The Safety Perceptions of the State’s Workforce
Minnesota State Wide Results & Next Steps

September 26, 2017

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Risk Control Manager
The PMA Companies

Who’s Survey?

The PMA Companies

The PMA Companies (Member of Old Republic International)
• Workers’ Compensation Specialists
• 100+ Years of Commercial Insurance Experience – (The PMA Group)
• 25+ Years Third Party Claims Administrator / Risk Management Services Provider (PMA Management Corp.)

David Weightman – Risk Control Manager
• 30+ Years of Safety & Risk Management Experience
• Risk Control Manager of PMA Public Entity Market
Agenda

• Overview of organizational culture
• Why a safety perception survey?
• State Wide survey results
• Safety perception survey report navigation
• Suggested next steps
• Organization changes process

For the Longest Time…

Safety Programs and Protocols
12 “Traditional” Safety Programs and Protocols

1. Safety program content
2. Equipment and facilities
3. Monetary resources
4. Reviews, audits and inspections
5. Procedures development, review and modifications
6. Corrective actions
7. Accident reporting and analysis
8. Safety training
9. Motivational procedures
10. Hazard control technology
11. Safety authority
12. Program documentation

American Railroad Association – 10 Year Study

1970’s Commissioned a study on… Safety Program Effectiveness

- Included all major rail roads and more than 85% of employees
- Audited 12 components of safety system vs. results
- Hypothesis - high scores in the 12 areas would correlate with lower accident and injury rates
Correlation: Program vs. Results?

0

"... little correlation was found to exist between actual safety performance and safety activity scores. The overall (program audit) score has almost no correlation with train accident rates, cost indicators and personal injury rates."

Dan Peterson

Railroads & Safety Attitude Questionnaires

• Late 1970’s the ARA partnered with Dan Peterson & Chuck Bailey to develop a safety perception survey

• Probed psychological unknowns of human behavior .... “what happens when people are faced with hard tasks or overload.”

• Methodology:
  – Asked railroad safety directors what questions they wanted to ask employees (1500 questions suggested)
  – Peterson & Bailey’s team reduced to 74 questions
10 Year ARA Study Conclusions:

A Positive Correlation

Peterson would write…

A “culture survey, properly constructed is a better measure of safety performance and a much better measure of safety results.”

As safety cultures became more positive and distinct, injury rates decreased.

This Marked A Shift in Thinking

From traditional safety to human and organizational factors…

• Why people do things?

• Why organizations do things?

• Results...
  – Organizational behavior movement took hold
  – Recognition of the importance of organizational culture
What Is Organizational Culture?

… It Resides Largely Below The Surface

“A pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems”


Culture is...
- Stable
- Deep
- Formed long ago
- Unconscious
- Slow to change
- Collective beliefs of individuals

Safety Metrics

Lagging Indicators – Historical Value
- Frequency rates
- Loss rates

Leading Indicators – Predictive Value
- A condition or characteristic that is a predictor of future results
- Metrics linked to culture would be a “leading” indicator
Columbia Space Disaster (2003): Investigation Results

“The physical cause of loss of Columbia and its crew was a breach in the Thermal Protection System on the leading edge of the left wing…”

In our view the NASA organizational culture had as much to do with this accident as the foam.”

Columbia Space Disaster: Investigation Results

“The Board found that there is a “broken safety culture” at NASA. Schedule pressures related to the international space station, budget constraints and work force reductions were also factors.”

Cultural traits and organizational practices detrimental to safety were allowed to develop, including: reliance on past success as a substitute for sound engineering practices..., organizational barriers that prevented effective communication of critical safety information and stifled professional differences of opinion; lack of integrated management across program elements; and the evolution of an informal chain of command and decision-making processes that operated outside the organization’s rules.”
Characteristics of Effective Organizations

Employee Engagement

“Top performers (organizations) in employee engagement have 70% fewer safety incidents.”

