

WORKPLACE HEALTH AND SAFETY SEGMENTATION AND KEY DRIVERS

Introduction

This paper summarises literature and theories about segmentation of the workplace health and safety market according to attitudes, motivation and activity around health and safety. It assesses a range of literature related to health and safety behaviour and describes a number of segmentation models.

Market segmentation involves the division of the total market into relatively homogeneous but distinct segments (Donovan & Henley 2003). The different segments will respond to different types of Government intervention. The different segments will be reached by different channels, respond to different communication approaches, or be motivated by different factors. Greater understanding of the characteristics of the market segments can influence effective targeting and selection of Government intervention.

Of relevance to workplace health and safety is a range of literature in the following categories:

- models of attitude and behaviour change, such as social judgement theory
- application of market segmentation
- organisational culture, and
- research on compliance related behaviour in health and safety.

The main focus of this paper is the last category, although it draws on influences from the first three categories.

Constraints on the Research

There is limited research available on motivation of health and safety behaviour in organisations. A literature search was conducted on compliance or commitment to workplace health and safety. Some more general literature on regulatory compliance, organisational culture and social marketing was also studied. The literature on health and safety segmentation focuses on organisations, rather than the general public or employees. There are some studies that focus on the self-employed.

Environmental Context

The segmentation of the workplace health and safety market is influenced by the context in which the segments operate. This context could be internal such as, the wider organisational context, or external, such as, the impact of competitive markets.

The intent and ability to develop workplace health and safety is strongly linked to both internal organisation of work and industrial relations practice. There is a relationship to shift work, staff levels and work loads. A poor health and safety record appears to be associated with low morale and downsizing. Size and financial stability are also influential.

Particular features of internal organisational culture will impact on workplace health and safety. An example is the cultural features of small businesses. A UK Health and Safety Executive (HSE) study (Vickers et al 2003) concludes that small businesses tend to have less formal approaches to management, and employer/employee relations are closer. The managers tend to like autonomy. Ethnicity, previous management experience, education or skill levels and gender will also influence the development of workplace health and safety in small businesses.

The external context also impacts on intent and ability to develop workplace health and safety. External features such as regulatory requirements, industry requirements, certification schemes and customer demands all influence health and safety practice. Competition and pressure on pricing can influence workplace health and safety, although the organisation's response to these pressures reflects their beliefs and commitment to workplace health and safety. An example is that an organisation may diversify the niche that their product fills, rather than reduce safety standards.

Health and safety culture

Reason and Weick (Hopkins 2002), are two influential commentators who develop the concept of health and safety culture. A health and safety culture distinguishes a workplace that excels at workplace health and safety.

Reason (1997) defines health and safety culture as a collective expression of:

- values, beliefs, attitudes, and
- practices, such as systems or practices.

Other literature indicates that a health and safety culture would be indicated when:

- health and safety is fully integrated into business practice, work organisation and workplace relationships. It is not an 'add on'.
- there is informed and dynamic implementation of health and safety systems and practices.

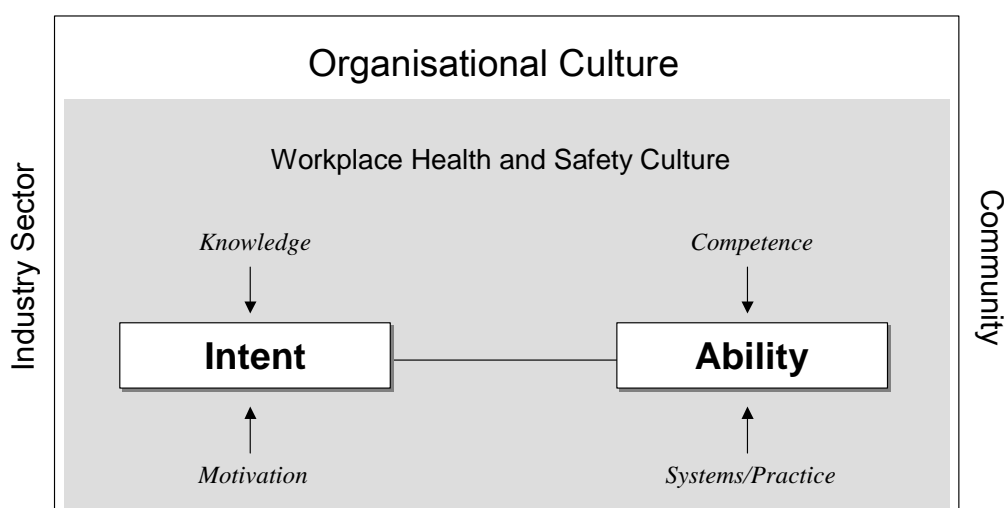
- owners, directors and managers are committed to the value of health and safety, and take actions to support these beliefs.
- workers are able to act to make themselves healthy and safe.

