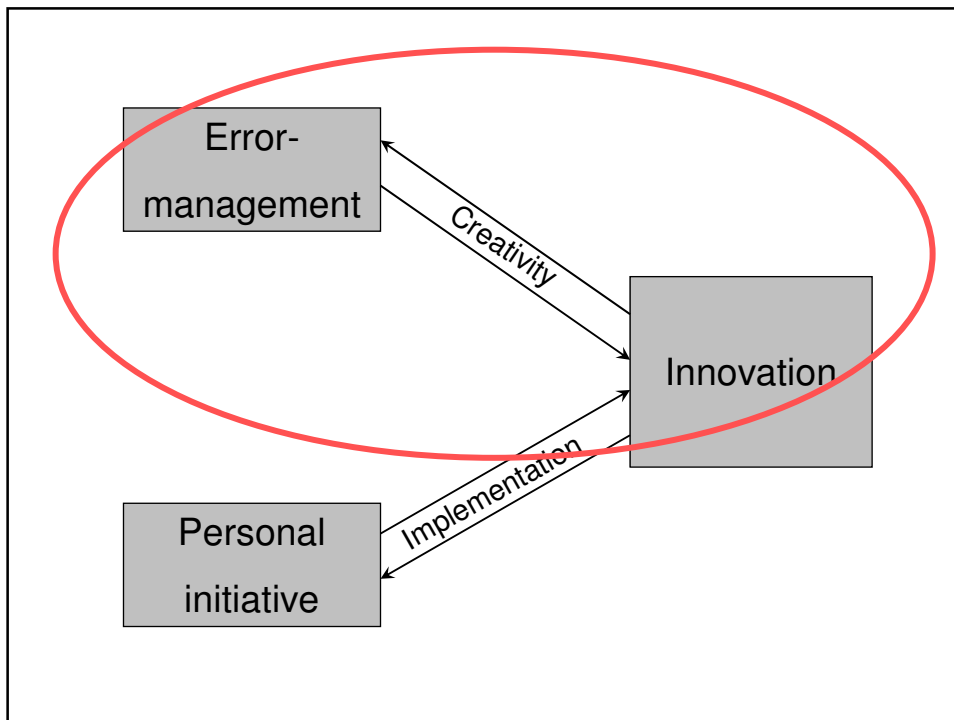
- **Michael Frese and Ronald Bledow: The
function of error management and pro-
initiative culture**
- **Miriam Erez: The paradox of innovation**
- **Edward E. Lawler: Built for innovation**

**Enabling innovation in organizations: The
function of error management and pro-initiative
culture**

**Michael Frese and Ronald Bledow
Justus Liebig Univ. Giessen,
Interdisciplinary Research Unit for Evidence-
Based Management and Entrepreneurship**