Business units with engagement scores in the top quartile of Gallup’s Employee Engagement Database have 70% fewer safety incidents compared with the bottom-quartile units

2016 Gallup Study on Engagement and Safety
- 82,000 business units
- 1.8 M employees
- 230 organizations
- 49 Industries
- 79 Countries

Social Norms – Peer Accountability

Vital Smarts Study (30 organizations & 1600 interviews)

They found that 93% of employees say they see urgent risks to life and limb and yet...

< 25% speak up about a safety concern to another worker. Rather, they wait for bosses or others to take action.
Characteristics of Effective Organizations

Safety / Production Conflicts

Itasca, IL – The National Safety Council released survey results June 20, 2016 showing 33% of the 2,000 employees surveyed across the nation believe safety takes a back seat to productivity at their organizations.

The percentage was even higher among employees in high-risk industries:

- Construction – 60%
- Agriculture, Forestry, Fishing – 52%

Characteristics of Effective Organizations

Job Satisfaction: Nickel Alloy Company Case Study

The two departments with the highest employee job satisfaction had the:

- Lowest absenteeism rates
- Lowest accident rates

Department A
Department B
Department C
Department D
Characteristics of Effective Organizations

Job Satisfaction and Low Back Injuries

A Physician Group Study

• A physician group in the state of Washington associated with a 3000+ employee aircraft manufacturing operation

• Tracked 279 back patients over four years

• Used the Minnesota Multiphasic Personality Inventory to rate job satisfaction

• The most predictive aspect of back injuries was the rating “hardly ever enjoyed their job”

These employees were 2.5 X more likely to report a back claim.

Safety Perception Survey – Leadership Feedback

Zengler Folkman Co. – analyzed 500,000 360 Degree Feedback

• Findings … Managers and Feedback
  – The older people get and higher they rise in an organization the more they value and want feedback
  – But…they get less of it

• The Problem …
  – “Managers live their lives in a bubble of praise, flattery and positive reinforcement…which reaffirms self concept”
  – Feedback is essential for development because everyone has blind spots
  – “The lack of dialogue between people at different levels about organization strategy has been described as one of the greatest “silent killers” of organizational alignment and commitment to the company’s vision”
Perception Survey … a Measure of Organization Culture

- Efficiently captures large data sample
- Empirical results vs. auditor assessment (bias)
- Ability to identify perception gaps between…
  - Senior managers, middle managers & employees
  - Work units
  - Effective & poor performing organizations
- Ability to target improvement interventions
- Ability to track changes over time

PMA Safety Perception Survey
April 24 – June 30, 2017

- 48 Agencies Elected to Participate / 15 Ordered Reports
- 19,739 / 50,842 ~ 39% Response Rate
PMA Safety Perception Survey

April 24 – June 30, 2017

Perception Gaps

• Between work groups / divisions
• Collective bargaining units
• Position / organizational hierarchy
• Tenure

• Between where you are today and where you want to be

• Where you are today and where you were

What Do We Measure and Why?

7 Performance Indicators

• Employee Involvement
• Work Environment
• Social Norms
• Safety Supervision
• Safety Leadership
• Safety Training & Education
• Job Satisfaction

• Open Ended Questions (3)

5 Degree Rating Scale

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree Nor Disagree
4 = Agree
5 = Strongly Agree
What Do We Measure and Why?

**Strategic Issues**

- **Employee Involvement** - Studies suggest employees who are engaged in supporting the goals of the organization are more likely to support a positive and safe work environment and experience lower workers’ compensation costs.
  - Are your employees involved in managing workplace safety issues and actively supporting organizational improvement?

- **Safe Work Environment** - A safe work environment is generally free of recognizable hazards.
  - Is your workplace free of hazards and is an effective process in place to identify and correct unsafe conditions?

- **Work Place Safety Norms** - It is widely recognized that peer pressure influences individual behavior.
  - Does the peer pressure and social norms of your organization support positive safety performance or is it a negative force on your organization?

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What Do We Measure and Why?

