What is Safety Culture?
Theory, Research, Challenges

Catherine Thompson, PhD

Safety Culture Specialist

Office of Enforcement

Overview

- History of safety culture theory
- Definitions of safety culture
- What safety culture is not
- Why do we care?
- Challenges for a common definition
- Common definition goals

Roots of the Safety Culture Concept

- Anthropology

- Sociology

- Organizational psychology

History: Anthropology

- "Culture…is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society."
- "More or less" consistent patterns of thinking, feeling and behaving
- Observable in myths, symbols, artifacts

History: Sociology

- Focus on social structures and institutions
- Introduced concepts of
  - Roles
  - Status
  - Norms
  - Values

History: Organizational Psychology

- Focus on human performance in the work environment
- Different levels of analysis
  - Individual differences
  - Intra- and inter-group interactions
  - Leadership (and management)
  - Organizational/corporate behavior
  - External influences

Schein: Organizational Culture

- "A pattern of <u>shared basic assumptions</u> that the group <u>learned</u> 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 <u>as the correct way you perceive, think, and feel</u> in relation to those problems."

Many Definitions of Safety Culture

- INSAG (1991) - That assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance.

UK Health & Safety Executive (1993)

- The product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organization's health and safety management.

Guldenmund (2000)

- Those aspects of the organisational culture which will impact on attitudes and behaviour related to increasing or decreasing risk.

- Lists 16 additional definitions from other research studies

Mearns, et al (2003)

- Safety culture … forms the environment within which individual safety attitudes develop and persist and safety behaviours are promoted.

Von Thaden and Gibbons (2008)

- Safety culture is defined as the enduring value and prioritization of worker and public safety by each member of each group and in every level of an organization.

Barnes (2009)

- The values, attitudes, motivations and knowledge that affect the extent to which safety is emphasized over competing goals in decisions and behavior.

What Safety Culture is Not

- It's not separate or different from organizational culture
- It's not a "thing" with an objective existence
- It's not a policy, program or procedure

Why Do We Care?

- Safety culture affects safety performance
  - Injury rates
  - Accident rates
  - Patient safety
- Reasonable support across industries
  - Aerospace, healthcare, manufacturing, construction, agriculture, off-shore oil and gas, highway safety, maritime

Challenges to a Common Definition

- Not all NRC-regulated activities occur in "organizations"

- NRC-regulated activities are performed across a wide range of industries

- Definition of safety performance/goals differ across industries

Challenges We Face

- Majority of NRC-regulated activities do not occur in large, stable organizations. Some are performed by –
    - individuals working independently
    - very small groups
    - a single unit within a larger organization that otherwise performs few or no nuclear safety-related activities
    - a rapidly changing workforce

Goals for Common Definition

- High level of detail (one sentence)
- Easy to understand
- Applicable across range of contexts in which NRC-regulated activities are performed

Discussion