Intent and ability

Intent and ability are two components of a health and safety culture:

- Intention: including values, beliefs and attitudes, and
- Ability: including systems and practices

Figure 1: Summary Diagram of Market Segmentation



This diagram emphasises the basic dichotomy between intent and ability. It also shows two sub-components of intent:

- Knowledge – Intellectual understanding of the importance of workplace health and safety, and
- Motivation – The desire to implement this knowledge. This is connected to beliefs and values.

There are two components of the ability:

- Systems and practices – What needs to happen to develop workplace health and safety
- Competence – The ability to implement systems and practices effectively.

Workplace health and safety does not exist in a vacuum, and these components are influenced by wider organisational culture and the external context.

Ability

Reason (1997) argues that ability and intention are connected. By acting safe, through application of health and safety practices, an organisation may start to think safe. Ability will influence intention, therefore ability is the most important component to target, in order to influence a health and safety culture. There are five critical sub-components of ability:

- Information is collected about the complexity of the organisation
- Reporting – People are encouraged to report errors and near misses
- There is a just response to reported information
- The organisation learns from reporting, and makes changes in response to reporting
- There are flexible responses to safety situations

Weick extends Reason's emphasis on ability, through a description of 'mindful organising' (Hopkins 2002). This also emphasises the interplay between intention and action. He describes five values or attitudes of 'high reliability organisations'. The organisations with these features are very safe:

- Preoccupation with failure. 'They hunt for lapses, errors and incongruence.'
- Reluctance to simplify. They develop workforces to notice more, and to explore complexity. They employ people to search for answers and to double check information.
- Sensitivity to operations, across the business.
- Commitment to resilience. They act to manage errors and crises. This action can be self-organised.
- Deference to expertise. This is non hierarchical, for example, informal networks are formed around the person who has knowledge, at appropriate times.

A New Zealand example of intervention that emphasises ability is the Health and Safety in Employment Act amendments on employee participation. If participation practices and systems are put in place this may improve health and safety behaviour. It also may have an impact on intent, for example, increased exposure through

employee participation systems may influence an organisation's beliefs about the value of workplace health and safety.

Intent

There is a theoretical base that argues that it is important to influence intent. This literature usually relates to individuals rather than organisations, and has underpinned social intervention such as social marketing. It is not specifically applied to the health and safety market, but to a range of markets and behaviours. However this literature may be useful in filling a gap, in understanding other ways of influencing motivation or intent towards workplace health and safety.

A theory by Littlejohn (Manch 2003) endorses intervention to influence intent. He argues that provision of information that relates to pre existing beliefs and attitudes, from a credible source, are likely to be assimilated. He describes this as social judgement theory. An example of this approach is when an OSH publication emphasises a moral responsibility to address workplace health and safety. This attempts to align workplace health and safety behaviour with ethics or morals that are held by the recipient of the communication.

Another example of this approach is visible in the advertising campaigns by LTSA. The *shock* advertisements on TV connect car accidents with attitudes of the viewer about health, reputation, independence, family and friends. Once the resonance or relevance with the audience is achieved, a simple behavioural solution is offered, such as, using a designated driver.

Intervention may be directed at increasing the sensitisation of an audience (Donovan 2003) Sensitisation means the importance or meaning that populations attribute to a risk. This does not correspond with actual risk. An example of change in sensitisation is public attitude towards terror in America following 9/11. New Zealand populations may currently have a low sensitisation to certain risks, for example, gradual onset injuries, or some areas of occupational health, which actually effect populations more than other injuries where there is higher sensitisation, such as, aeroplane accidents.

Motivational drivers

The OECD (Manch 2003) breaks down intent into two categories:

- being aware of the rule and understanding it, and
- being willing to comply

Being willing to comply involves motivation. Social judgement theory and social learning theory explain the relationship between beliefs, motivation and action. There is some literature that indicates what motivational drivers for workplace health and safety could be.

ACC (Angus 2001) has contracted some market research on a small sample to understand the health and safety motivational drivers of organisations.