**Strategic Issues**

- **Safety Supervision** - Supervisor actions establish work rules and influence employee behavior.
  - Do your supervisors and management systems effectively manage employee behavior and important safety activities?

- **Organizational Safety Leadership** – It is important that employees recognize safety is a priority for the organization as behavior is influenced by management priorities.
  - Is safety a priority for your organization and does your management team provide effective leadership to safety initiatives?

- **Safety Training & Development** - Employees need the knowledge and skills to safely and effectively perform their jobs.
  - Have you effectively trained your workforce? Do your managers and employees understand the hazards of their jobs and do they know how to do their jobs safely?

- **Job Satisfaction** - Studies suggest employees who are dissatisfied in their job are more likely to experience higher absenteeism, experience a work related accident or submit a workers’ compensation claim.
  - Are your employees satisfied in their job and committed to the mission of the organization?
And the survey says…

Strategic Analysis… Your Starting Point / Baseline

State Wide - Survey Results

<table>
<thead>
<tr>
<th>Employee Safety Involvement</th>
<th>Safe Work Environment</th>
<th>Workplace Safety Norms</th>
<th>Safety Supervision</th>
<th>Organizational Safety Leadership</th>
<th>Safety Training &amp; Development</th>
<th>Job Satisfaction</th>
<th>Aggregate Avg. Score</th>
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<tr>
<td>3.76</td>
<td>3.92</td>
<td>3.88</td>
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<td>3.76</td>
<td>2.76</td>
<td>3.81</td>
<td>3.82</td>
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And the survey says…

Strategic Analysis

State of MN
Agency Scores: High – 4.52  Low – 3.59

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<td>3.80</td>
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Other PMA Clients
Organization Scores: High – 4.17  Low – 3.31

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<td>3.79</td>
<td>3.81</td>
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Employee Safety Involvement

State Level Question Analysis

Safe Work Environment

State Level Question Analysis
Work Place Safety Norms

State Level Question Analysis

Safety Supervision

State Level Question Analysis
Organizational Safety Leadership

State Level Question Analysis

Safety Training & Development

State Level Question Analysis
Job Satisfaction

State Level Question Analysis

State Wide Trends – Questions with High Scores

Organization Strengths to Leverage

<table>
<thead>
<tr>
<th>Question</th>
<th>Avg. Score</th>
<th>% Deviation from Overall Average of 3.93</th>
<th>Culture Indicator</th>
<th>Cultural Indicator Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am comfortable raising salary issues</td>
<td>4.27</td>
<td>12%</td>
<td>Employee Satisfaction</td>
<td>3.73</td>
</tr>
<tr>
<td>2. I cope my work responsibilities and tasks</td>
<td>4.21</td>
<td>10%</td>
<td>Job Satisfaction</td>
<td>3.81</td>
</tr>
<tr>
<td>3. The equipment and tools I use are well</td>
<td>4.7</td>
<td>10%</td>
<td>Work Environment</td>
<td>3.95</td>
</tr>
<tr>
<td>4. Our workplace is free from drugs and alcohol</td>
<td>4.65</td>
<td>9%</td>
<td>Work Environment</td>
<td>3.92</td>
</tr>
<tr>
<td>5. It is OK to speak or encourage people to work safely</td>
<td>4.72</td>
<td>10%</td>
<td>Work Environment</td>
<td>3.92</td>
</tr>
</tbody>
</table>
State Wide Trends – Questions with Low Scores