and London Business School

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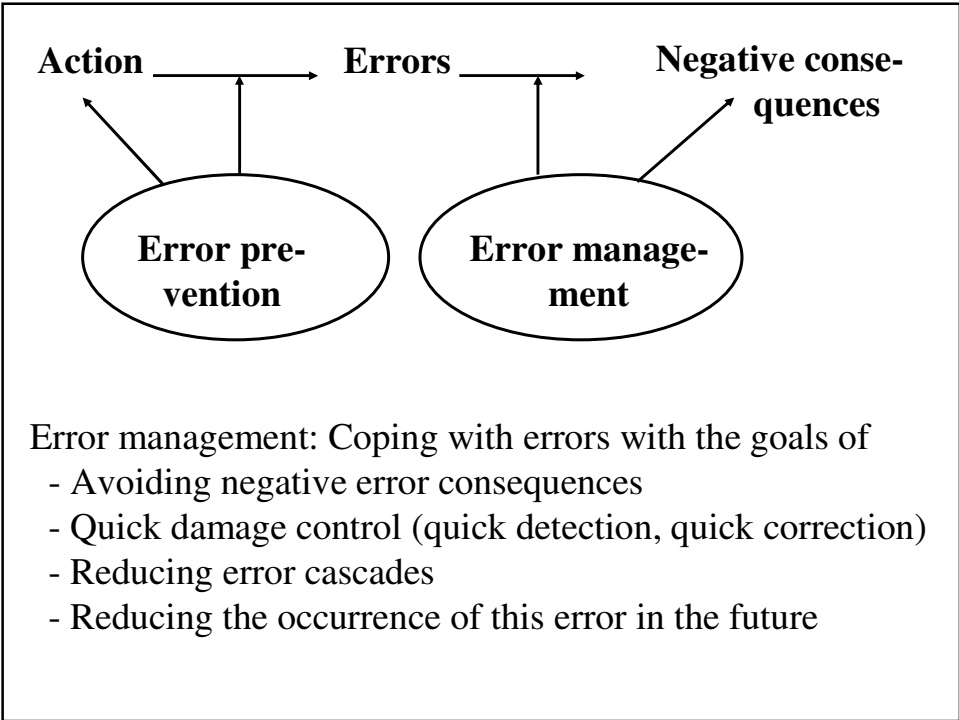
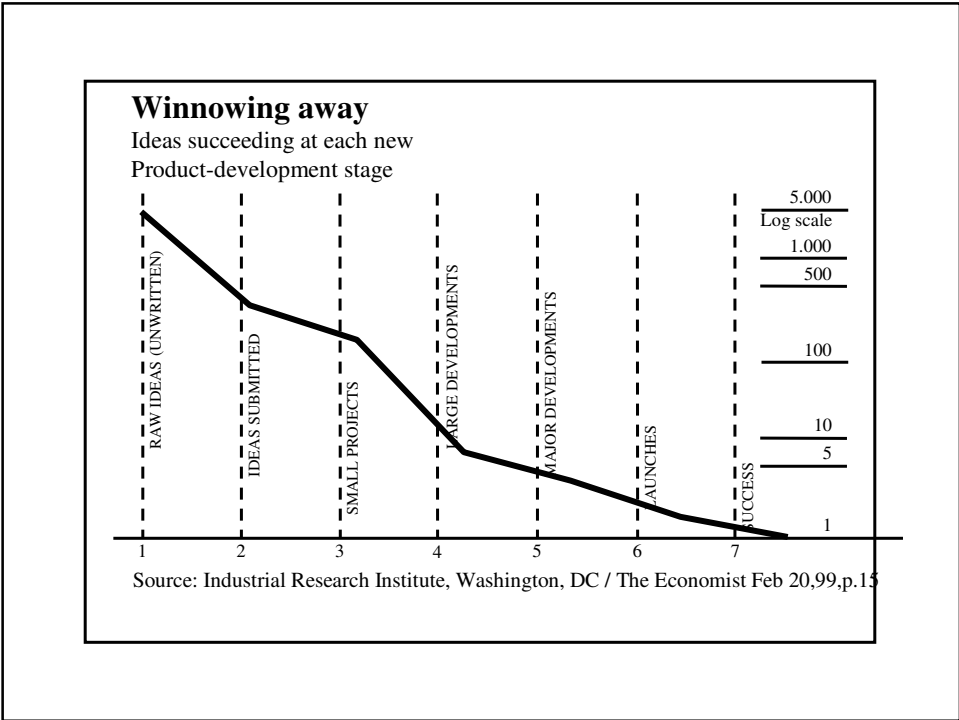
Creativity and Mistakes

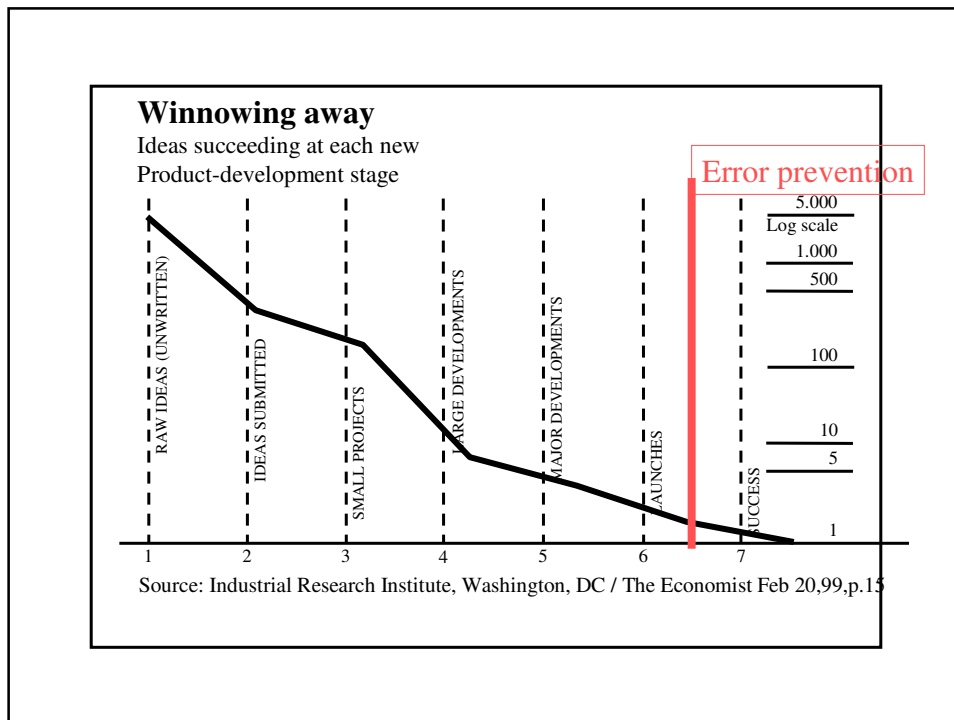
We tend to think of innovations: successful products, etc.

