

High Reliability Leadership: Developing Executive Leaders for High Reliability Organizations

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Outline of Presentation

- Research Questions
- Definition of Key Terms
- Research Methodology
- Study Participants
- Results & Implications

Research Questions



- Main Question: How do individuals develop to be effective executive leaders in high reliability organizations (HROs)?



1. What experiences do executive leaders in HROs consider significant to their own development as executive leaders and why?

Research Questions



- 2. How do executive leaders in HROs develop future executive leaders in their organizations and why?



- 3. How do executive leaders in HROs select future executive leaders in their organization and why?

Definition of Key Terms

- **Executive Leader** – An individual who has the authority and responsibility to develop and manage a semi-autonomous organization as a whole to achieve the purposes of that organization.
- **Executive Leader Development** – The expansion of a person's capacity to be effective in executive leadership roles and processes.

Definition of Key Terms

- **HROs** – Organizations that manage complex, demanding technical systems with significant potential for catastrophic accidents and achieve exemplary performance in both safety and reliability over a long period.

Examples: nuclear power plants, air traffic control centers, chemical processing plants, space exploration agencies, naval aircraft carriers, nuclear missile submarines, DOE defense nuclear facilities

Research Methodology

- In-Depth Interviews using Flexible, Semi-structured interview protocol
- Iterative Approach for questioning, coding, analyzing, and interpreting data
- Selection criteria for study participants
- Purposeful sampling to broaden participant group

Results: Study Participants

33 Study Participants

- Age: 44-73 years (average = 59.7)
- Experience: 22-50 years (average = 34.9)
- Education (12 BS, 14 Masters, 7 PhD/MD)
- Gender (31 male, 2 female)
- Status (19 active, 7 consulting, 7 retired)
- Level (10 entry, 10 middle, 13 top level)
- Average Interview Length: 91 minutes

Results: Study Participants

HRO Contexts (16)

- Commercial Nuclear Power
- Commercial Airlines Operations
- US FAA Air Traffic Control
- US VA & Private Hospital Operations
- Fire Rescue & Ambulance Operations
- Emergency Response Incident Command
- US Forest Service Fire Fighting
- US Coast Guard Operations

Results: Study Participants

HRO Contexts (16)

- US Navy Nuclear Subs, Ships, Carriers
- US Navy & Air Force Fighter Squadrons
- US Navy Aircraft Carrier Flight Operations
- US Strategic Air Command Bomber Wings
- US DOD Nuclear, Chemical & Biological Weapons
- US DOE Nuclear Operations
- US DOE Nuclear Cleanup
- US DOE Hazardous Research Operations

Results for Question #3



3. How do executive leaders in HROs select future executive leaders in their organization and why?

Results:

High Reliability Leadership

Four Leadership Elements

- Managing Self
- Demonstrating Technical Competence
- Leading People
- Leading Organizations

Results:

High Reliability Leadership

Support for Leadership Model

- Leader Selection & Non-Selection
- Leadership Effectiveness
- Leadership Lessons from Key Events

Results: Selecting HRO Leaders

A	MANAGING SELF
A1	Demonstrates honesty, trustworthiness & integrity
A2	Shows drive, energy & passion for shared goals
A3	Demonstrates intelligence, vision & judgment
A4	Shows commitment & openness to learn and change
A5	Maintains self-awareness & humility
A6	Shows self-confidence, optimism & positive attitude

Results: Selecting HRO Leaders

B	DEMONSTRATING TECHNICAL COMPETENCE
B1	Attains and demonstrates general technical competence
B2	Maintains operational awareness & vigilance
B3	Understands risks & protection measures
B4	Develops, shares & learns from operating experiences

Results: Selecting HRO Leaders

C	LEADING PEOPLE
C1	Respects, cares for & values people
C2	Engages & connects with people
C3	Communicates effectively with people (esp. listening)
C4	Demonstrates & cultivates trust in people
C5	Inspires, motivates & provides context to people
C6	Accurately assesses capabilities of people
C7	Coaches, mentors & develops people
C8	Delegates, clarifies expectations & empowers people
C9	Monitors performance & provides feedback to people
C10	Holds people accountable fairly

Results: Selecting HRO Leaders

D	LEADING ORGANIZATIONS
D1	Builds teams & promotes teamwork
D2	Encourages participation & builds consensus for action
D3	Plans work to achieve vision & leads change efforts
D4	Secures internal sponsorship & resources
D5	Works with external groups & secures necessary resources
D6	Executes plans to produce desired results

Results for Question #1



1. What experiences do executive leaders in HROs consider significant to their own development as executive leaders and why?

