



ICMM Conference

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Overview of presentation

1. The management of safety and the management of risk – South African trends
2. Perceptions of safety on South African mines
3. Leadership and safety
4. Attitudes to risk, and risk taking
5. Governance and safety systems
6. Conclusion
7. Way forward

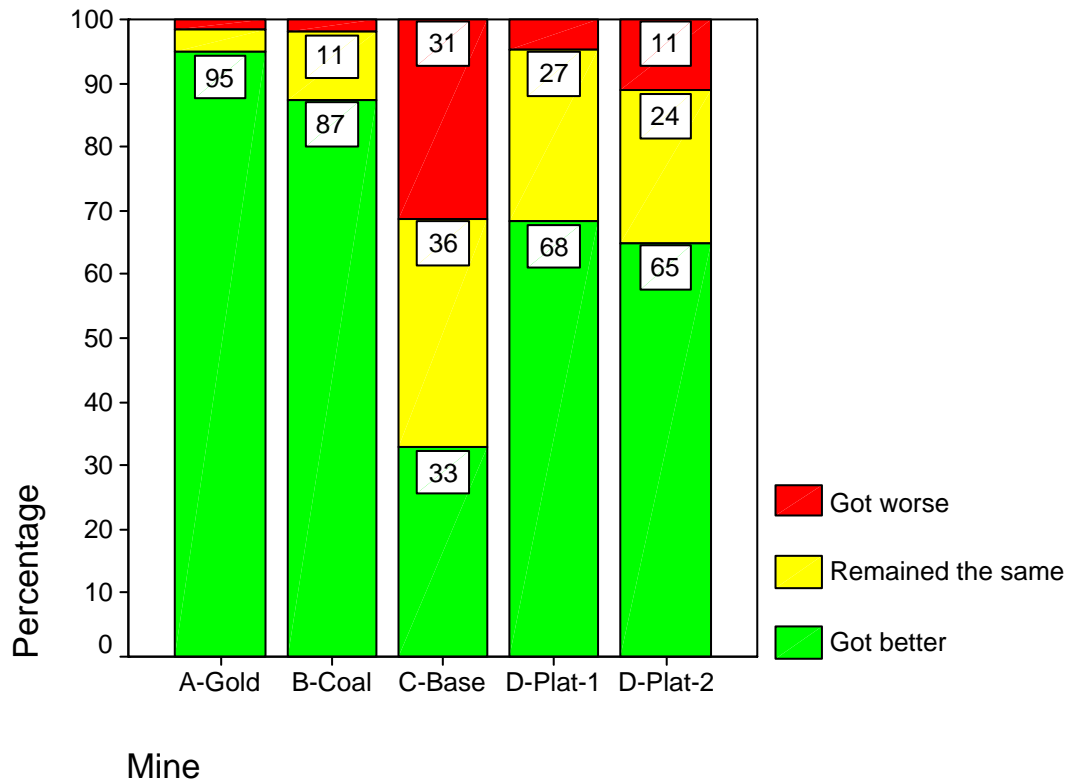


1. Safety-Risk: SA Trends

- Human behaviour (BBS)
- Safety and organisational development
- Safety and productivity
- Indigenous circumstances
 - Multi-culturalism
 - Changing management approaches
 - Legacies of Apartheid

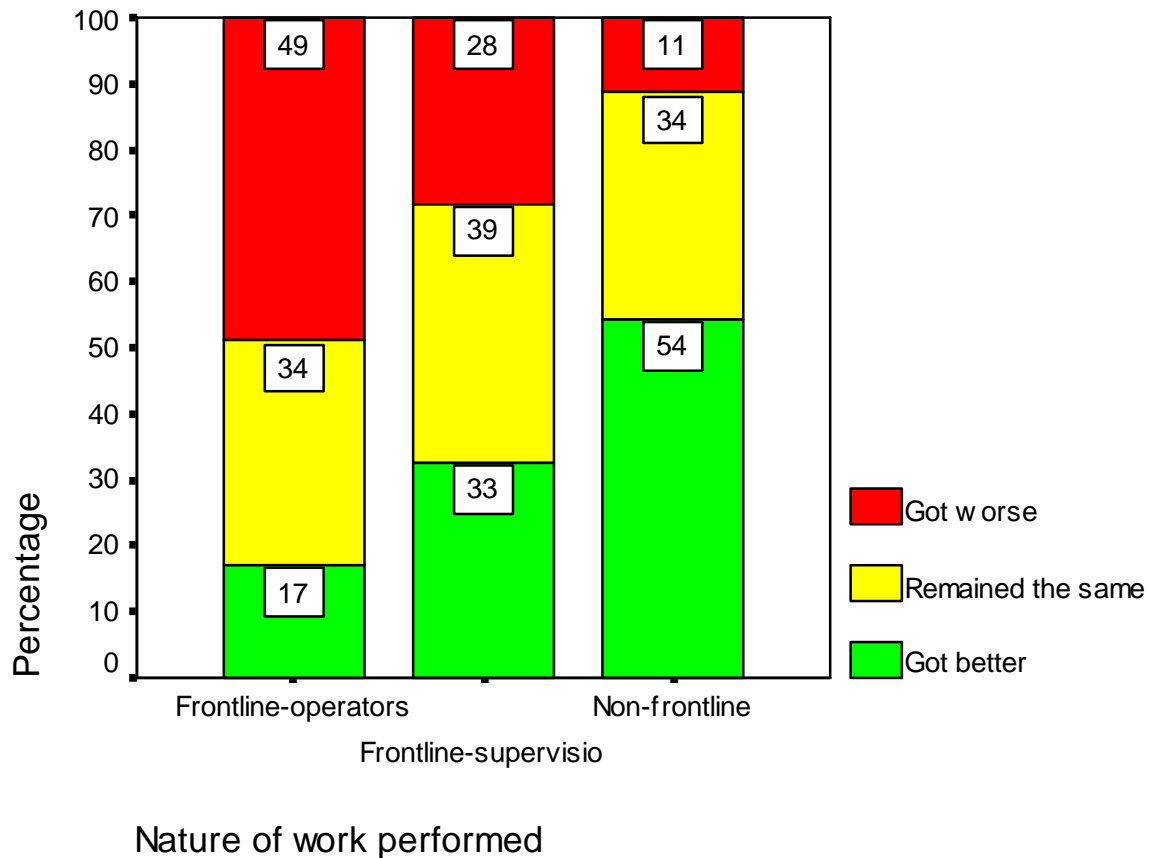
2. Perceptions of safety: Improvement

Safety improvement - past five years



2.1 Perceptions (mine C)

Safety improvement (nature of work performed)



