Organisational Culture and Effect Sizes

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Advisors on culture, competence and human factors

Commonly expressed assumptions

- Organisations which are managed better will have better safety records

- Safety performance will have significant positive correlations with other aspects of organisational performance

- Organisational and safety culture will be positively related to organisational and safety performance

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Evidence concerning assumptions

- Little agreement on number of factors
  - As few as 2
  - As many as 28
  - Confusion between themes and factors
- Different assessments focus on different aspects of culture
  - What the organisation and its members are like
  - How well the organisation works
- Factor structure varies from sample to sample
- Prediction of safety performance from safety culture scores modest
  - Average correlation reported as 0.2
- Passing the "so what" test

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Correlations between safety performance and operational performance

	Safety Performance – Direct Management Control	Safety Performance – Indirect Management Control	Safety Performance – Train Integrity
Quality of travelling environment	0.325*	0.217*	0.279*
Objective performance (incentives and cancellations)	-0.034	0.043	0.505*
Customer Care	0.108	0.200*	0.062
Service quality	-0.026	0.258*	0.236*
Service Reliability	0.013	0.042	0.467*

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Correlations between safety culture and operational performance

|	Quality of travelling environment	Objective performance	Customer Care	Service quality	Service Reliability
SSM –organisational and risk management	0.474*	0.640*	-0.018	0.419*	0.622*
SSM –organisational and staff development	0.149	0.282	0.279*	0.218	0.293*
SSM –organisational attitudes to and response to change	.214	0.555*	0.130	0.245*	0.545*
SSM –organisational commitment and readiness	0.137	0.814*	-0.093	-0.020	0.794*

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Correlations between safety culture and safety performance

	Safety Performance – direct management control	Safety Performance – indirect management control	Safety Performance - train and equipment integrity
SSM –organisational and risk management	0.379*	0.069	0.346*
SSM –organisational and staff development	0.235*	-0.073	0.296*
SSM –organisational attitudes to and response to change	0.088	-0.005	0.390*
SSM –organisational commitment and readiness	0.251*	0.172*	0.473*

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What needs to be fixed to improve performance?

Performance criterion	Top three areas for improvement	Potential performance gain (top three areas only)
Service reliability	-Organisational structure -Motivation of relevant staff -Budgeting and resourcing	86%
Workforce injuries	- Motivation of relevant staff - Identifying safety risk implications - Promoting a positive safety climate	29%

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CAS Culture Management Model

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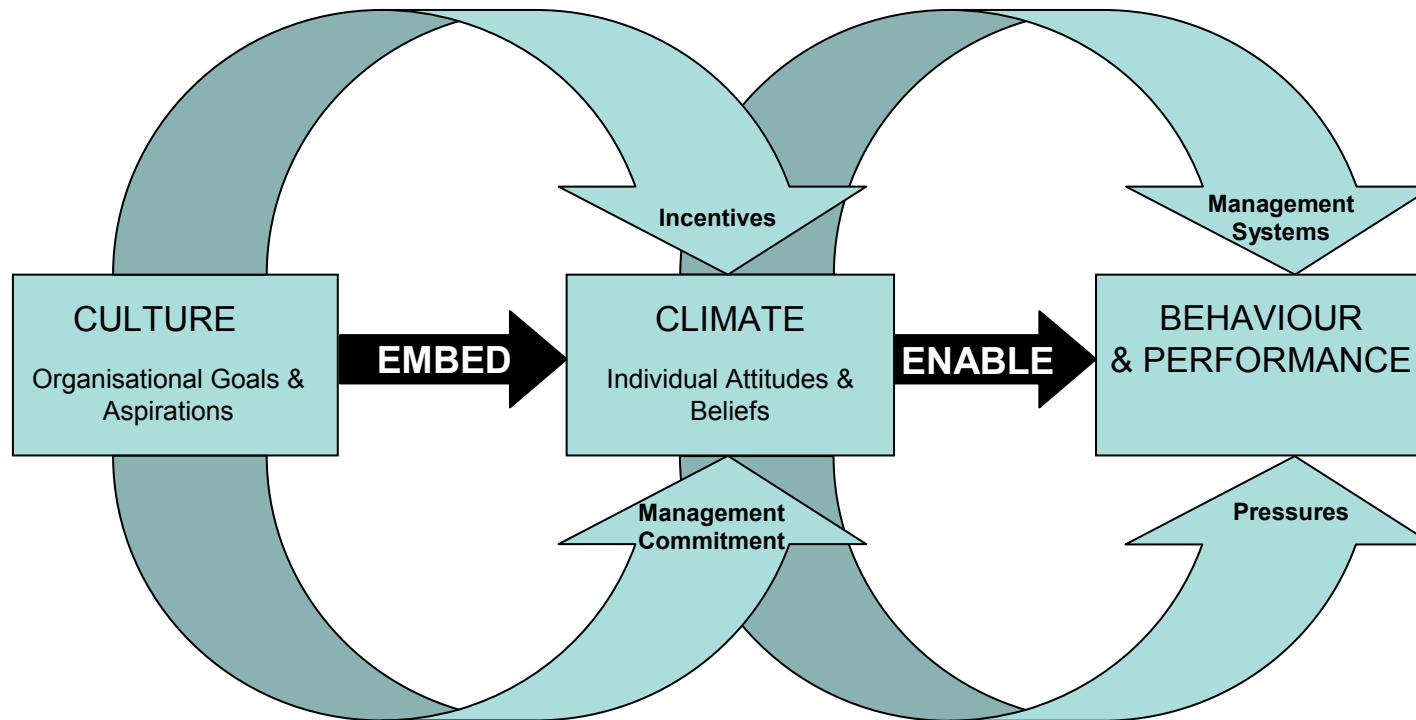
Implications for practice

- No single, common safety culture that will work for all companies
- Different embedding and enabling mechanisms are appropriate for different culture types
- You cannot assume that good operational or business performance will lead to good safety performance
- Sub-cultures are often necessary to make all parts of your organisation perform effectively

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Stages in managing your culture

Decide the style of organisation you want to be

Identify the mechanisms needed to embed that style in your culture

Ensure these mechanisms are applied consistently where they are needed

Review progress and effectiveness of approach

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