This highlighted three themes:

- Understanding the implications of health and safety for the business. These include staff morale, productivity, profitability, customer relationships and brand image.
- Attitude that staff are *people* as opposed to *production units*. Staff are viewed as integral to an organisation's success. Staff retention is prized, and morale is valued.
- Beliefs in the ability to control the occurrence of injuries. This includes a perception that staff can be influenced, or that injuries are controllable. Injuries are not caused by employee negligence, lack of attention or bad luck. Training, communication, equipment, practice and management can influence injuries.

The HSE conducted a literature review in 1998, and determined three motivational drivers:

- Reputation or fear of loss of credibility. The perception of a company's health and safety status is important. This can be influenced by publication of information from investigations or publication of actual health and safety incidents.
- Beliefs that it is morally important to be healthy and safe. This is due to a concern to protect others or to contribute positively to society.
- Compliance with regulation. Organisations will comply with regulation, even if there is a perception that the likelihood of detection and prosecution is low. The regulation 'focuses' the company's attention on health and safety, and prompts behaviour. An inspection serves a similar purpose in 'focussing' the company on health and safety. The regulation provides a moral and social guide.

The Health and Safety Executive (HSE) concludes, in this study, that the financial costs of illness and injury are motivating factors in the USA, but not in the UK and many other countries. In the UK, other factors are perceived as having a more direct relationship to profits, and as being easier to influence. The insurance arrangements in the USA may influence the perception of illness and injury as a financial cost.

However, a public campaign was conducted in Britain after this literature review. The 'Good Health is Good Business' Campaign indicates that there can be a measurable improvement in occupational health risk management, as well as changes in employer's attitudes, following a public campaign around good business (Entec UK Ltd 2000). This campaign involved surveys, provision of guidance material, seminars, videos, and advertising on radio and television. This suggests that business orientated approaches, which emphasise both the risks and benefits to business of occupational health, can be an effective motivator.

February 2004

The literature points towards the key drivers for motivation of organisational health and safety behaviour being:

- Good business. Some businesses see health and safety as being integrally linked to profits or successful business practice. Health and safety is fully integrated, because this is how the organisation does its business and achieves its goals. This driver is applicable to the profit and not for profit sectors.
- Reputation. Some businesses are motivated by the perception of their health and safety. This is important to their brand and their ability to achieve market exposure. It also could be important to the reputation they wish to have in the community, of being ethical and socially responsible.
- Perception of Ability to Comply. Motivation is effected by beliefs about organisation of work, and perception of ability to manage risk. These businesses believe they can control behaviour, and that the business itself can learn and develop. They consider that accidents or illnesses are not random occurrences and can be influenced.
- Social Responsibility. Some organisations want to send their people home safe. They do not want to be morally responsible for loss of life or injuries that affect income and quality of life. They may want to be corporate citizens, and make a positive contribution to the wider community.

Intervention that connects with or enhances these beliefs is likely to be effective.

Application of intent/ability to market segmentation

The health and safety market could be segmented according to ability and intent:

1. Companies who have neither the intention nor the ability to control their working environments (*the bad companies*)
2. Companies who have the intention, but not the ability
3. Companies who have the ability, but no intention
4. Companies who have both the intention and the ability to control their working environments (*the good companies*)

The HSE has identified similar market segments, using different language:

- Criminal
- Confused
- Compliant
- Committed

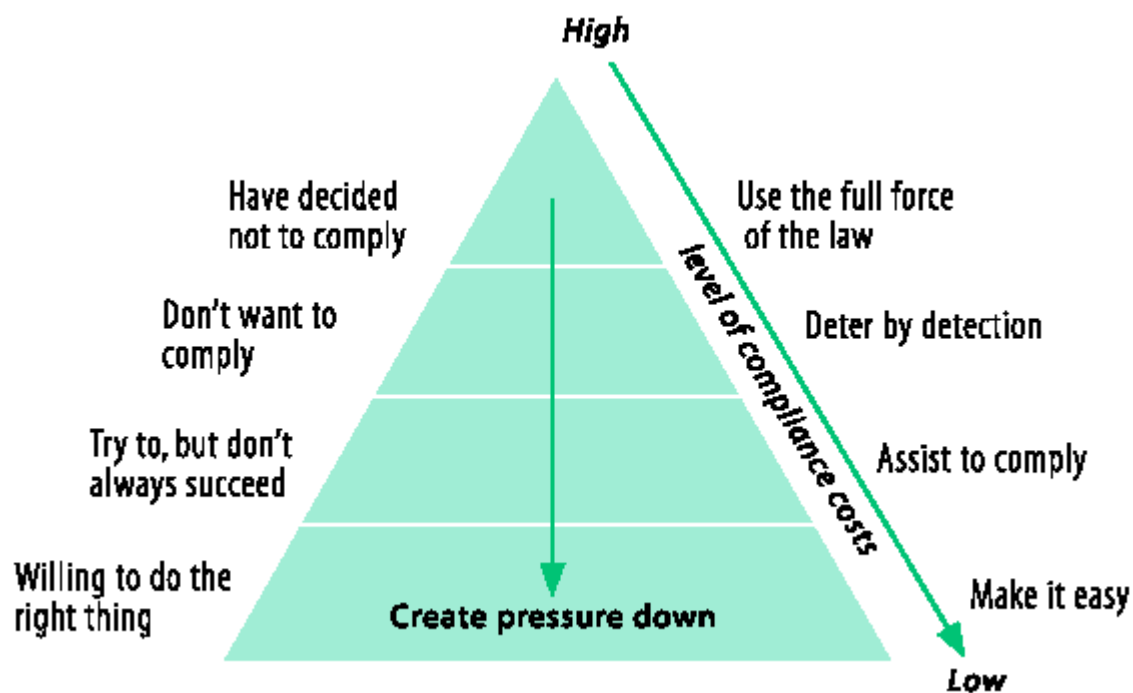
Braithwaite and Ayres (Manch 2003) introduce a layer of complexity by segmenting according to different kinds of intent, as well as ability:

- **Virtuous** – willing to comply with the law, and more, based on an existing strong desire to do the ‘right thing’
- **Economically rational** – willing to comply, based on an economic analysis
- **Irrational** – unwilling to comply because of contempt for regulation
- **Incompetent** – unable to comply because of lack of ability to understand or execute actions necessary to comply

This kind of segmentation approach is useful when mapping kinds of Government intervention. It becomes clear that one approach does not fit all, and that a range of interventions are suitable for influencing different characteristics. This is reinforced by literature on regulatory compliance. Braithwaite and Ayres (1992b) are two influential Australian writers on regulatory compliance. They claim that a dynamic institutional design that responds to different human motivations is the most effective. Regulatory institutions should attempt to influence the market by motivation and persuasion. The response can then escalate to threats and actions of increasing severity. “...*Compliance is optimised by regulation that is contingently cooperative, tough and forgiving.*” (Braithwaite and Ayres, 1992b)

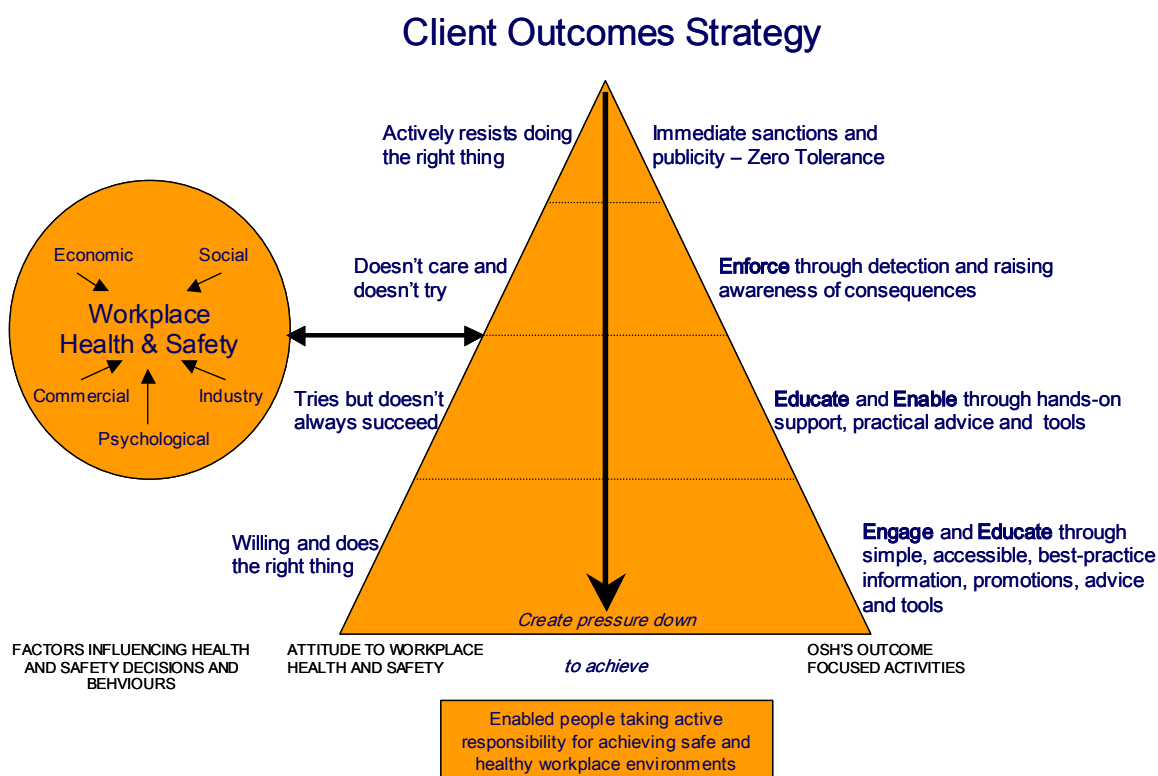
New Zealand's Inland Revenue Department (IRD) has applied this typology in its tax compliance model. This model is responsive to different types of compliance behaviour. The overall intent of the model is to use a range of interventions to move companies from level one to level four. The model can also be applied to individual workplaces, for example, labour inspectors in Denmark assess workplaces using similar categories (Hasle 2003).