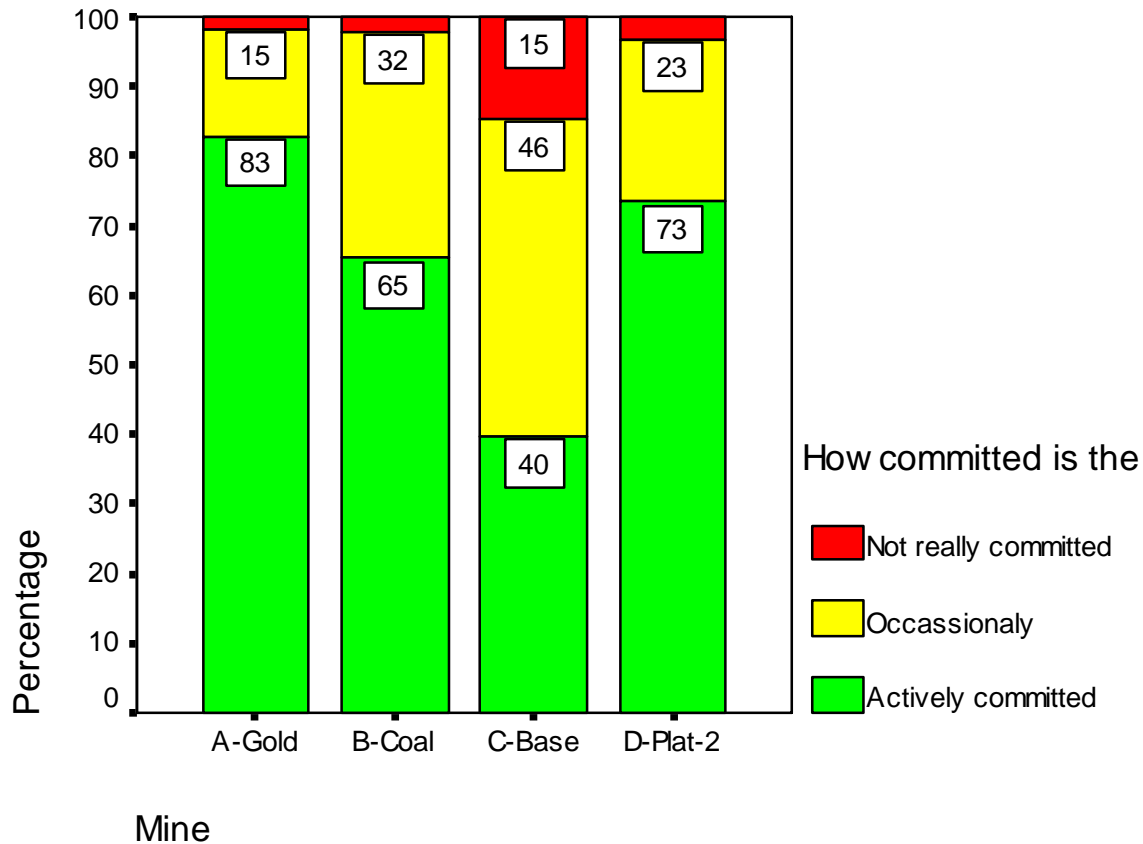


3. Leadership and safety

- Leadership and safety
 - Visible
 - Felt
 - Trusted

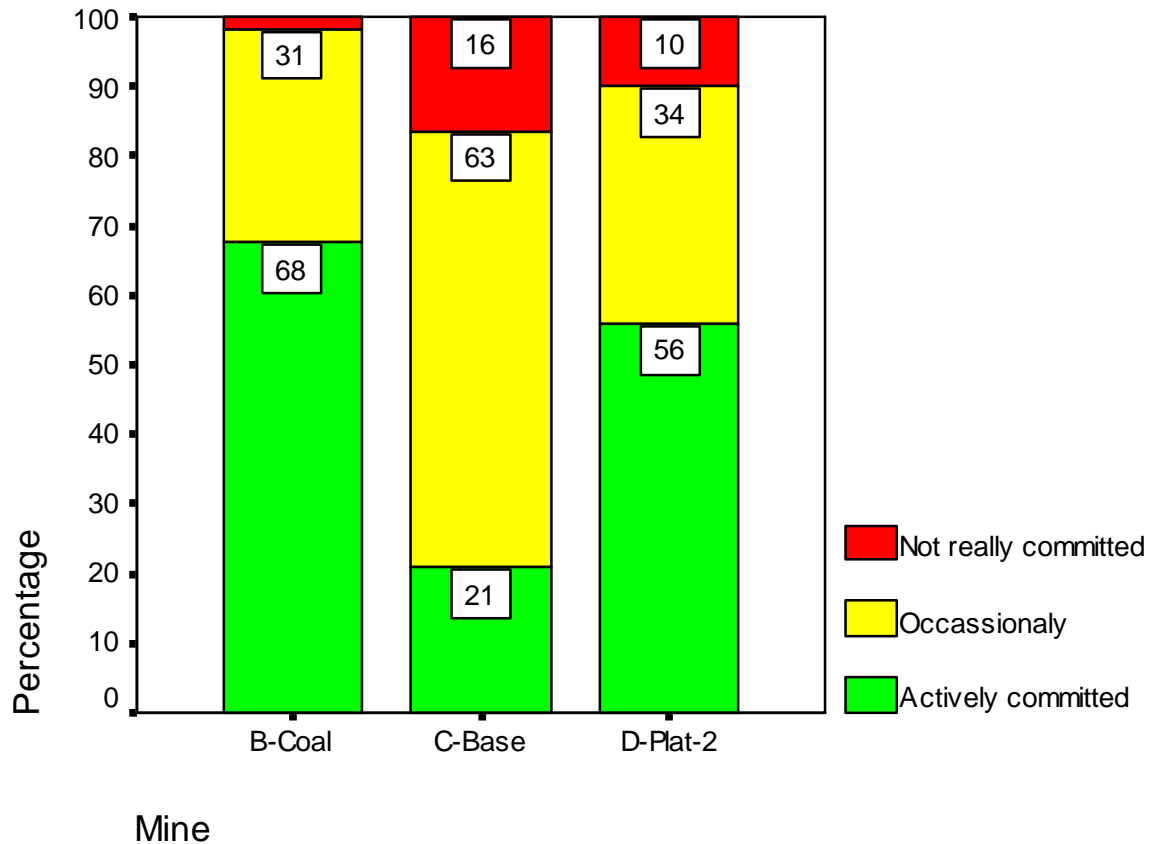
3.1 Commitment-Senior leadership

Senior leadership - committment to safety

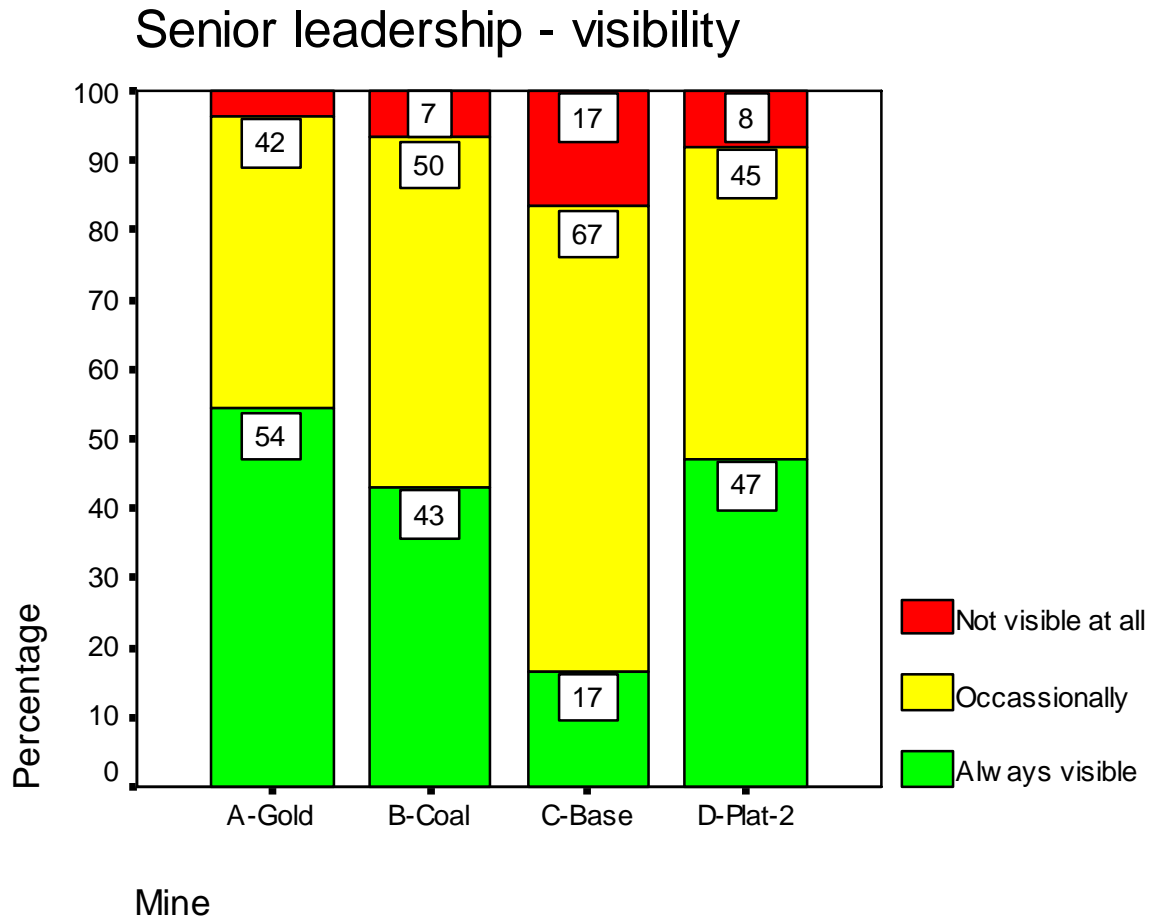


3.1.2 Commitment - Supervisors

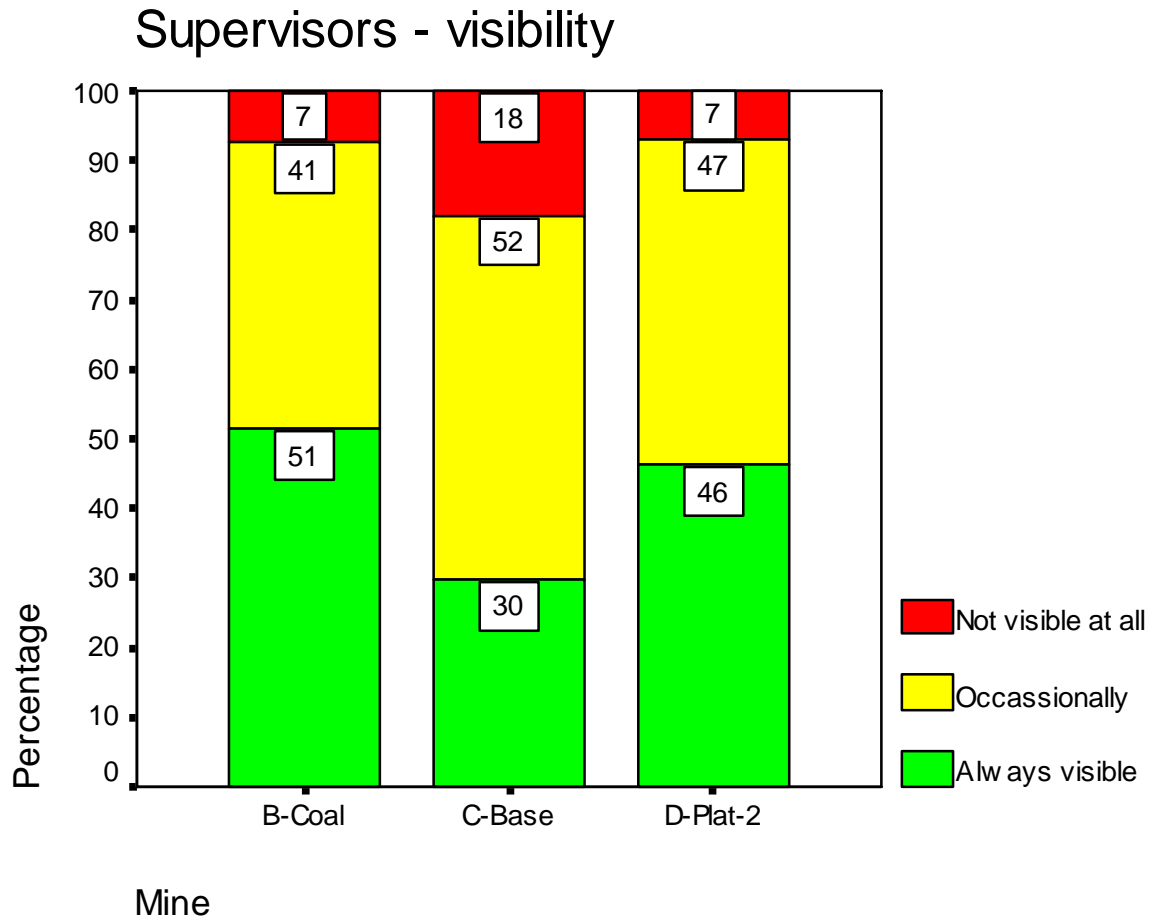
Supervisors - committment to safety



