Agricultural Safety Culture & Manufacturing Crossovers ?

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Can Measuring Safety Climate: Lead to Improved Agricultural Safety

1. Safety Climate
2. Safety Leadership Development
3. Can tools which work in Manufacturing- Measure and Advance Safety in Agriculture?

The Dalhousie Approach

- What is the Prevention Literature saying?
- Test approaches working elsewhere
- Focused on Large Industrial Environments
- Next Step ? Research in Small Business

Comprehensive Safety & Health

Personal Wellness

(Health Practices & Lifestyles)

Organizational Wellness –

(Leadership & Culture)

Physical Work Environment,

(Materials and Process)

No Simple Answers
Multiple Ingredients!

Audit, Inspection, Prosecution, Orders, Incentives, Policies, Standards & Procedures

Training, Supervision, Motivation, Equipment, Financial Standards, Commitment

Research indicates lasting solutions require:

effective leadership ties

systems & people together

Dov Zohar & Safety Research

- researching leadership linkage since 1980's
- 1st Safety Climate paper cited >1000
- Internationally respected researcher & teacher
- 3 years in partnership, with Dalhousie through the IWH, on safety leadership development

Safety Leadership Message

- Effective Leaders monitor their team to provide feedback & recognition
- Feedback & Recognition can be an effective motivator when people feel understood & valued
- Strongest incentives at the workplace:
  - Pay-per-performance (23%);
  - Recognition (17%);
  - Immediate feedback (10%).

Improving Safety requires leaders to identify issues & respond: recognizing

(Emotional Intelligence)

- Bounded rationality: short-term maximizing
- Safety precautions -modest & immediate cost (slower pace, extra effort, & discomfort)
- Unsafe behaviour offers immediate rewards;
- Safe behavior delayed/ uncertain rewards- given limited risk why incur the cost

Routine work situations: understandable tendency to take risks (Boundedly rational decision making)

- Supervisory leaders key to change (i.e. leaders can reverse the payoff structure)
- Frequent measurement as lever for change: '*what gets measured - gets attended to*'
- Who leads the leaders to create culture & climate at the workplace?

Understanding Climate

- Priorities reflect underlying values/ priorities , the building-blocks of organizational culture
- Bounded rationality promotes discrepancy between formal vs. enacted priorities
- Employees will share and compare experiences
- If discrepancies exist there is a consensual reassessment of priorities,

Safety Climate reflects

- the shared workplace understandings –what behaviors will be rewarded & supported (e.g. speed, safety, comfort, quality)

- leaders' daily actions and informal interactions summarized through "the eyes of employees" – info concerning true priorities: "walk-the-talk" ?

- a starting point for changing culture

How do you change Culture
Work on Climate

- Assess your safety climate - survey
- Safety checklists formal & informal
- Hazard removal ideas discussions
- Safety talks become –
  Safety Discussions

But it is Normal to do What always has been done

- Framework for change demonstrated & re-enforced through coaching
- Feedback & recognition positive & negative
- Leaders who Listen & Respond to Workers views of safety climate & site hazards, have information to use as feedback & recognition & improve safety climate

Leadership Development in Manufacturing Plants

- Heavy Steel Manufacturing - Nova Scotia
- Oil refinery – Israel
- Food Manufacturing – Israel