Those that are not successful are mistakes

Therefore, mistakes and innovation are related

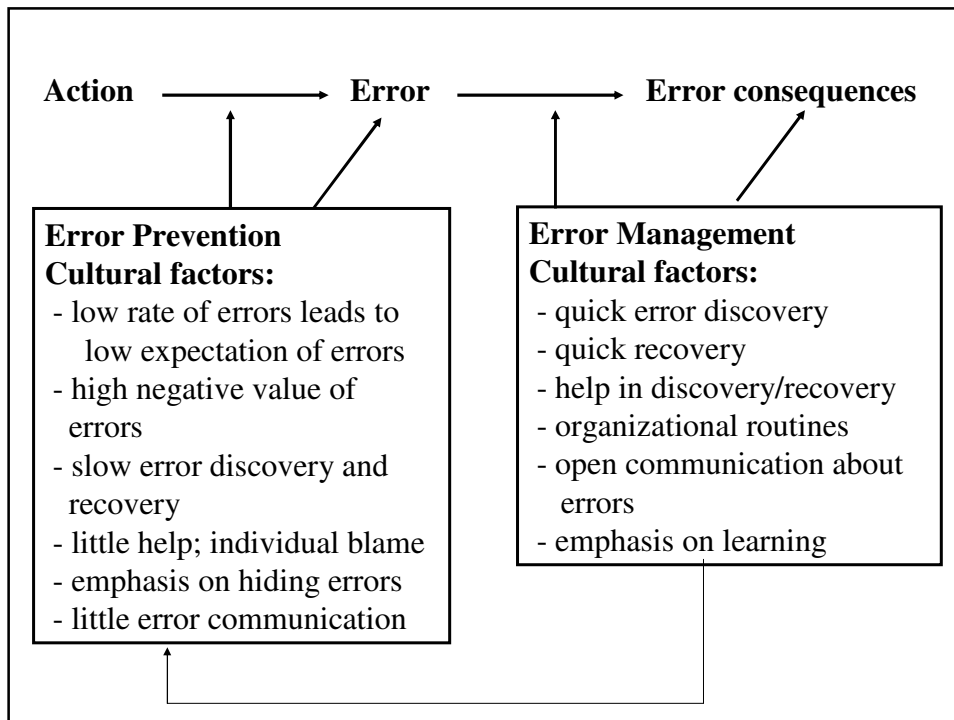
particularly so for creativity





Error Management Strategies

- Error discovery (reduction of error detection time):
 - Transparency of system
 - feedback
 - Organizational defenses: e.g., second person intervening (airplanes – cockpit crew training)
- Good error explanation:
 - context specific help
 - Memory aids
- Error recovery:
 - UNDO
 - Going to a known point
- Learning from errors possible:
 - Consistency, learnability of system, simulator training



Company Level: Error Management Culture – Examples of Items

- For us, errors are very useful for improving the work process.
- After an error has occurred, it is analyzed thoroughly.
- When mastering a task, people can learn a lot from their mistakes.
- When an error has occurred, we usually know how to deal with it.