3.2 Visibility-Senior management

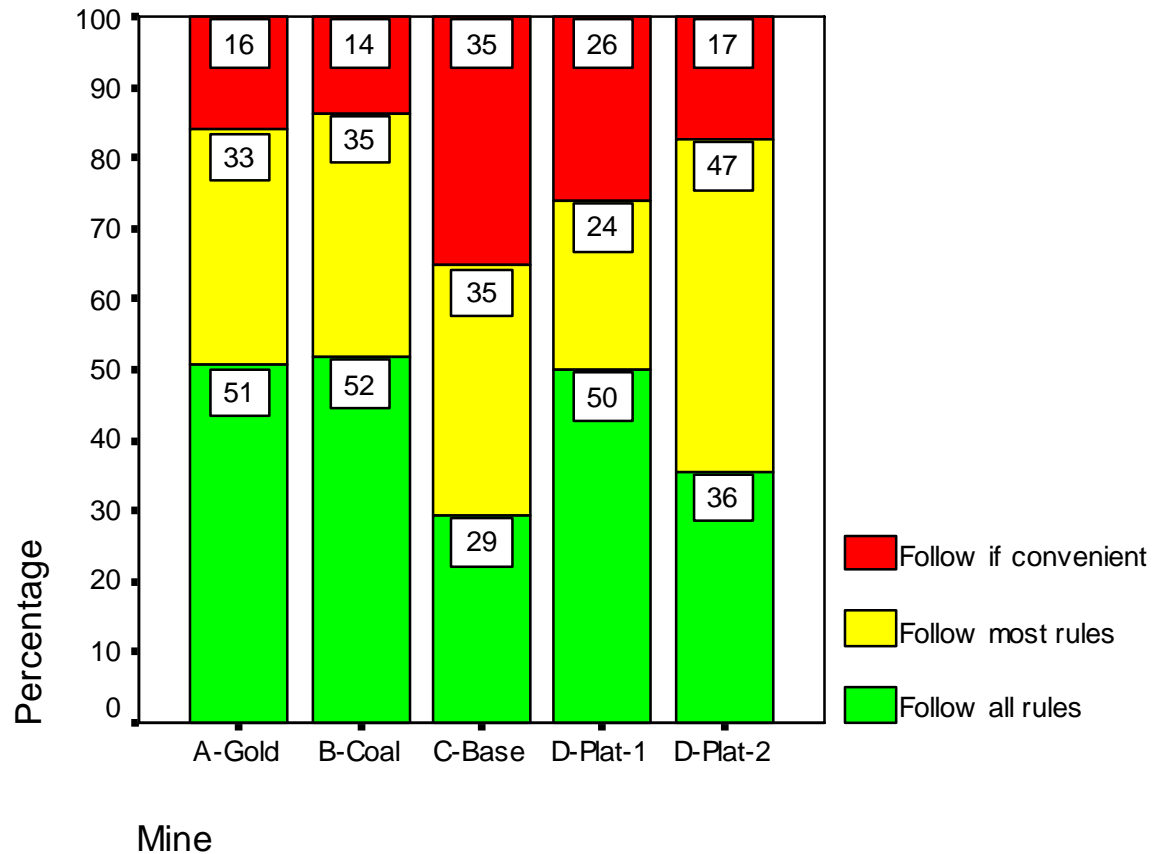


3.2.1 Visibility-Supervisors



3.3 Compliance

Supervisors - compliance with safety systems



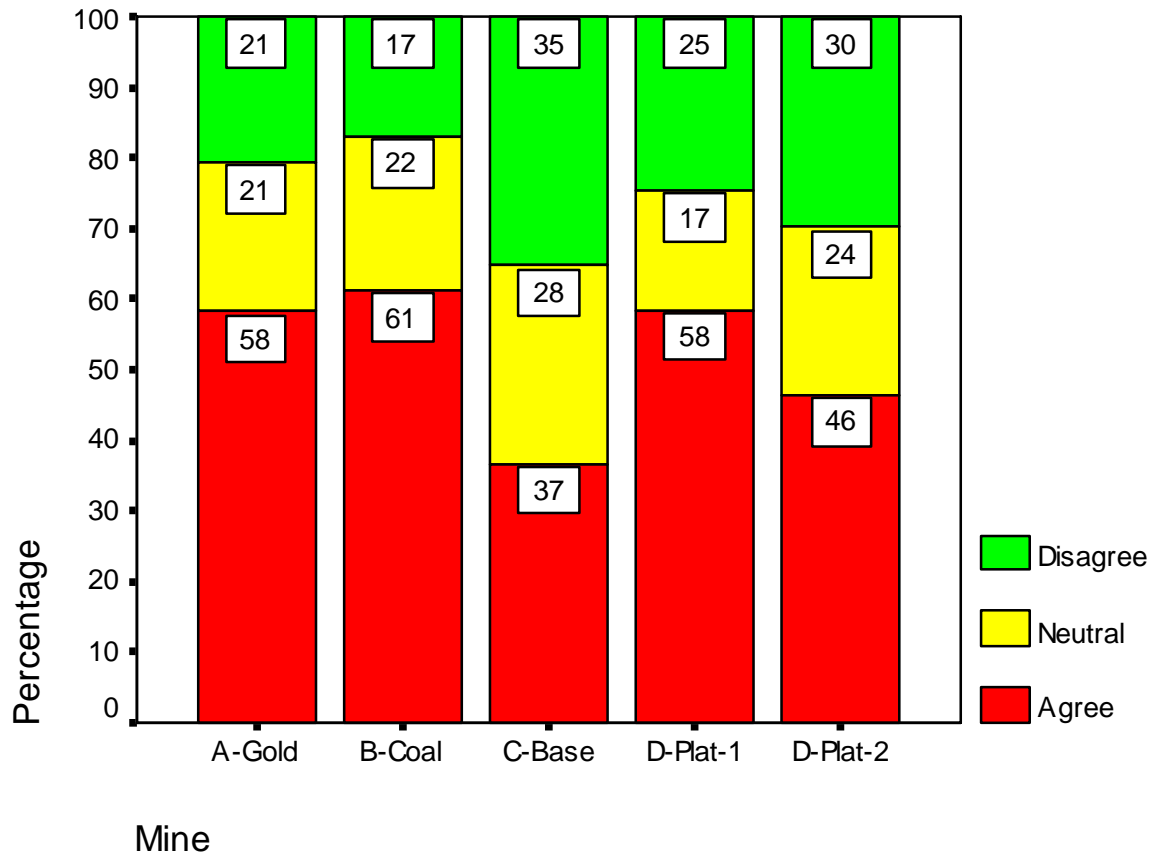


4. Attitudes to risk, and risk taking

- Why are people willing to put themselves at risk
 - Fatalism
 - Whip of production
 - Machismo
 - Peer pressures
 - Shortcuts