B-Shop comparison Daily Safety Exchanges, and % of Safe Operations housekeeping

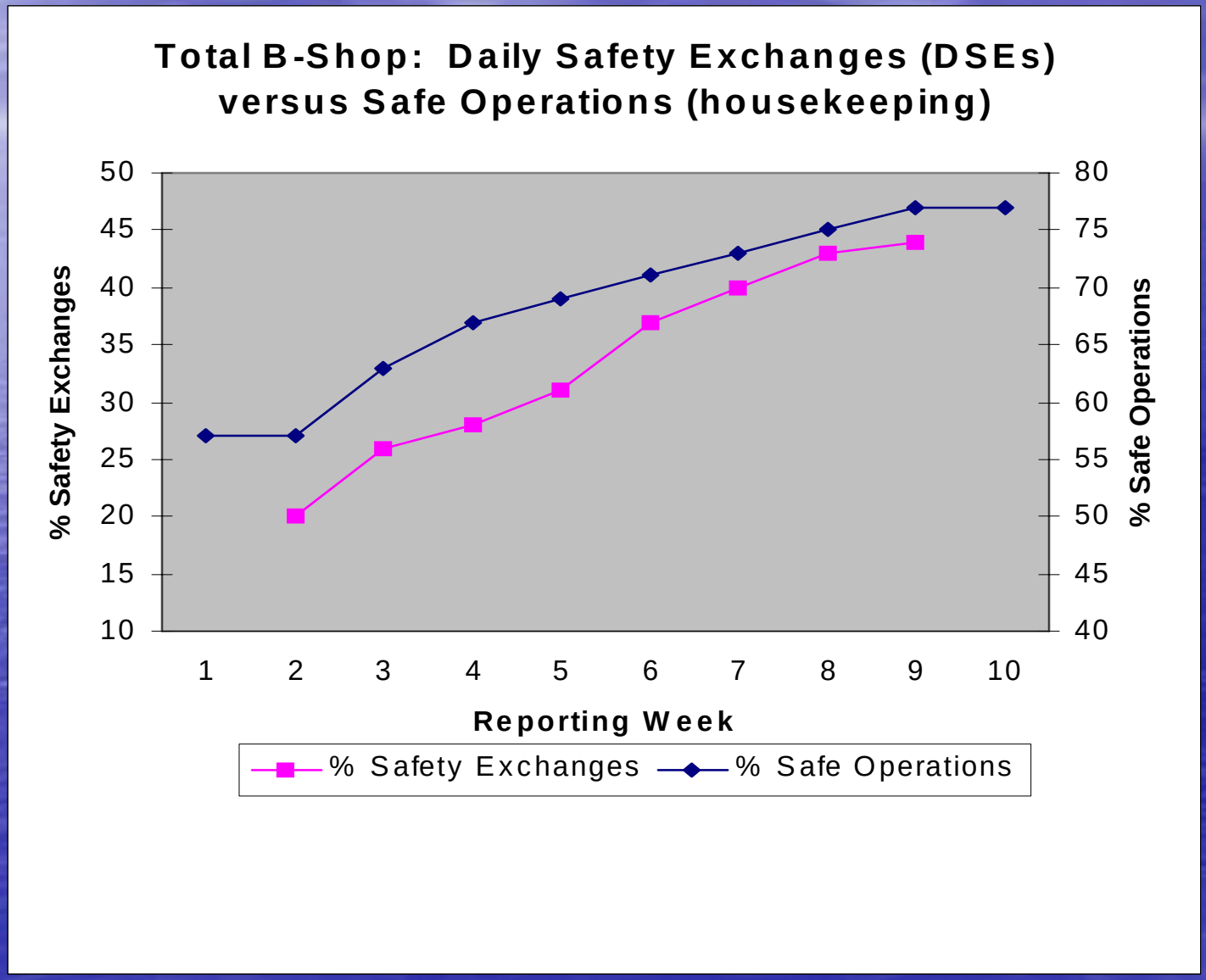