Results: Distribution of Key Events

Key Events	110 (100 percent)
<i>Experiences</i>	<i>80 (73 percent)</i>
<i>Other Persons</i>	<i>16 (14 percent)</i>
<i>Education & Training</i>	<i>7 (6 percent)</i>
<i>Personal Hardships</i>	<i>7 (6 percent)</i>

Results: Significant Work-Related Experiences

- **Early Work Experiences**
- **Early Leadership Experiences**
- **Major Turning Points**
- **Significant Personal Challenges**
- **Operational Mishaps**
- **Task-Force Experiences**
- **Significant Organizational Challenges**

Results for Question #2



2. How do executive leaders in HROs develop future executive leaders in their organizations and why?

Results:

Developing Future Leaders

Developmental Assignments

- Breadth of Technical Experience
- Use of Special Assignments & Task Forces
- Core Technical Discipline (Operations)
- Line and Staff; Field and HQ
- Increasing Levels of Responsibility
- Length of Assignments (2-4 years)

Results:

Developing Future Leaders

Developmental Relationships

- Closely related to Assignments
- Coaching desired Leadership Behaviors
- Modeling desired Leadership Behaviors
- Mentoring to facilitate learning & reflection
- Helping to obtain opportunities

Results:

Developing Future Leaders

Education & Training

- Helps with Self-Awareness & Confidence
- Technical and Leadership emphasis
- Obtain Key tickets (Operator's license)
- Continuous process

Results for Main Question



Main Question: How do individuals develop to be effective executive leaders in high reliability organizations (HROs)?

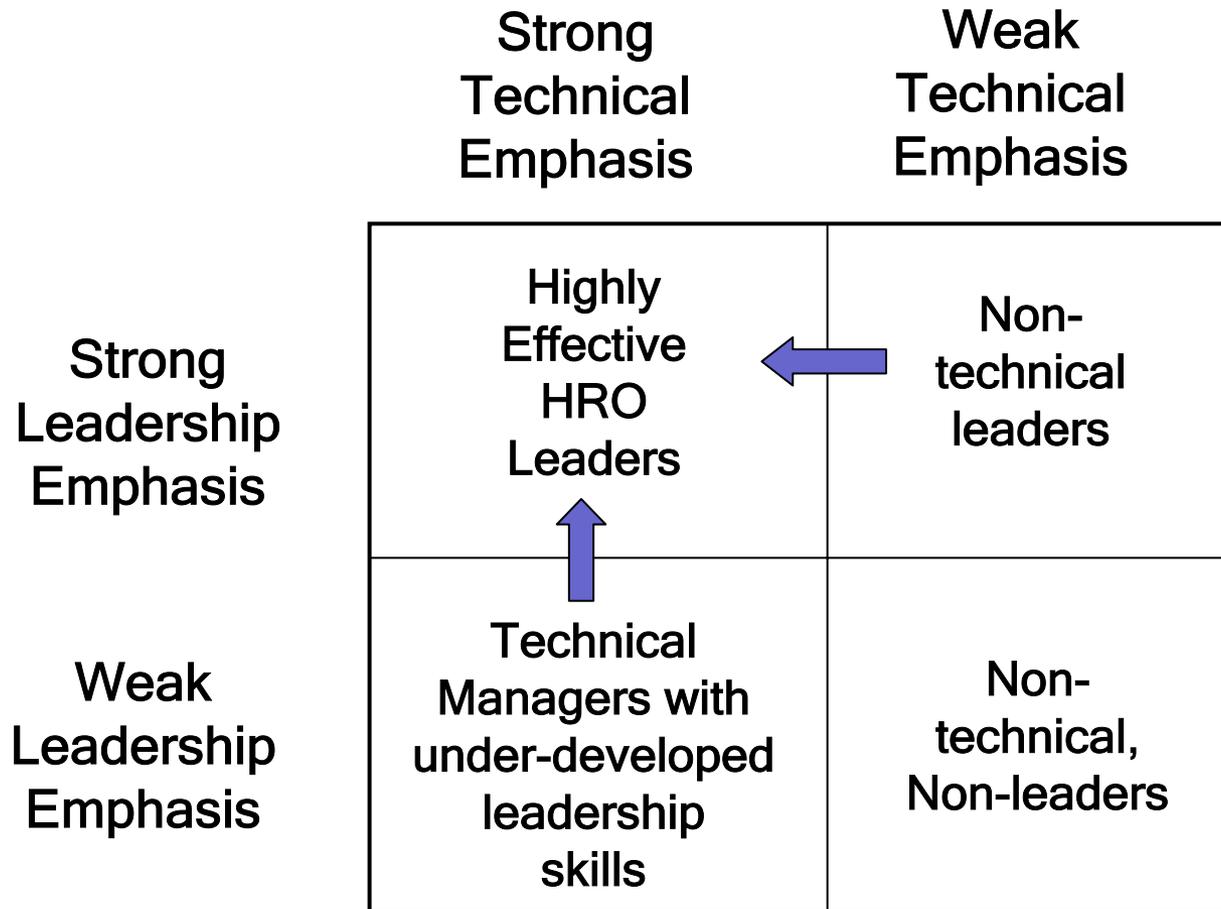
Results: Developing Yourself (Advice from Participants)

- Accept Responsibility for Development
- Prepare Development Plan
- Seek Challenging Work (Volunteer, Broaden, Move, Short and Long-term)
- Seek Coaching & Mentoring
- Seek Training, Education & Development
- Stay Committed; Be Patient & Persistent

Are HRO Leaders Different? (Study Comparison)

	HRO Execs	Business Execs	Int'l Execs
Managing Self	28%	41%	30%
Technical Competence	15%	13%	17%
Leading People	39%	27%	25%
Leading Organizations	18%	19%	13%
Other			15%

Discussion: Emphasis for Development



Results:

Developing Future Leaders

Bottom Line

- Leadership matters!
- Future leader development matters.
- HROs and HRO leaders need to put more conscious attention & commitment on future leader development.

Questions?



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***Thank-you
for your
interest.***