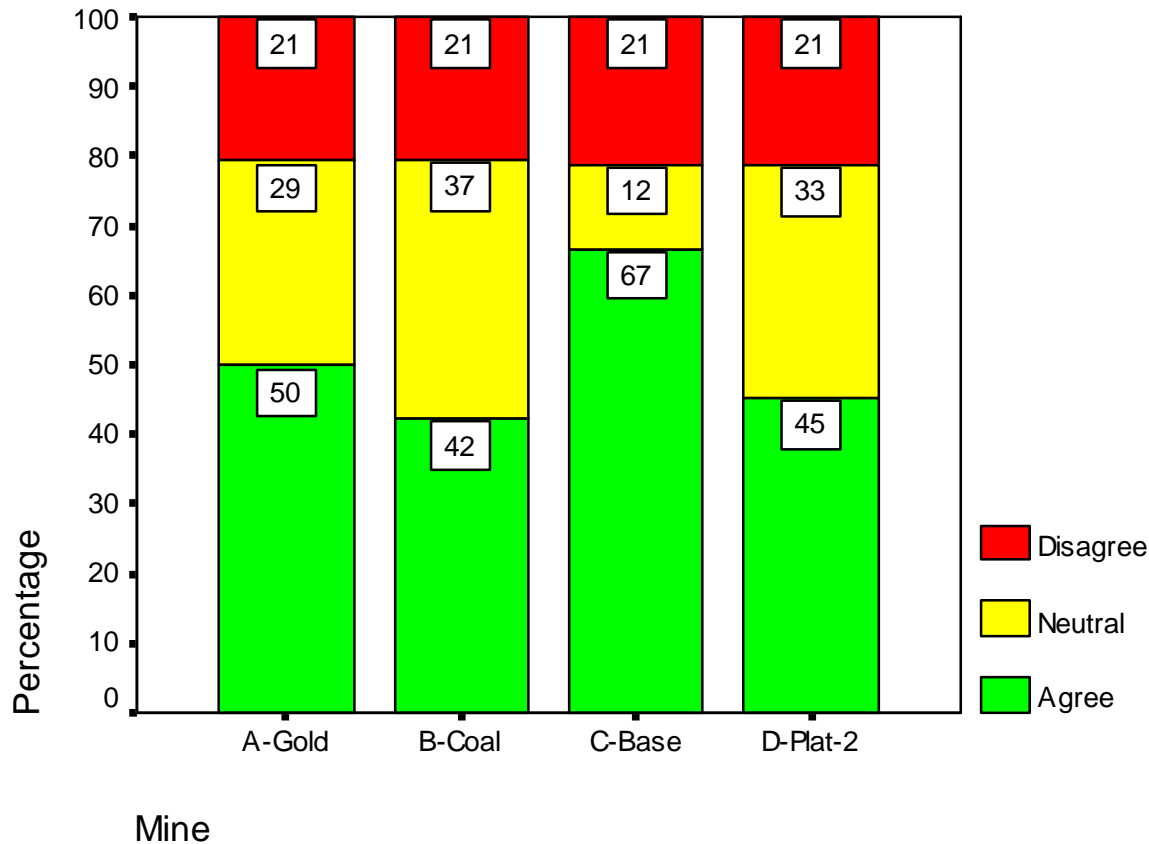
4.1 Fatalism, responsibility, causation

"Mining is dangerous: I might get killed or injured"



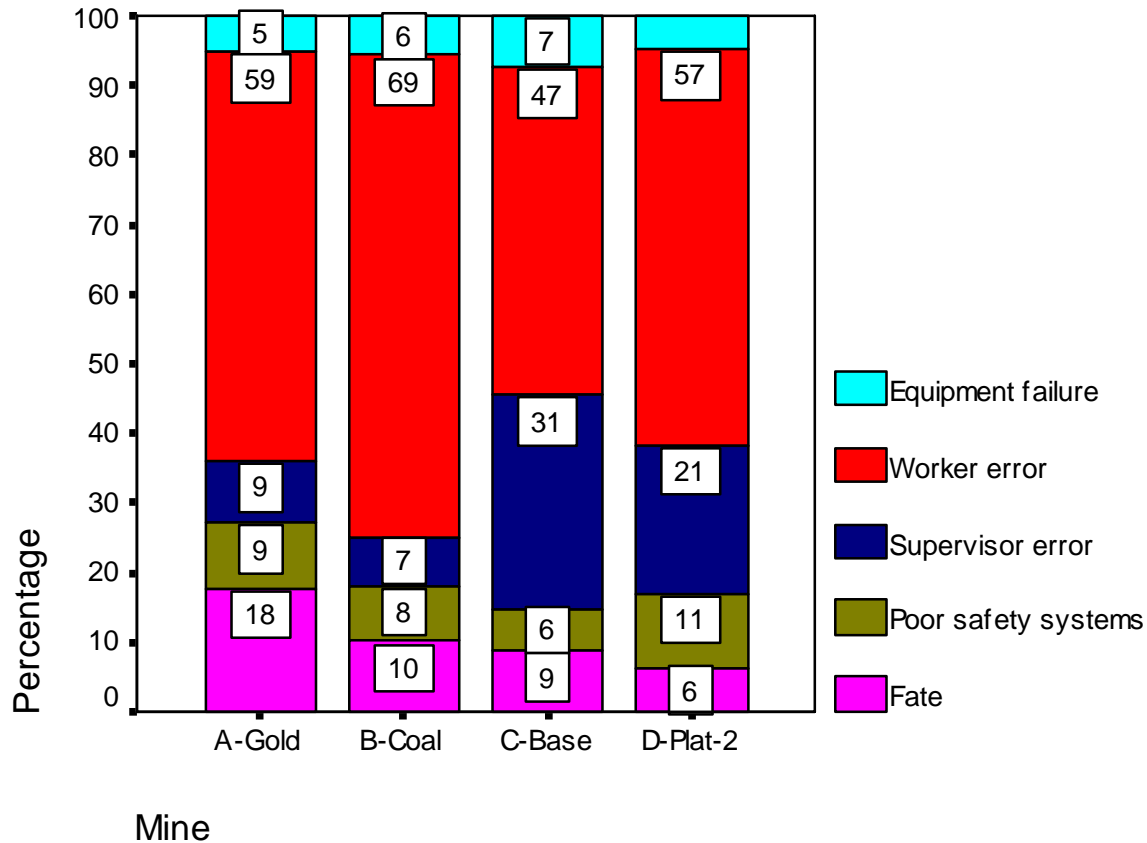
4.1.2 Fatalism, responsibility, causation

"All accidents are preventable"

