

Assessing The Effects of Executive and  
Management Development on Learning Transfer and  
Business Results: Some Empirical Findings

David Lewin

Neil Jacoby Professor of Management, Human Resources and  
Organizational Behavior

UCLA Anderson Graduate School of Management

Presented to the UNICON Annual Conference  
Atlanta, GA - April 2004

## Executive and Management Development (EMD) and Learning Transfer

Transfer of EMD learning to participants jobs and organizations:

- 132 former participants in the UCLA Anderson School Executive Program (“participants”)
- 1,276 subordinates, peers and superiors of these participants (“colleagues”)

## Dimensions of Learning Transfer

- Overall
- Management
- Organization
- Leadership
- Results

# Components of Learning Transfer Dimensions

## Management:

- Customers
- Financial Resources
- Technology
- Operations
- People

## Organization:

- Critical Tasks
- Org. Structure
- Info. for DM
- Rewards
- People
- Culture

# Components of Learning Transfer Dimensions

(Continued)

## Leadership:

- Motivating Others
- Leadership Adjust.
- Delegating Resp.
- Developing Others

## Results:

- Individual Perf.
- Colleague Perf.
- Team Perf.
- Bus. Unit Perf.

## Overall Learning Transfer Ratings (Scale: 1 = Low, 5 = High)

- Participants:  $M = 3.75$ ;  $SD = 1.15$
- Subordinates:  $M = 3.09$ ;  $SD = 0.87$ ;  $DIFF = 0.66^*$
- Peers:  $M = 3.27$ ;  $SD = 0.73$ ;  $DIFF = 0.48^*$
- Superiors:  $M = 3.45$ ;  $SD = 0.64$ ;  $DIFF = 0.30^*$
- All Colleagues  $M = 3.22$ ;  $SD = 0.79$ ;  $DIFF = 0.53^*$

## Components With Largest Learning Transfer Rating Differences

Participants v. All Colleagues:

- Using Information for Decision Making – 1.00\*
- Managing People – 0.99\*
- Delegating Responsibility – 0.82\*
- Providing Rewards for Performance – 0.78\*

## Correlates of Participants' Overall Learning Transfer Ratings

- Years of Work Experience + 0.34\*
- Number of Companies Worked For + 0.38\*\*
- Marketing Functional Specialty + 0.32\*
- Finance Functional Specialty – 0.33\*
- Female + 0.27\*
- Organization Size in Assets – 0.42\*\*
- 3-Year Sales Revenue Growth + 0.35\*
- Number of Management Levels – 0.31\*



## Executive and Management Development (EMD) and Business Results

- 111 Participants' Business Units
- Financial Performance Measures, 1995-2000

### Dependent Variables:

- Change in return on capital employed (ROCE)
- Change in sales revenue growth (REVGROW)
- Change in revenue per employee (REVEMP)

# Business Results

(Continued)

## Independent Variables:

- **EMD Scope:** Change in proportion of executives/managers participating in EMD (EMDPART)
- **EMD Activity:** Change in proportion of “participating” executives/managers attending externally-supplied open enrollment programs (EMDEXT)
- **EMD Expenditure:** Change in executive/manager per capita EMD expenditure (EMDEXP)

## Business Results

(Continued)

### Selected Findings:

- In ROCE equation, EMDPART + 1.23\* (0.59), EMDEXT +1.02 (0.61), EMDEXP + 1.34\* (0.63)
- In REVGROW equation, EMDPART + 1.47\* (0.70), EMDEXT + 0.96 (0.55), EMDEXP + 1/19\* (0.57)
- In REVEMP equation, EMDPART + 1.26\* (0.56), EMDEXT + 0.97 (0.53), EMDEXP + 1.14\* (0.51)

## Business Results

(Continued)

- Participant learning transfer rating (PLEARNTR) and participant-colleague learning transfer rating difference (LEARNTRD) entered into cross-sectional business performance equations
- In ROCE equation, PLEARNTR + 0.39 (0.25), LEARNTRD – 1.11\* (0.52)

## Business Results

(Continued)

- In REVGROW equation, PLEARNTR + 0.34 (0.23), LEARNTRD – 1.15\* (0.54)
- In REVEMP equation, PLEARNTR + 0.40 (0.26), LEARNTRD – 0.90 (0.49)

## Business Results

(Continued)

- Second set of 292 business units from 72 participants' companies selected for "paired comparison" analysis
- Business units ranked by rate of change in EMDPART, EMDEXT and EMDPART, 1997-2000
- Business units split into "high EMD" and "low EMD" groupings based on median rate of change in EMDPART, EMDEXT and EMDPART

## Business Results

(Continued)

- Similar change in business performance (1997-2000) regressions run separately for “high EMD” and “low EMD” business units
- In ROCE equation, EMDPART +1.18\*\* (0.56) in “high EMD” business units, 0.82 (0.51) in “low EMD” business units

## Business Results

(Continued)

- In REVGROW equation, EMDEXT + 1.10\*\* (0.52) in “high EMD” business units, 0.66 (0.42) in “low EMD business units
- In REVEMP equation, EMDEXP + 1.08\* (0.63) in “high EMD” business units, 0.74 (0.45) in “low EMD” business units



## Business Results

(Continued)

- Business units winnowed to “top EMD” and “bottom EMD” groupings based on rate of change (1997-2000) in EMD measures. Regression findings include:
- In ROCE equation, EMDPART + 1.14\*\* (0.53) in “top EMD” business units, 0.77 (0.42) in “low EMD” business units

## Business Results

(Continued)

- In REVGROW equation, EMDEXT + 1.07\*\*  
(0.52 in “top EMD” business units, 0.29 (0.19) in  
“bottom EMD” business units
- In REVEMP equation, EMDEXP + 1.15\*\* (0.53)  
in “top EMD” business units, 0.53 (0.32) in “low  
EMD” business units

## Conclusions

- Colleagues rate EMD program participants' learning transfer significantly lower than participants rate their own learning transfer
- Colleague-participant EMD learning transfer rating differences follow the organizational hierarchy, with subordinate-participant difference largest and superior-participant difference smallest

# Conclusions

(Continued)

EMD participant learning transfer rating significantly correlated with individual and organizational demographic characteristics:

- Positively with years of work experience, number of companies worked for, female gender, functional specialties in marketing and operations, 3-year revenue growth
- Negatively with functional specialties in engineering and finance, organizational size, number of levels of management

## Conclusions

(Continued)

- Change in EMDPART and EMDEXP significantly positively associated with change in business unit ROCE, REVGROW and REVEMP
- Colleague-participant EMD learning transfer rating difference significantly negatively associated with change in business unit ROCE, REVGROW and REVEMP

# Conclusions

(Continued)

- Change in EMDPART, EMDEXT and EMDEXP significantly positively associated with change in financial performance in “high EMD” but not “low EMD” business units
- Change in EMDPART, EMDEXT and EMDEXP significantly positively associated with change in financial performance in “top EMD” but not “bottom EMD” business units
- **Cumulatively, these findings imply that EMD “pays off”**

## Implications

- EMD is not practiced by all businesses because heretofore evidence about EMD learning transfer and effects on business results has been meager
- EMD as a form of organizational R & D analogous to traditional product and service-oriented R & D. Both are significantly positively associated with (change) in business unit financial performance—and perhaps both should be capitalized and amortized

# Implications

(Continued)

- Analyzing EMD's role in “explaining” the variance in change in financial performance among large samples of business units is different from analyzing EMD's role in explaining a single business's change in financial performance
- The latter requires a more conventional and more challenging before-after, control group type research design—that is, a quasi-experimental design