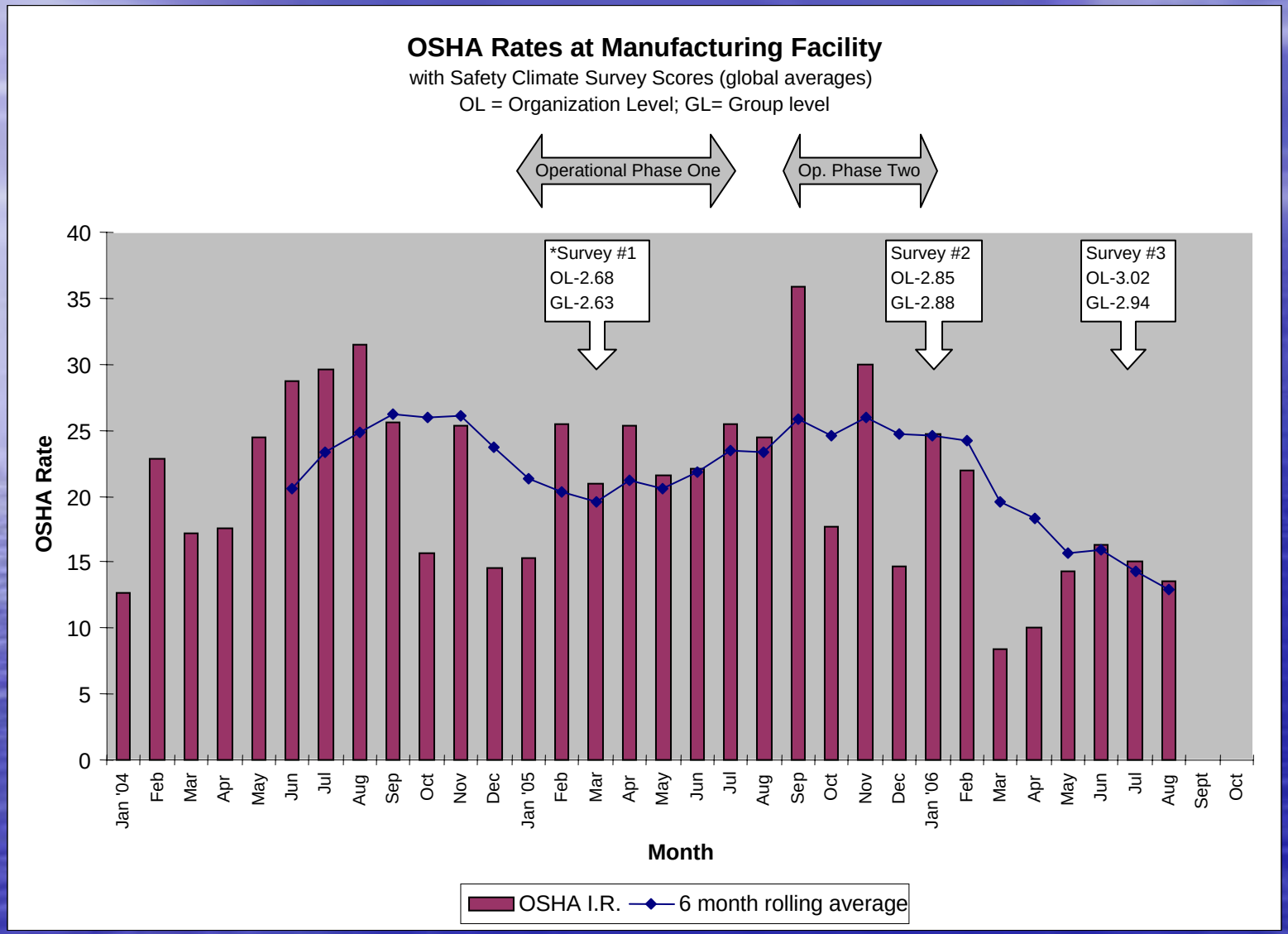
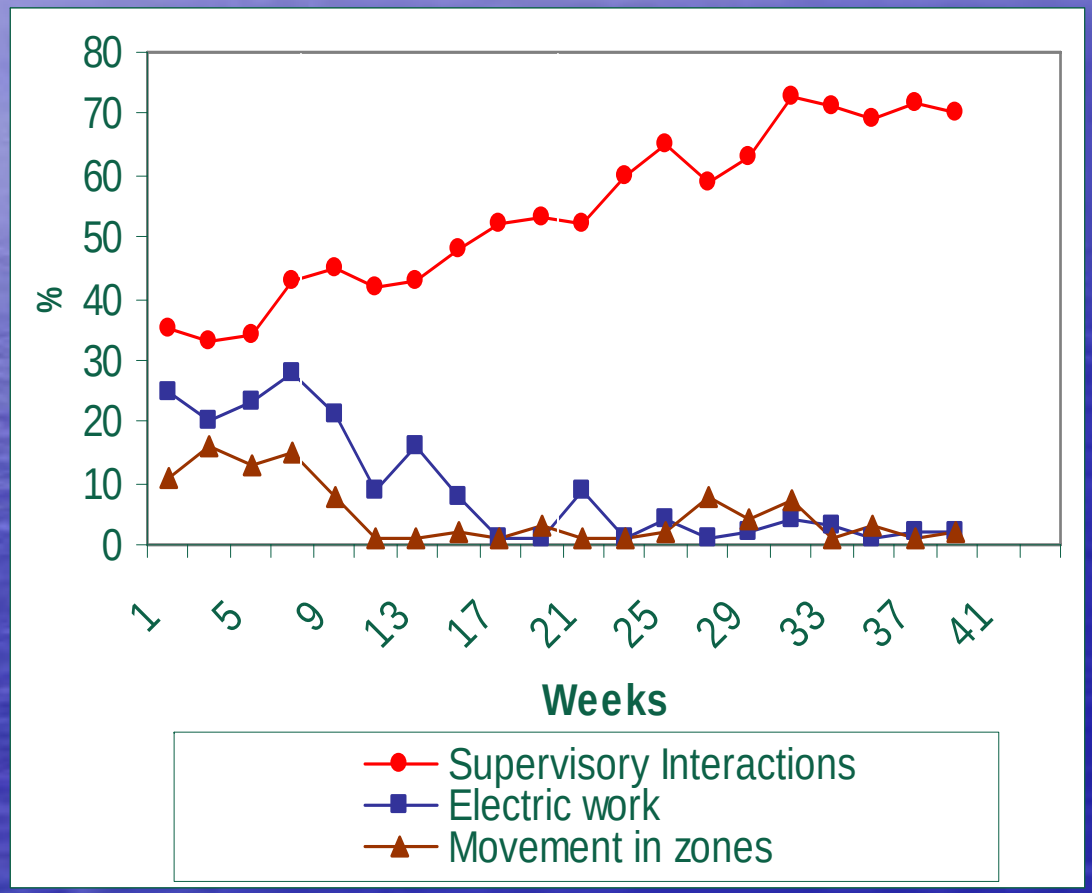