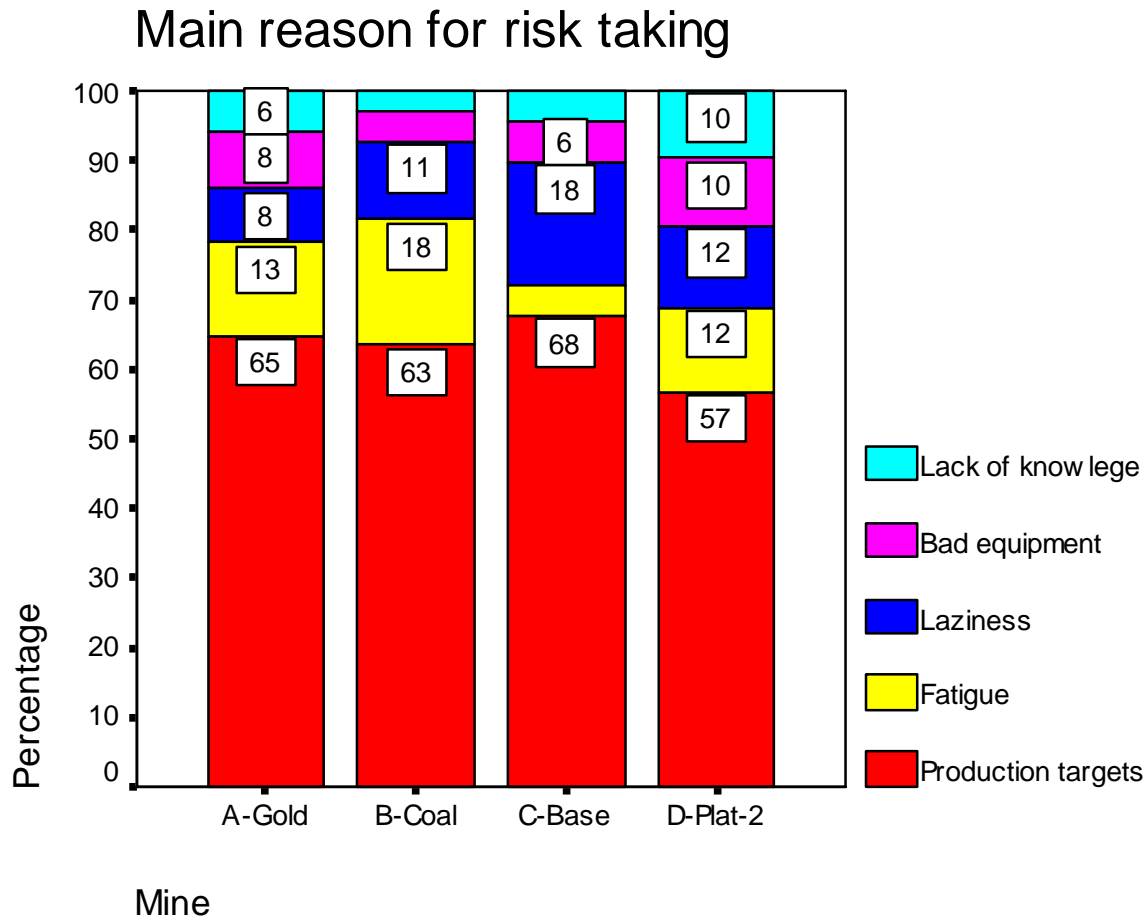


4.2 Causes of accidents

Main cause of accidents

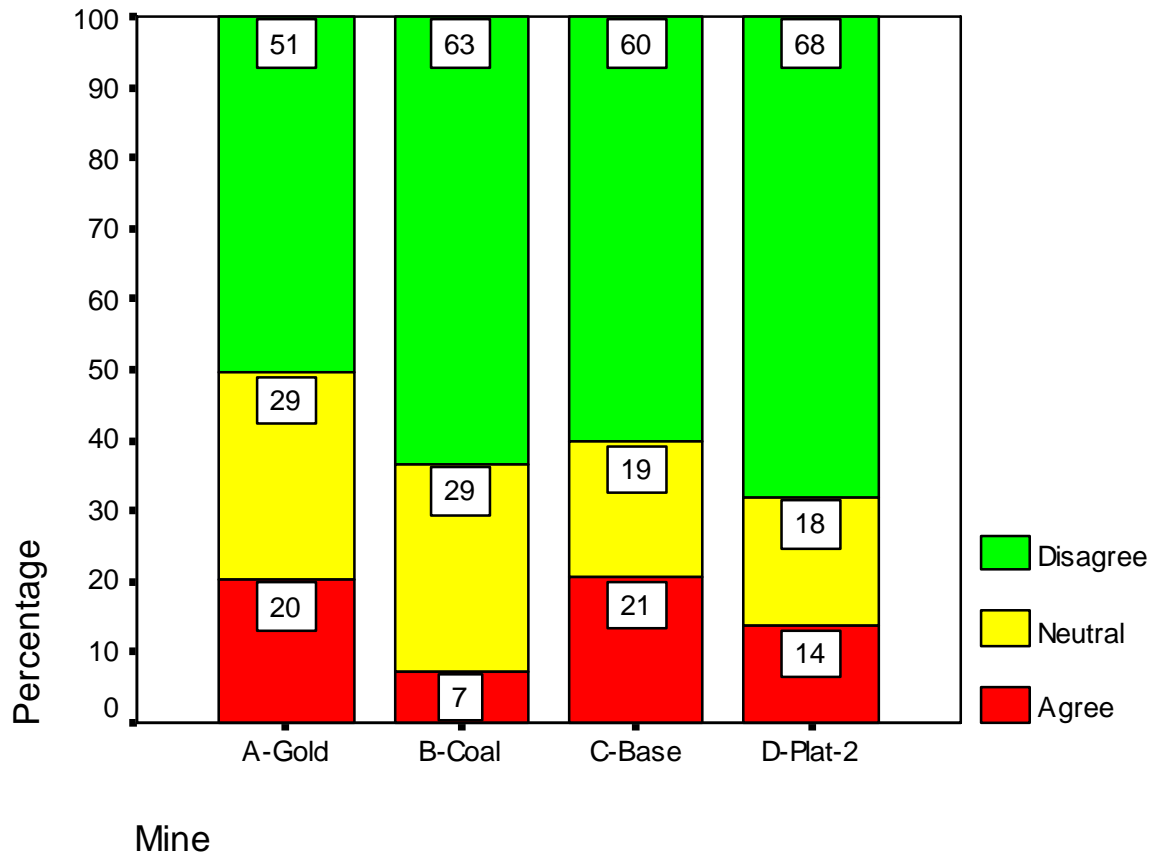


4.3 Reasons for risk taking



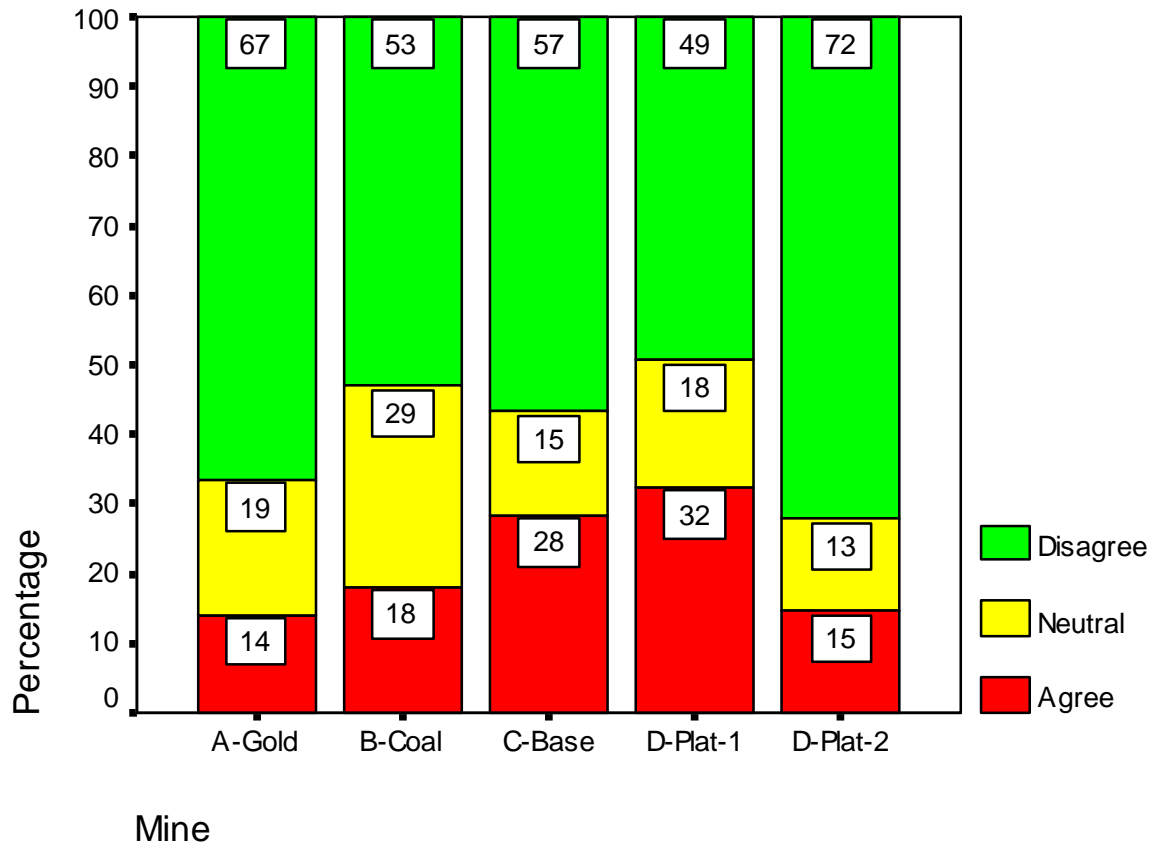
4.3.1 The whip of production

"To get promoted, it is necessary to cut corners"



4.3.2 The whip of production

"To earn a bonus, I will take shortcuts"