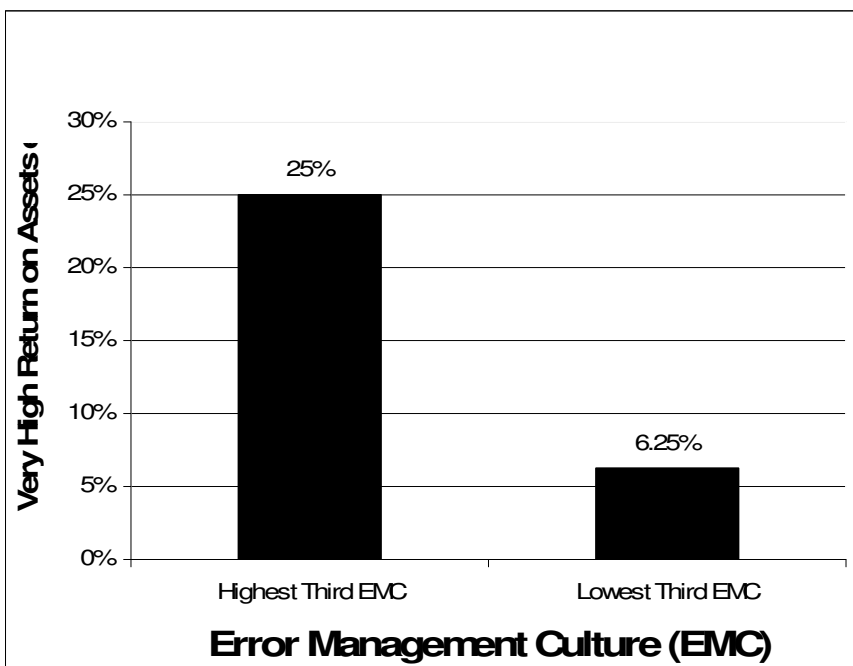
Result on Error Management Culture and Profitability

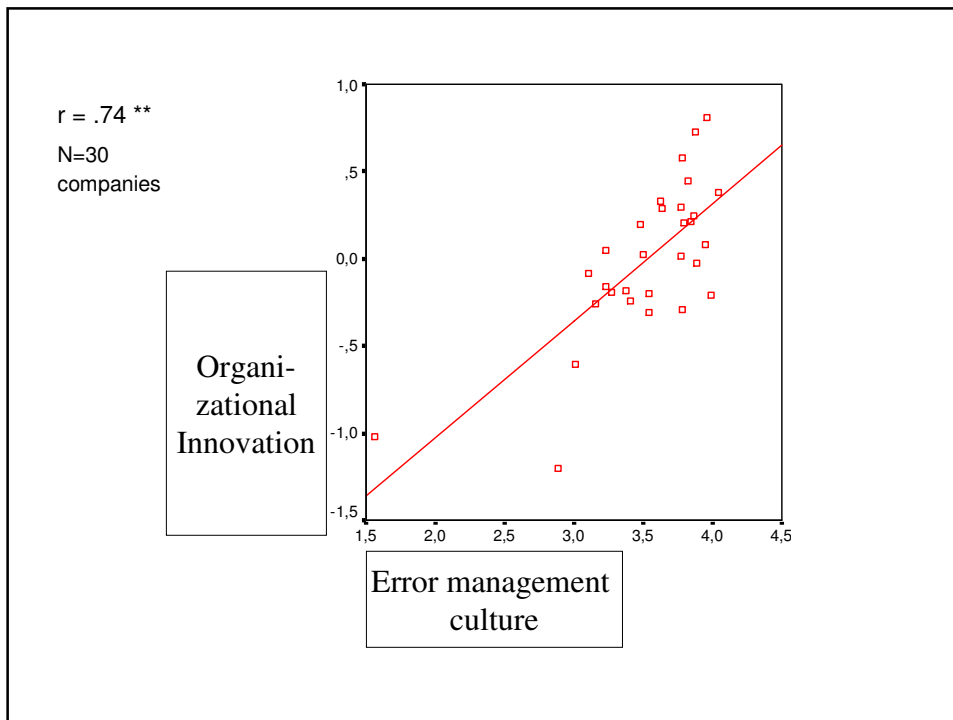
About 20% of profitability is determined by error management culture

(van Dyck, C., Frese, M., Baer, M., & Sonnentag, S. (2005). Organizational error management culture and its impact on performance: A two-study replication. *Journal of Applied Psychology*, 90, 1228-1240.)

Replicated in the Netherlands

Replicated in China





Error Management Culture: Qualitative Data

Error management culture: Low

“In this organization, we don’ t talk about errors”

“But I don’ t want to discuss errors at great length. [...] I indicated that this shouldn’ t happen again. And that was the end of it.”