Figure 1. OSHA rates and the project timeline

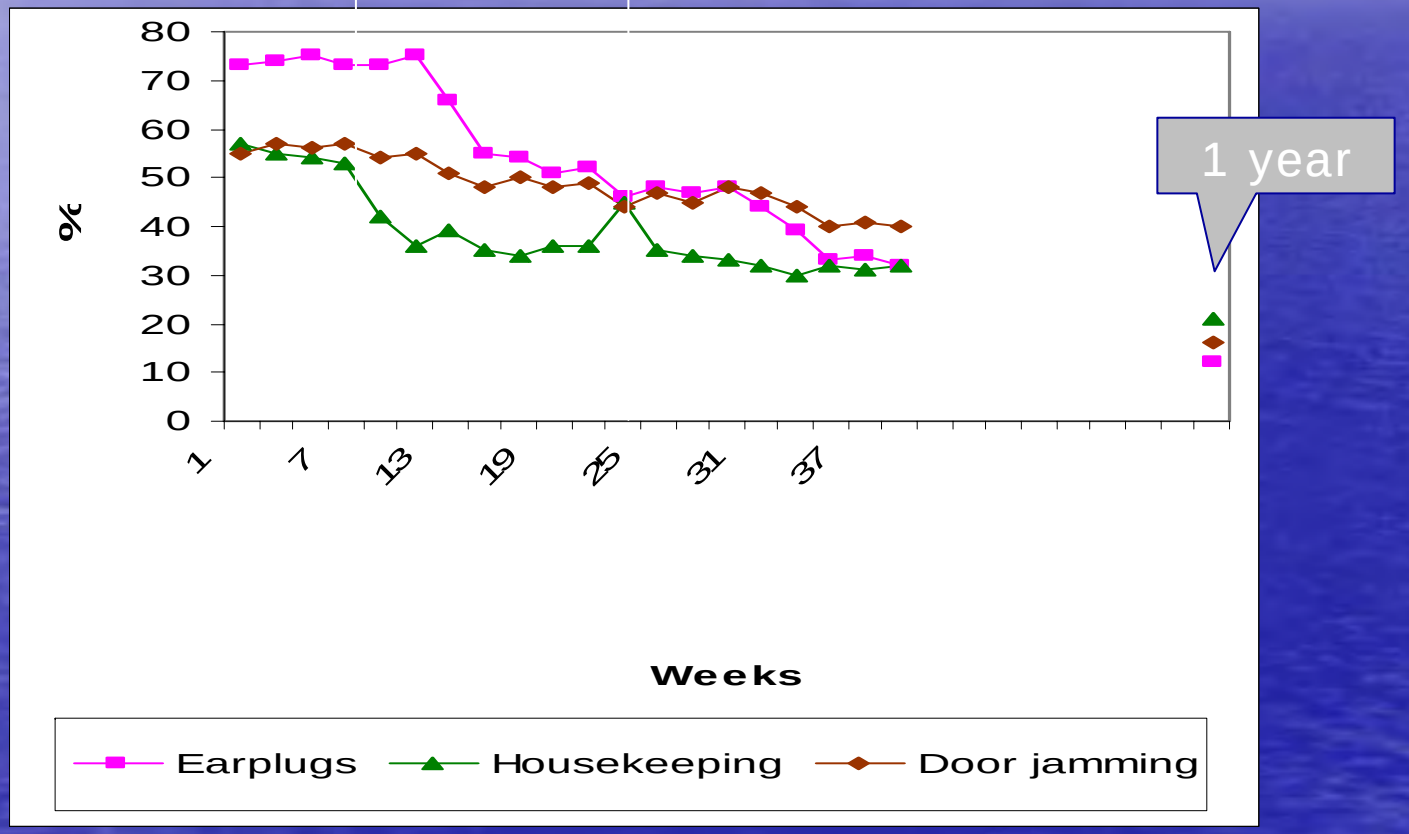


Safety exchanges & unsafe operations (%)
refinery section



One year later

Food-processing Company: (% unsafe) Israeli company –Zohar with Luria



Will the Manufacturing approach work in Agriculture?