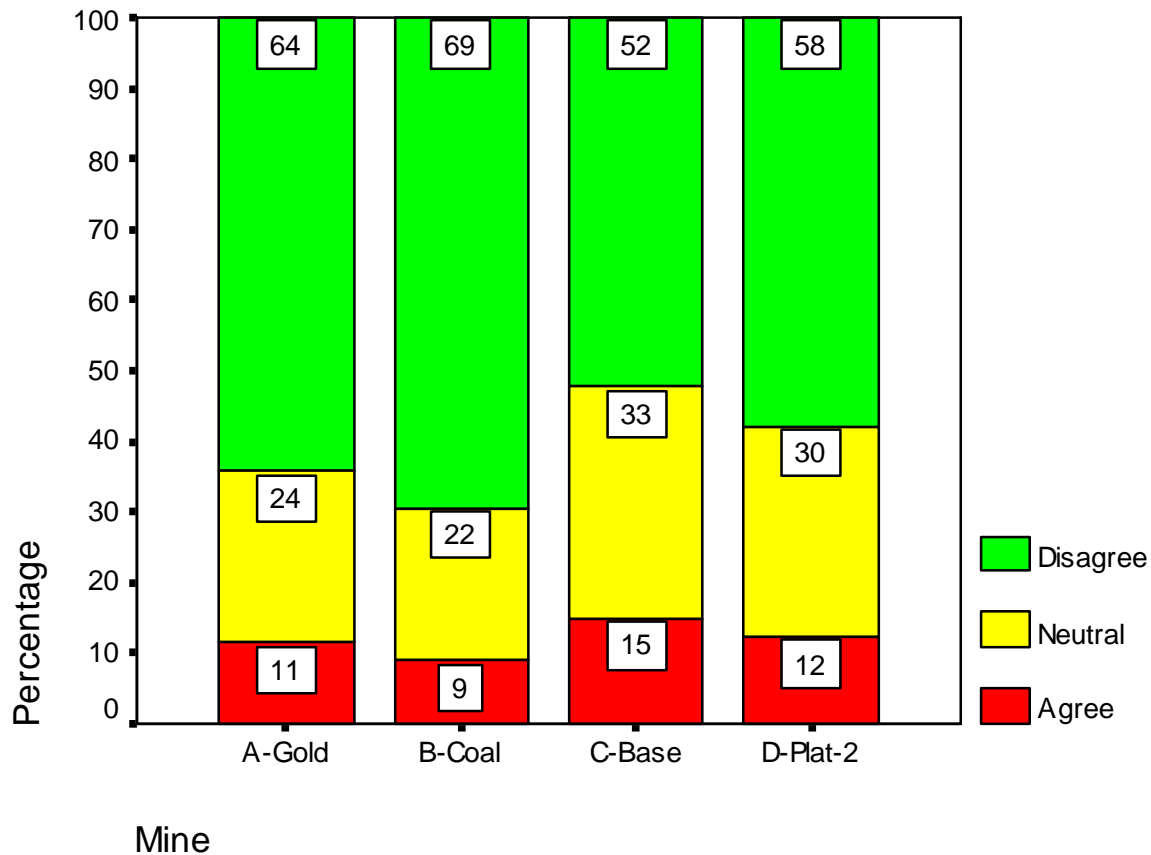


5. Governance and safety systems

- To work properly, safety systems:
 - Require the full support of all personal, at all levels
 - Well resourced
 - Effective institutions to represent all players

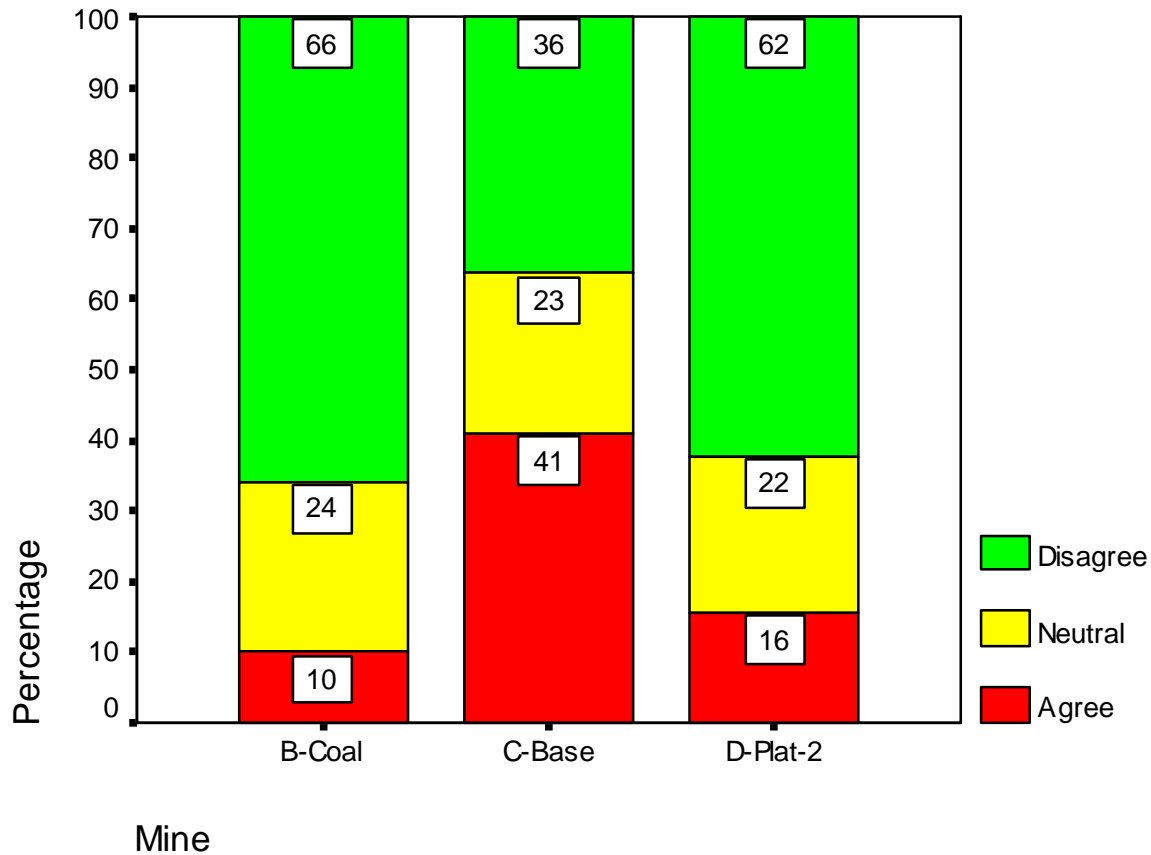
5.1 Attitudes

"BBS systems are really just a waste of time"



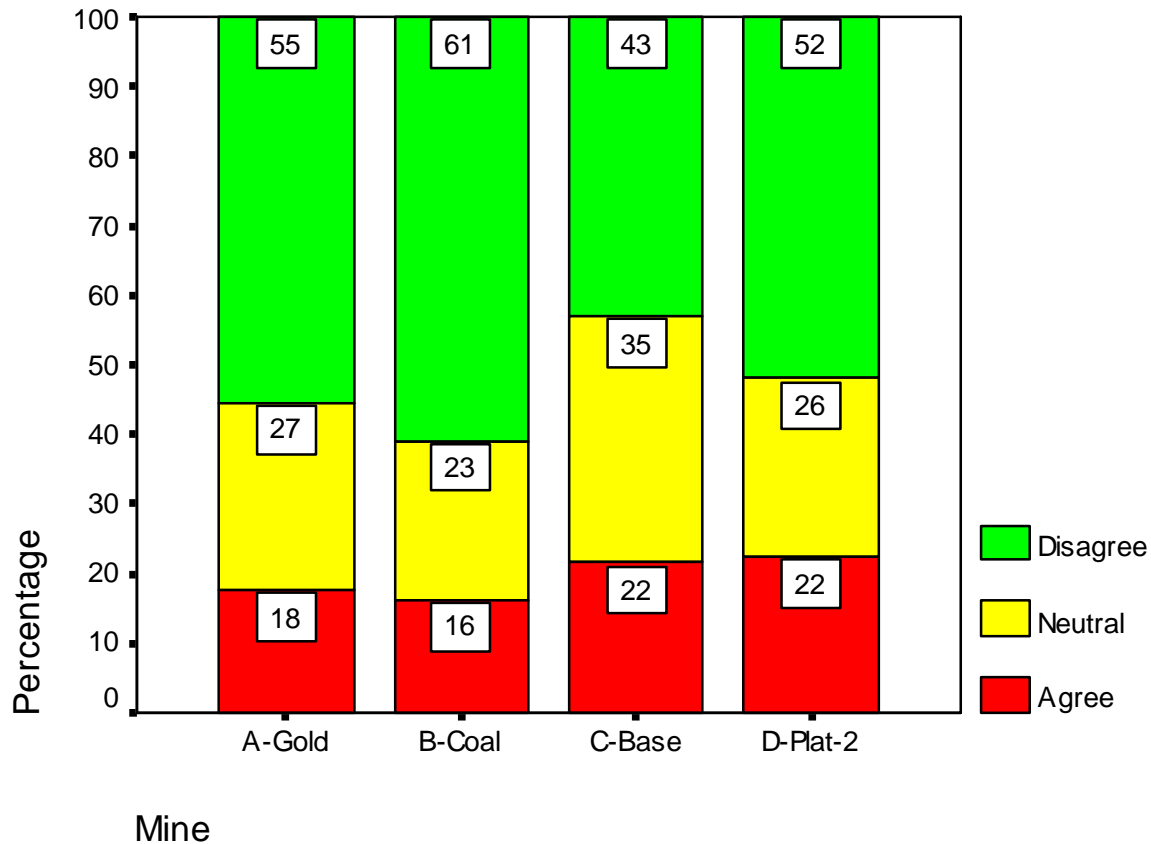
5.1.1 Attitudes

"Terms like OTTO are just empty slogans"