Organization Improvement Opportunities

<table>
<thead>
<tr>
<th>Question</th>
<th>Avg Score</th>
<th>% Deviation from Baseline Average</th>
<th>Current Indicator</th>
<th>Current Indicator Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Our safety messages are clear.</td>
<td>2.37</td>
<td>-12%</td>
<td>Employer Safety</td>
<td>2.75</td>
</tr>
<tr>
<td>15. Safety performance is considered in performance appraisals.</td>
<td>3.40</td>
<td>-11%</td>
<td>Organizational</td>
<td>3.70</td>
</tr>
<tr>
<td>44. When injured, the company returns workers to work as quickly as possible.</td>
<td>3.51</td>
<td>-8%</td>
<td>Job Satisfaction</td>
<td>3.61</td>
</tr>
<tr>
<td>42. There are reasonable rewards for the work I perform.</td>
<td>3.42</td>
<td>8%</td>
<td>Job Interaction</td>
<td>3.41</td>
</tr>
<tr>
<td>25. There are consequences for violating safety rules.</td>
<td>3.60</td>
<td>-7%</td>
<td>Safety Supervision</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Questions with the Highest Perception Gap between Positions

Highest Standard Deviation Between Positions
Questions with the Lowest Perception Gap between Positions

Lowest Standard Deviation Between Positions

<table>
<thead>
<tr>
<th>Standard Deviation of Average Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.093</td>
</tr>
<tr>
<td>Job Satisfaction</td>
</tr>
<tr>
<td>11. I have a clear understanding of workplace hazards and how to avoid injury at work</td>
</tr>
<tr>
<td>Director/Senior Leader</td>
</tr>
<tr>
<td>Employee</td>
</tr>
<tr>
<td>Seasonal/Temporary</td>
</tr>
<tr>
<td>Supervisory/Manager</td>
</tr>
</tbody>
</table>

Open Ended Questions

At Division / Work Group Level

Questions:
46. Are there any specific hazards management should address to improve workplace safety?
47. Are there any specific issues management should address to improve workplace safety?
48. Please list any other comments that you feel will improve the safety culture of your organization.

Observations:
- Feedback unique to each work unit
- Common Trends:
  - Building security and personal safety
  - Parking lot lighting
  - Indoor air quality
  - Office ergonomics
  - Snow and ice hazards
Review with your divisions and work groups to foster discussion of work group issues
Next Steps

Consider the following…

• **Review Survey Data** – If your agency participated in the survey and ordered a report, review and “process” the feedback provided by your work agency, divisions and work groups.

• **Management Knowledge and Support** – Get your senior management team involved in reviewing survey data, prioritizing improvement opportunities and leading the organization change process
  - Understand survey data and employee perceptions
  - Identify and prioritize improvement opportunities
  - Lead change management process

• **Share Survey Data with Employees** - Survey data should be reviewed with the management team and ultimately with all employees. “Thank you for your participation”…and observations and actions planned.
  - Agency Level Survey Data
  - Division Survey Data
  - Address feedback obtained through Open Ended Questions

Next Steps

Consider the following…

• **Employee Focus Group Meetings** – Solicit additional feedback from employees or probe the meaning of empirical data obtained. “Give me examples…; let’s talk about question # ____ responses”
  - Personal Interviews
  - Group Sessions

• **Establish Improvement / Safety Culture Teams**
  - Goals / Metrics
  - Target Cultural Indicators or Questions
  - Actions & Target Dates

• **Follow-up Survey** – Consider a follow-up survey 18 to 24 months with the goal of assessing changes in employee perceptions and the impact of any organizational changes initiated following this survey
Employee Involvement Strategies - If an organization or work unit scored low in the Employee Involvement culture indicator or the questions which make up this indicator, the following strategies may improve organizational and work unit effectiveness and employee perceptions around the issues measured:

- Share survey data with employees
- Create meeting forums
- Publicly recognize those who support the improvement process
- Manager & supervisor training to improve management skills
- Share operational data
- Create teamwork opportunities
- Improve the effectiveness of safety committees and market their efforts and accomplishments throughout the organization
### Next Steps