- safety climate survey
- sampling safety observations & interactions
- coaching leaders based on observations info starting at the work team & building to the organizational level.

The Process

- Confidentially is key to soliciting & sharing Leadership data
- In most Agra industries family relationships are a significant operational factor
- Family relationships issues which will need to be addressed in the workshop

Limits on the Manufacturing Model

- Intensive on site time to establish relationships and secure information
- No family relationships
- Existing survey tool –needs to be modified for testing in agriculture

Options

- Use a telephone based coaching model as used in executive coaching
- Test & modify the manufacturing survey to include agricultural information
- Directly address family situations

Questions:

assume no single site info shared

- Would a regional or sector specific survey have an impact on Agra leaders
- Would a regional or sector specific discussion groups work for coaching
- Would anonymous internet or phone based discussion groups work for coaching

Concluding comments

- Safety culture & climate **can** be monitored/measured
- Monitoring **can** result in a lasting impact on safety performance (*What gets measured*... gets attended to)
- Ultimately depends on a leaders commitment (*Who leads the leaders?*)

Safety Leadership Development

Key Ideas

- Normal is to take risks in routine situations (Bounded rationality decision-making)
- Leaders are the key to change (i.e. leaders can reverse the supports for risk taking)
- Strategic leaders create culture down the line with measurement as lever for change

Thank you

- Research Examples Available
- Questions Welcomed

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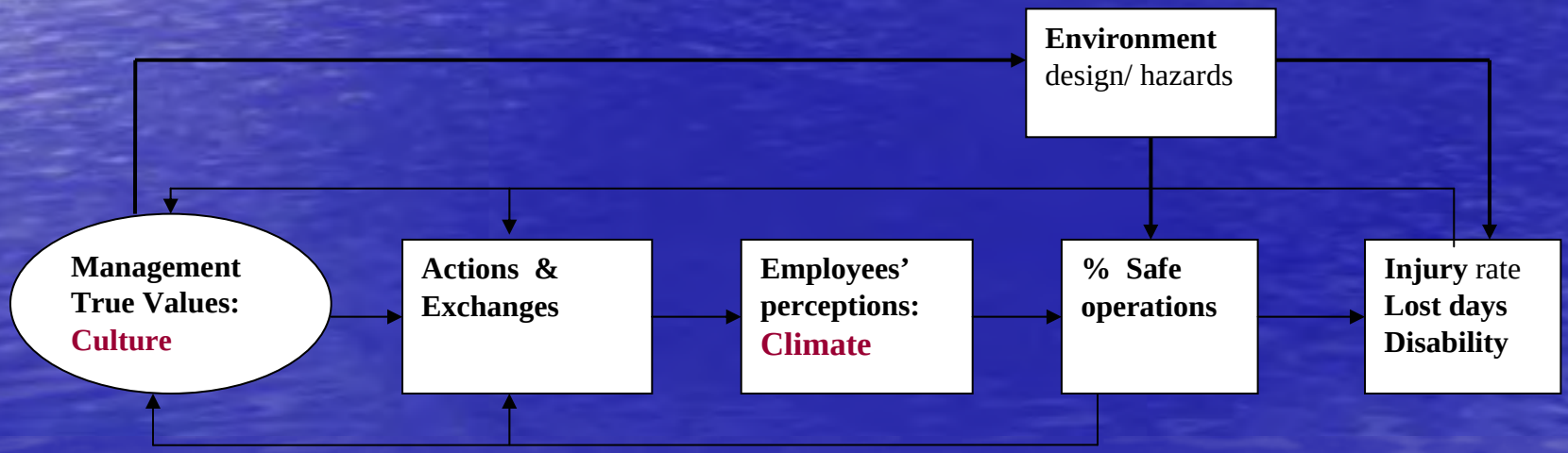
Safety climate model

- Climate perceptions provide the link between managerial practices and employees' behaviour



Manufacturing Preparation for Buy In

- Brief Mgmt & Labour on Logic & Process (often separately)
- Joint Briefing Logic & Process to Mgmt & Labour
- Mgmt & Labour jointly confirm support
- Selection of joint Labour & Mgmt Steering Group

Introducing a Project to Staff

- Brief all staff in research area- in groups of 10-15 (30 min)
- Develop safety check lists with workers on floor in research area (site specific)
- Brief all other employees in larger groups at time of survey (30 min)

The Process-Confidentially is key to soliciting & sharing Leadership data

- Leaders Workshop driven by safety climate results
- Gather & post safety checklists results for all staff
- Gather & Confidentially explore safety exchange results with leaders who voluntarily agree to coaching
- Voluntary & confidential coaching of leadership pairs
- Steering Committee input into project process