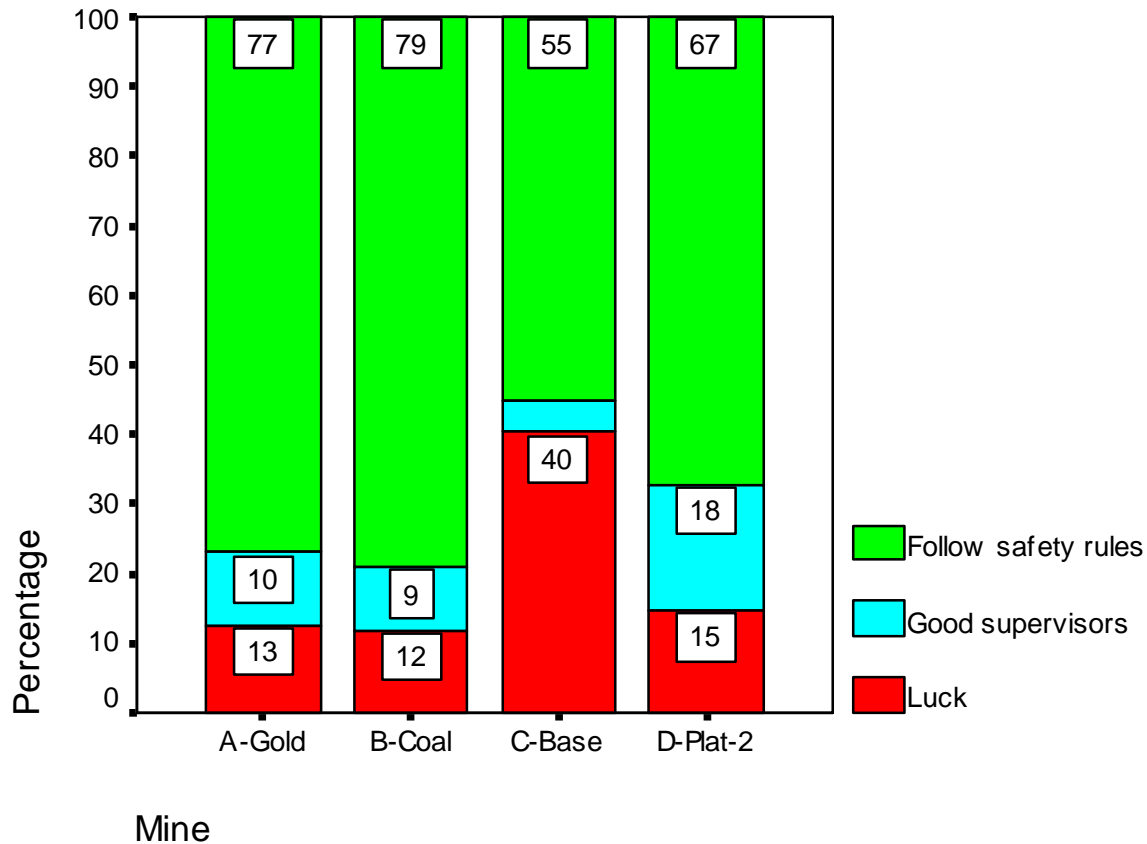
5.2 Complaints

"Safety complaints alienate colleagues"



