

United States Nuclear Regulatory Commission

Protecting People and the Environment

Traits, Characteristics, Principles, Components or Attributes of Safety Culture

Theory and Research



Safety Culture is Multi-dimensional

- According to Schein's theory
- Supported by questionnaire research
- Practical



Relationship of Traits to Safety Culture





Christian, et al (2009)

- Reviewed 500 studies
- Analyzed 90 (excluded driver behavior)
- Wide range of industries
- International

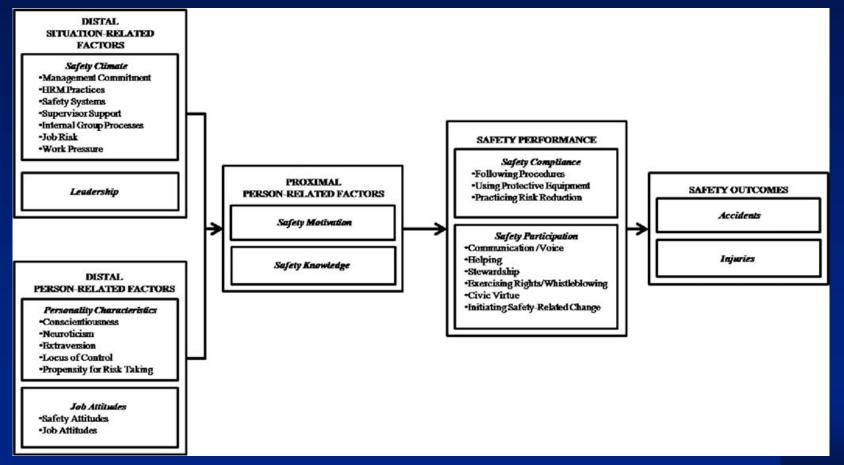


Defined climate as perceptions of –

- Management commitment to safety
- Human resources practices
- Quality of safety systems
- Supervisor support for safety
- Internal group processes
- Group boundary management
- Risk associated with activities/environment
- Work pressure
- Leadership

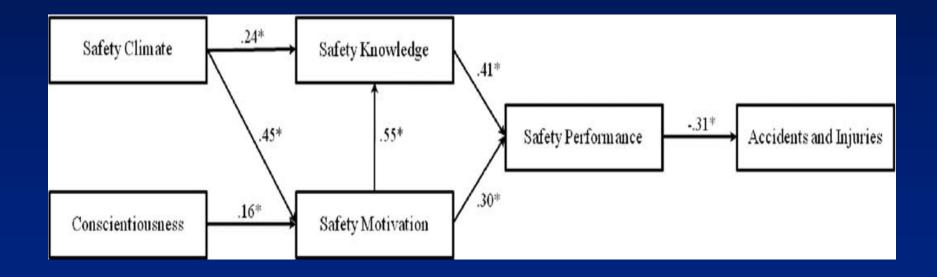


Proposed Model





Final Model





Other Findings

- Group-level, shared perceptions were more strongly related to safety outcomes than individual-level perceptions
- Individual-level perceptions were about equally related to safety behavior as group-level perceptions



Implications

- INPO, NRC and INSAG lists of traits are fairly complete
- Appears to be support for developing a common terminology to describe safety culture traits
- Appears common terminology may also be applicable to individual contributors