**Develop a Plan...**

<table>
<thead>
<tr>
<th>Cultural Indicator</th>
<th>Survey Question</th>
<th>Question Score</th>
<th>Action 1</th>
<th>Action 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Work Environment</strong></td>
<td>Unsafe conditions are corrected in a timely manner</td>
<td>3.54</td>
<td>Confirm receipt of unsafe condition within 24 hours of report with employee.</td>
<td>Notify employee and workgroup that unsafe condition is being addressed or has been resolved.</td>
</tr>
<tr>
<td><strong>Safety Training &amp; Education</strong></td>
<td>New employees are effectively trained on safety rules and procedures</td>
<td>3.62</td>
<td>Establish a management / employee group to review existing training program/process and make recommendations.</td>
<td>Set date for group to meet by end 3rd Qtr 2017.</td>
</tr>
</tbody>
</table>

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**Cultural Indicator**

**Employee Involvement**

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Question Score</th>
<th>Action 1</th>
<th>Action 2</th>
<th>Action 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaders use safety suggestions made by employees</td>
<td>3.64</td>
<td>Use the Company resources to acknowledge and identify employee’s suggestions including Group Texting, STOP Meetings, and Human Resources News Letter.</td>
<td>Solicit suggestions from employees @ all type of meetings including STOP Meeting, Manager, Sales, etc.</td>
<td>Create a suggestion box or some type of method for employees to communicate their suggestions</td>
</tr>
</tbody>
</table>

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**Address issues presented in Open Ended Questions**
Where to Start?

State Wide Trends … consider your agency trends

- Our safety meetings are effective – (3.37)
- Safety performance is considered in performance appraisals and promotions – (3.40)
- When injured on the job, employees return to work as quickly as possible – (3.51 and consistent low score among agencies and organization hierarchy/position)
- There are reasonable rewards in the work I perform – (3.52)
- There are consequences for violating safety rules – (3.55)

Where to Start?

State Wide Trends … consider your agency trends

- Leaders in this company solicit safety ideas from employees – (3.58 and wide variation in scores among agencies)
- Leaders use safety suggestions made by employees - (3.59)
- My company’s safety goals and results are clearly communicated – (3.68 and variability in scores among agencies)
- I usually have enough time to perform my job in a quality manner – (3.71 and wide variation in scores among employee hierarchy/positions with lower scores reported by supervisors/managers)
- A team approach is valued in this company – (3.72 and wide variation in scores among agencies, organization/position and employee tenure)
Does it Work?

The Power of Employee Engagement

“Top performers (organizations) in employee engagement have 70% fewer safety incidents.”

Business units with engagement scores in the top quartile of Gallup’s Employee Engagement Database have 70% fewer safety incidents compared with the bottom-quartile units

2016 Gallup Study on Engagement and Safety

- 82,000 business units
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Does it Work?

Before & After Analysis - Recent PMA Client
Does It Work?

A Before and After Analysis ...

The methodology used to calculate this pre/post survey result analyzes the workers’ compensation loss data for each company involved in our study for the time period (2012 through 2016). Complete policy years prior to releasing the safety perception survey report are classified as “Before” and policy year loss experience for the policy year during the release of the report and after are considered “After”. To calculate the average experience noted above, payroll and claim counts for the before and after time periods noted were aggregated and the number of claims divided by the trended earned payroll. The percent change was calculated comparing the Before & After frequency rate results at the aggregate levels.

Are You Interested in Supporting Change - Climbing the Mountain?
Start with a Vision of Where You Want to Go

Today you may be at base camp
... history and baggage
How do you start your climb?

Understand the Change Management Process

The Change Management Process

Issues to Consider...

- Leadership needs to create a sense of urgency around the need to change

- A coalition of change agents should be established with the expertise and influence in the organization to initiate change

- A vision for change needs to be created that clearly define how you want the organization to change

- The vision of change needs to be actively communicated throughout the organization
The Change Management Process

Issues to Consider...

- Proactively identified, removed or actively worked around obstacles to change (supervisors, systems, policies, skills, etc.)

- Create short-term wins and market them internally... success creates positive momentum

- Build on success and change

- Anchor changes as they occur by embedding them in your policies, training programs, performance management system, employee selection process, mission and value statements

Just Get Started!