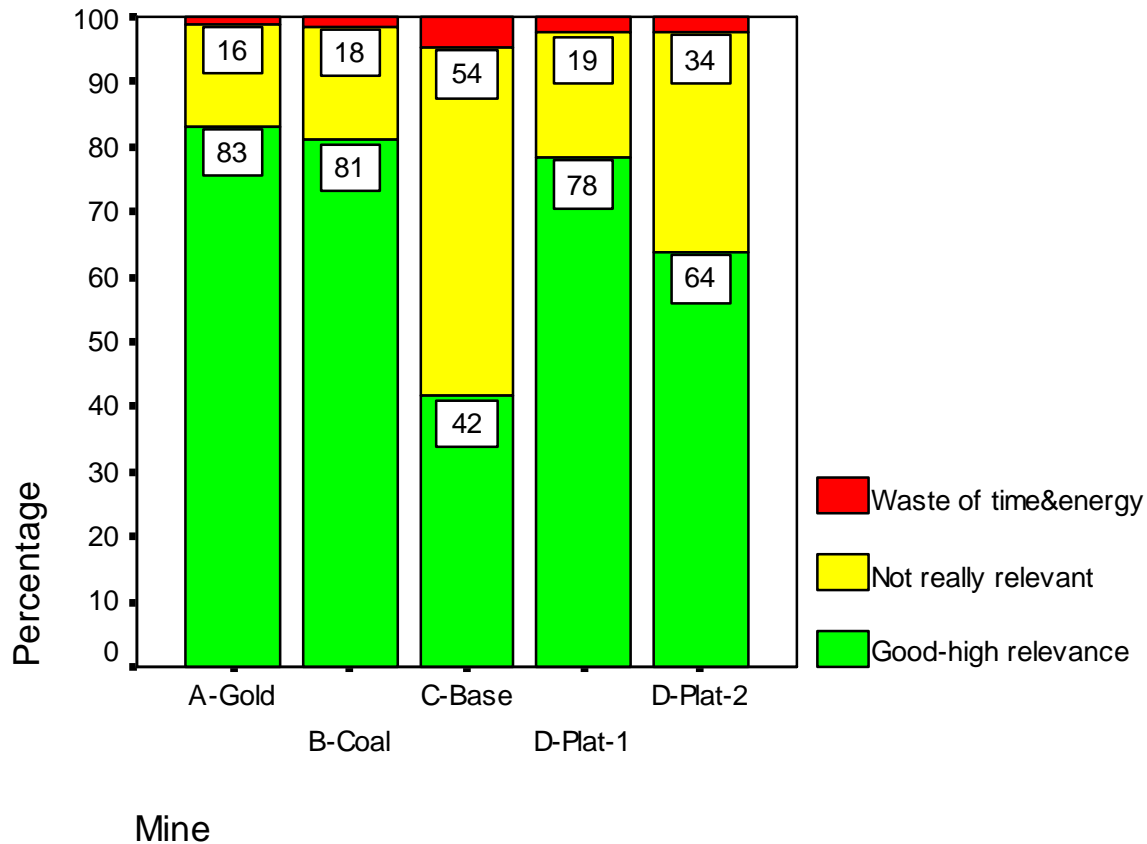
5.3 Impact

Reasons for NOT having an accident



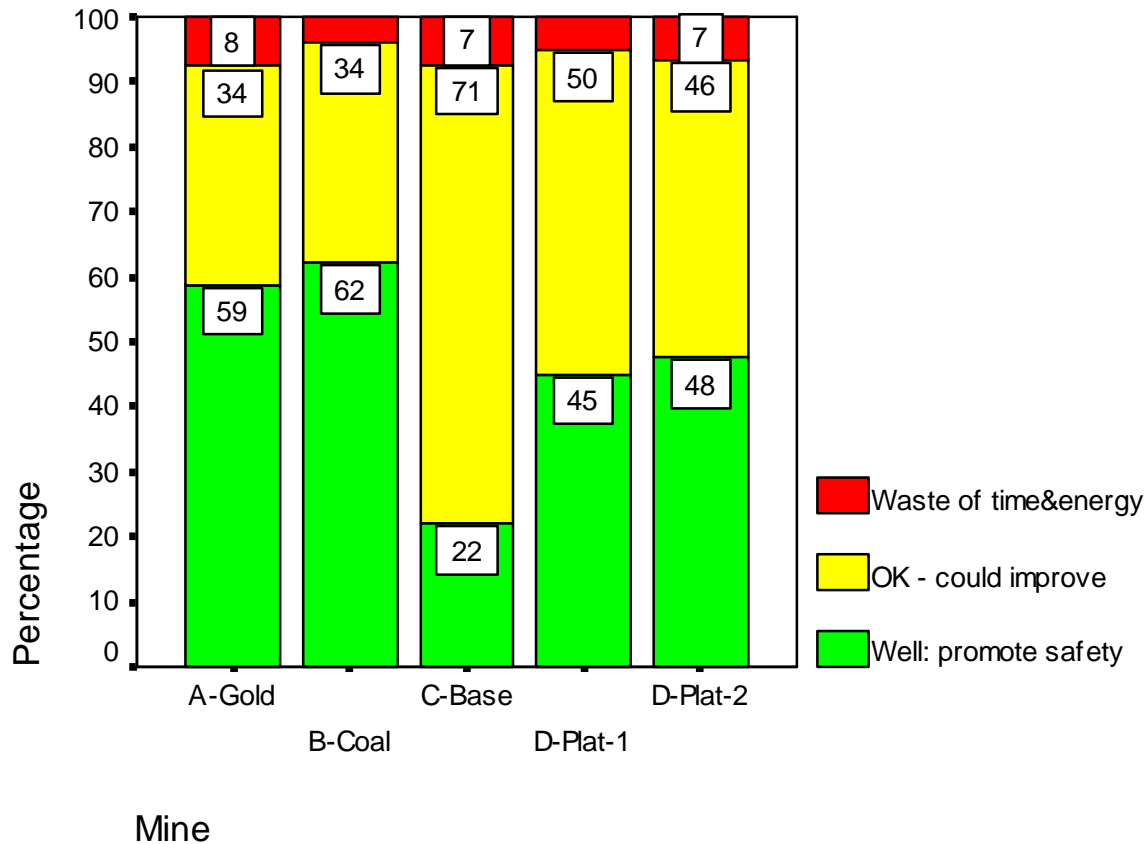
5.3.1 Impact

Quality of safety training on mine



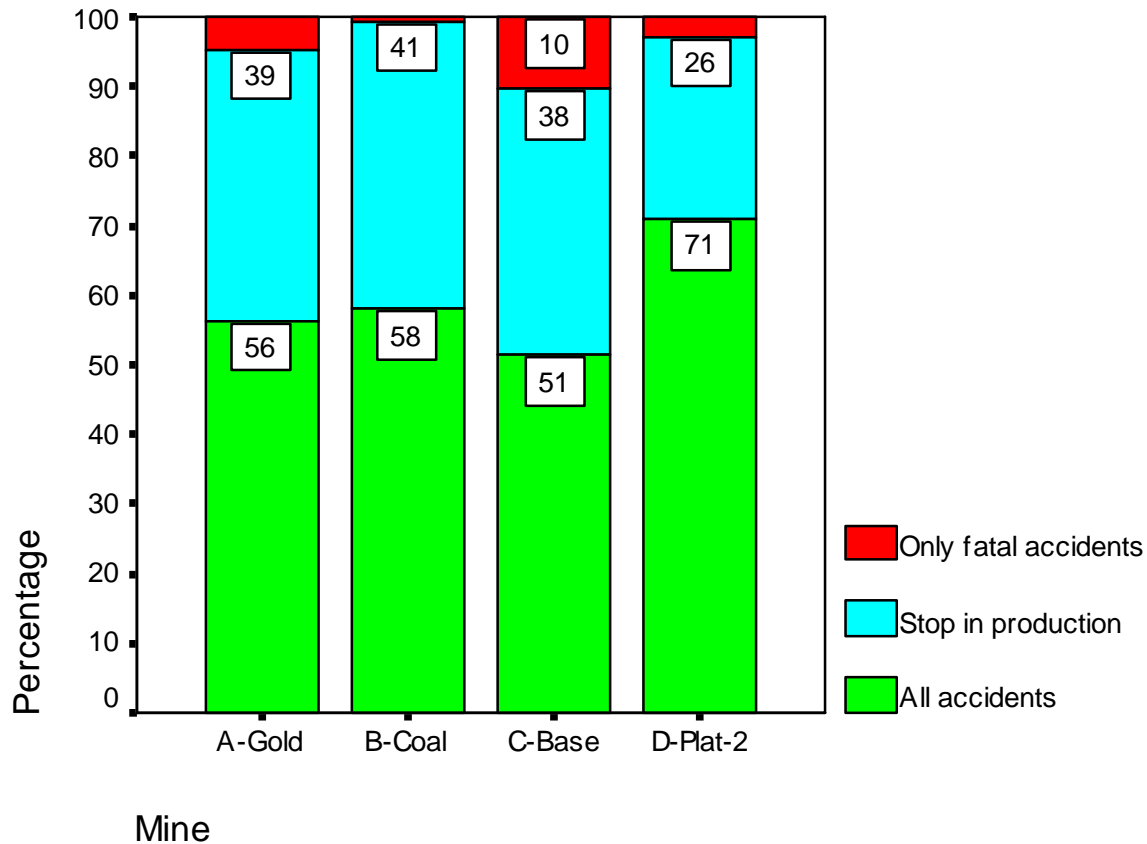
5.4 SHE committees

Performance: SHE committees



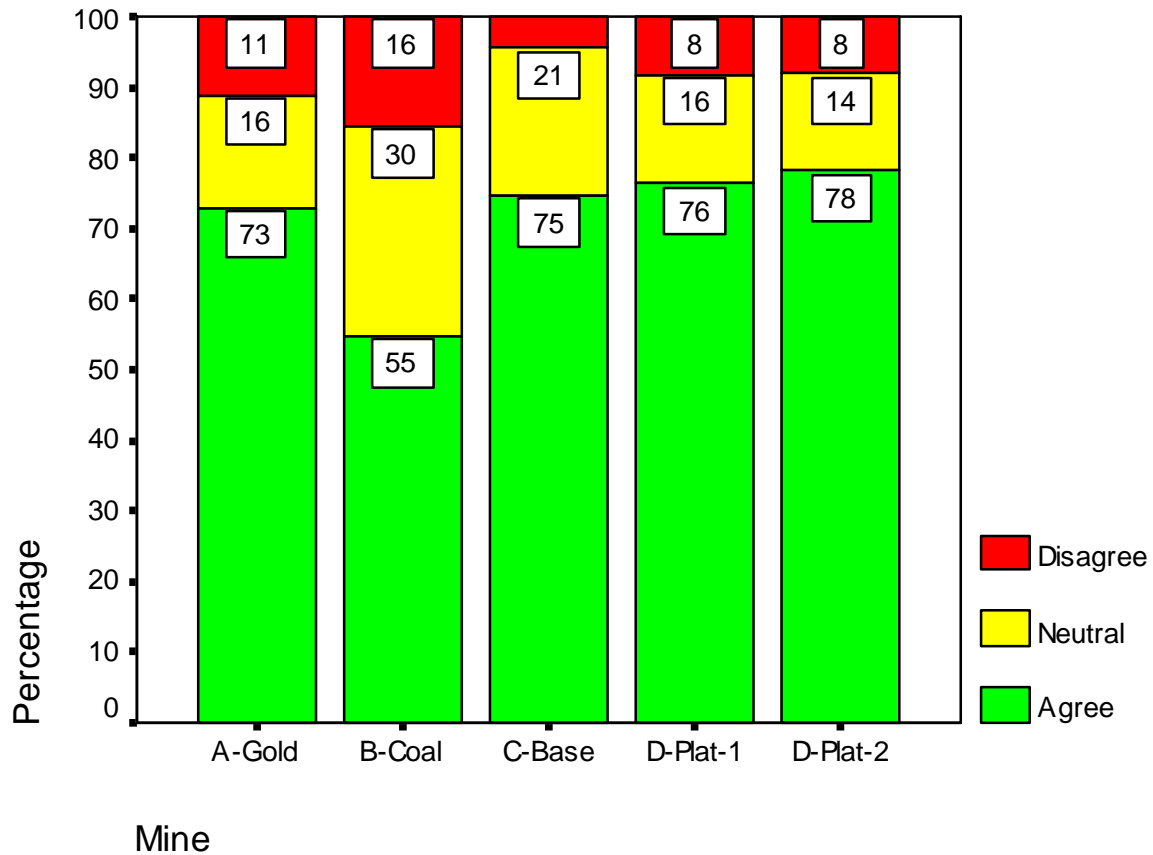
5.5 Accident reporting

What type of accidents are reported



5.6 Discipline

"I expect to be punished if I break a safety rule"





6. Conclusion

- South African safety standards remain below both Australian and international standards
- The main barrier remains at the level of implementation, not system-design



7. Way forward

- Mindsets
- Two universes of mining
 - Unknown “underground planet”
- Need for indigenous and comparative best-practice models
- Middle-management connectivity
- Leadership and communication