Error Management Culture: High

“I try to create an open atmosphere and tell people they should inform me if they have made a mistake, so that we can do something about it. We try to be open and discuss errors, because we believe that is the only way to control damage.”

“I have spoken to the responsible manager, and have asked him to use this incident as a learning opportunity in his department.”

(van Dyck, Frese, Baer & Sonnentag, 2005)

Error Management Culture: Intervention

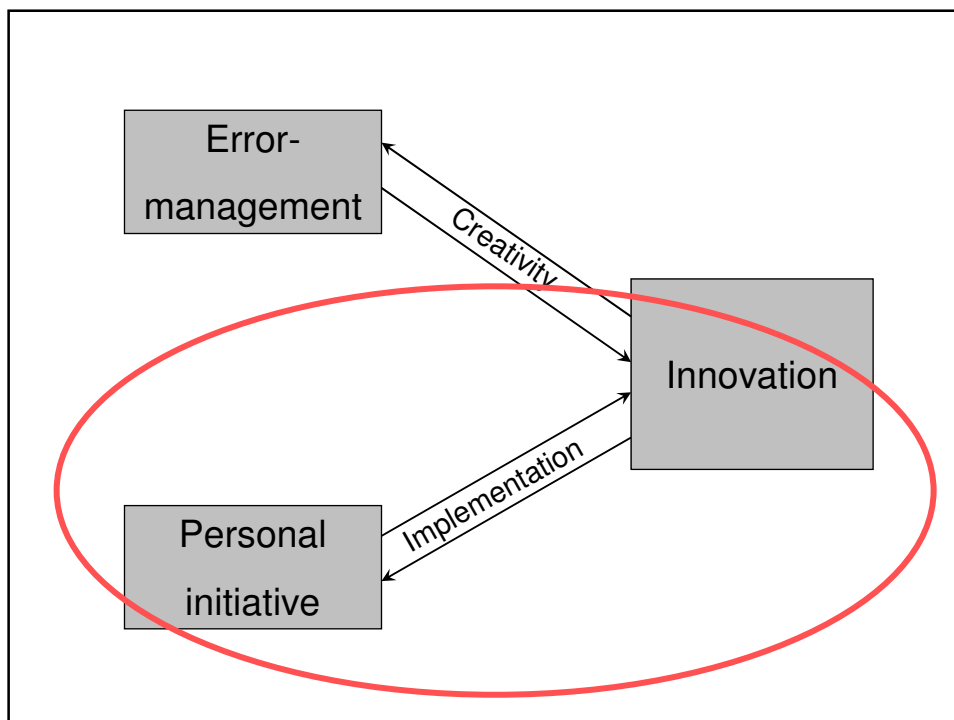
Allow errors to happen

Maximize learning from errors

Overcome: “Don’t blame, don’t act culture”

Quick error discovery

Learning from errors: Error management training



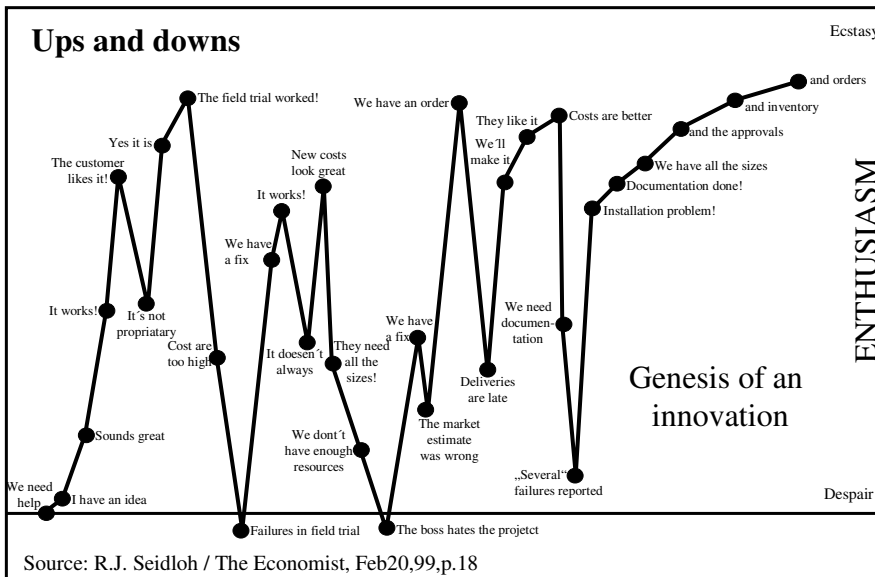
Innovation and Personal Initiative

Personal Initiative:

- Self-starting
- Proactive – long range preparation for problems and for opportunities
- Overcoming barriers on the way towards the goal

Frese, M., Garst, H., & Fay, D. (2007). Making Things Happen: Reciprocal Relationships between Work Characteristics and Personal Initiative (PI) in a Four-Wave Longitudinal Structural Equation Model. *Journal of Applied Psychology*, 92, 1084-1102.

Ups and downs



Company Level: Climate for Initiative Items

- People in our company actively attack problems.
- Whenever something goes wrong, people in our company search for a solution immediately.
- Whenever there is a chance to get actively involved, people in our company take it.
- People in our company take initiative immediately – more often than in other companies.
- People in our company use opportunities quickly in order to attain goals.

Climate for Initiative and Return on Assets of Medium-Sized Firms

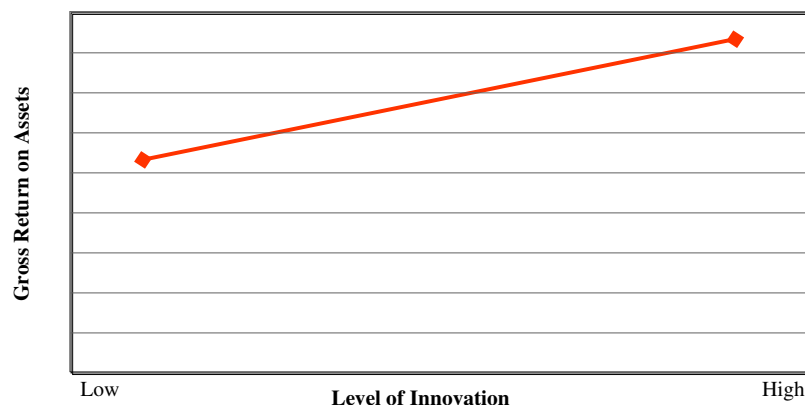
Holding constant Process Innovativeness, Size, and Industry codes, prior Return on Assets → predicting future Return on Assets:

ΔR .30**

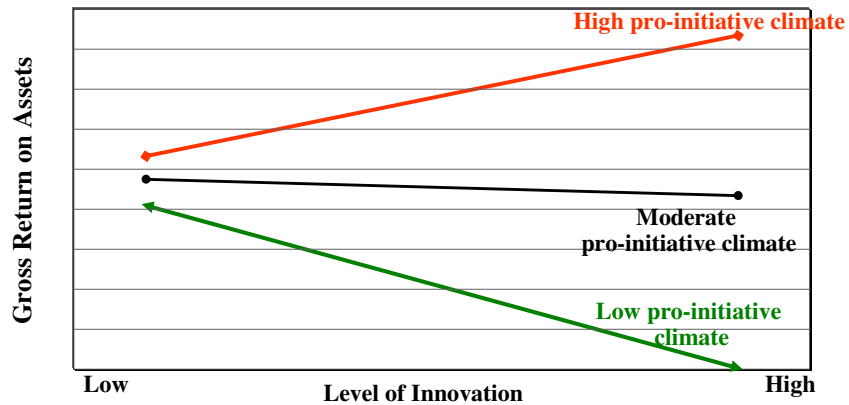
Baer, M. & Frese, M. (2003) Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance; *Journal of Organizational Behavior*, 24, 45-68

Definitions of Process Innovations

- 1. Business Process Reengineering (BPR)** Redesign and slim down operations and production processes to eliminate unnecessary procedures. Characteristics: customer orientation, process-related teamwork, and the transition from highly specialized workers to teams (Hammer & Champy, 1993).
- 2. Supply-Chain Partnering** An informational network with other relevant companies for the purpose of overlapping company improvement in customer orientation and resource utilization (Handfield & Nichols, 1998).
- 3. Learning Culture** A continuously changing company with the goal of facilitating constant learning to its employees (Pedler, Burgoyne, & Boydell, 1991).
- 4. Just in time production** Material and information flow to attain a customer demand-oriented delivery service. Characteristics: integrated information processing, manufacturing segmentation, production-synchronized supply, and reduction of storage costs (Womack, Jones & Roos, 1990).



Pro-Initiative Climate Moderating the Relationship between Levels of Process Innovation and Economic Performance of Company



Baer & Frese (2003) Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance; Journal of Organizational Behavior, 24, 45-68

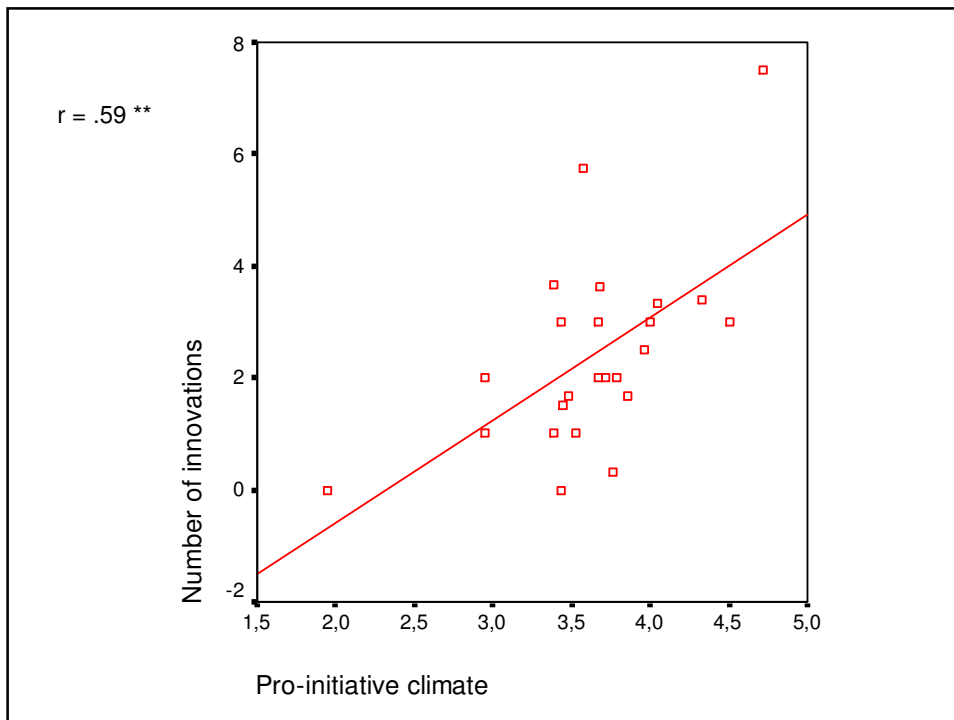
Relationship Between Personal Initiative and Entrepreneurial Success in Uganda (Correlations)

r with Success

Initiative .42**

Replicated several times

(DeReu, Koop, Frese, 1998)

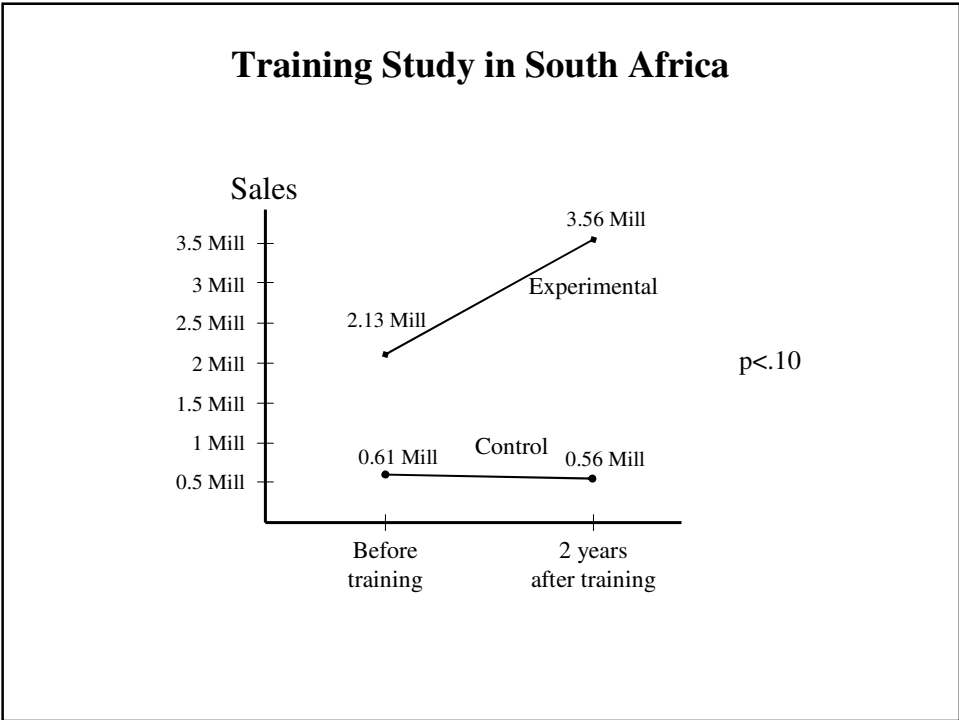
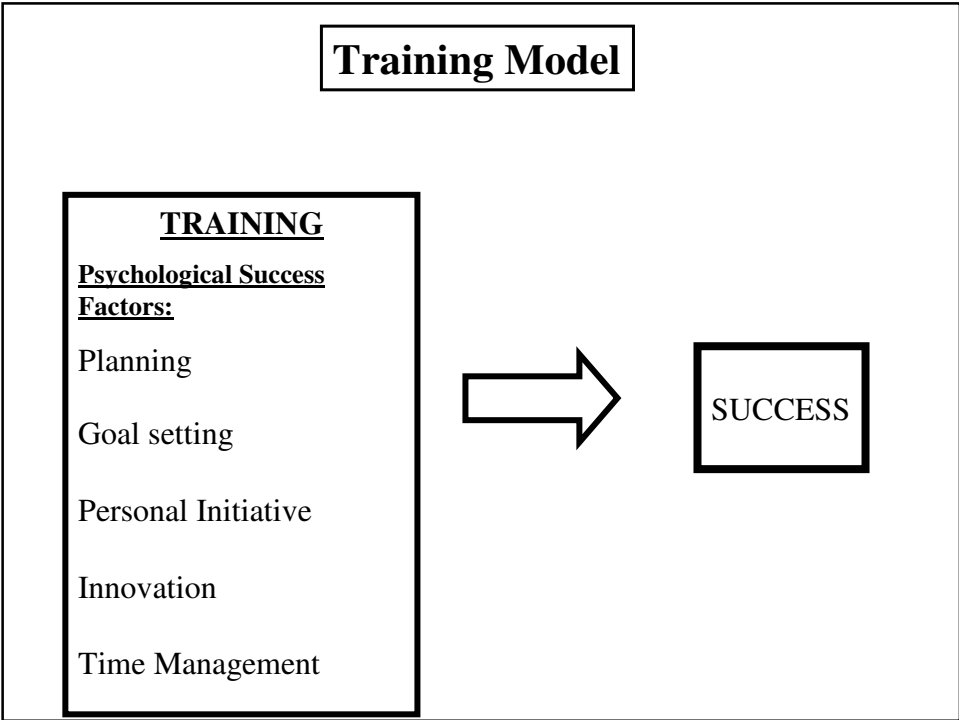


Training Studies on Personal Initiative

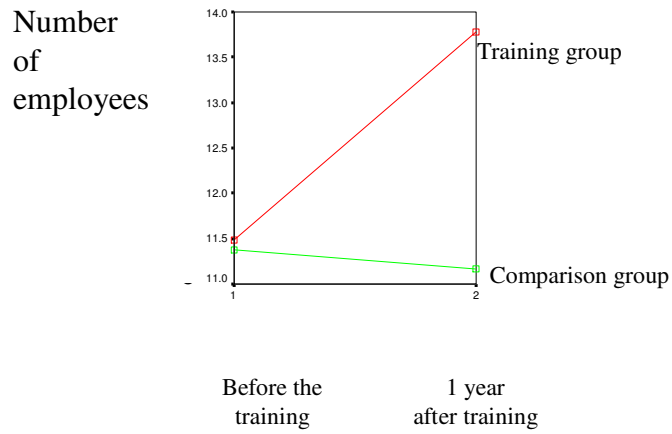
Studies done on:

- Unemployed**
- Employees**
- Firm owners**

6 studies



Initiative Training for Business Owners in Germany



Frese, M., Friedrich, C., & Hass, L. (in prep). Training entrepreneurs for higher efficiency and effectiveness: A psychological training study. *Univ of Giessen: Report.*