Figure 2: Inland Revenue Department's Compliance Model
(Inland Revenue 2001)



OSH has included a similar model in its Strategic Plan for 2004-09. The main difference in the application of this model to this setting is the range of regulatory agents, and the complexity of the health and safety behaviour that is required. Effective health and safety involves a complex interplay between beliefs, work organisation, relationships between staff and organisational systems and practices. It could be argued that other regulatory relationships, such as tax compliance, are simpler.

Figure 3: OSH Strategic Plan 2004-09



The models used by IRD and OSH both have a pyramid structure. Most organisations are located at the bottom of the pyramid and will be influenced by ease of compliance and assistance. Only a few organisations will directly experience enforcement. However the existence of enforcement mechanisms acts as a deterrent to the whole pyramid. This has implications for the resourcing of informing, assistance, simplification of systems and enforcement by Government agencies.

Another way of segmenting the health and safety market is to distinguish a range of characteristics on a continuum. The Department of Labour (2001b), in its research on the costs and benefits of complying with the HSE Act, provides this kind of qualitative information. It places companies on a continuum with three stages, moving from companies who are not good at workplace health and safety to companies who are compliant, to companies who excel at workplace health and safety. Companies can move from one category to the other.

Figure 4: Categories of Companies who comply with the HSE Act
(Department of Labour 2001b)

| Perceived costs and benefits as low | Perceived costs high in relation to benefits | Perceived costs as investment |
|---|--|---|
| <p>Risk perceived as low resulting in a low commitment to health and safety.</p> <p>Health and safety approach driven by their perception their workplace was low risk.</p> <p>Short-term focus to health and safety, with a high reliance on OSH to tell them what to do.</p> <p>Perception that health and safety is not that important in their workplace.</p> <p>Minimal understanding of HSE Act by employers and employees.</p> | <p>Risk perceived as high but health and safety approach sometimes focused more on the fear of prosecution or negative interactions with OSH than developing a dynamic approach to health and safety focused on improvements of actual health and safety conditions.</p> <p>Concerned about being held responsible for employee negligence.</p> <p>Limited understanding of the HSE Act.</p> | <p>Risk perceived as high.</p> <p>Economic incentives and/or concern for welfare of employees drive health and safety</p> <p>Proactive and continuous improvement approach, with high employee participation</p> <p>Health and safety integrated into the running of the business</p> <p>Good understanding of HSE Act by employers and employees</p> <p>Relationship with OSH either not important or good</p> |
| <i>Inactive companies</i> | <i>Reactive companies</i> | <i>Proactive companies</i> |

Case studies of the ACC reforms, by the Department of Labour (2000, 1999) identify similar categories.

The categories identified in the ACC case studies are:

- laissez-faire companies, who do not see health and safety as a significant management issue
- active companies, who perceive health and safety as a significant issue but do not integrate it into other workplace procedures

- integrated companies, who have developed health and management systems supported by a workplace culture that ensures a high level of employee participation and commitment

Conclusion

Workplace health and safety culture has two key components:

- intent, and
- ability

There is more literature available on how to influence ability in workplace health and safety. However wider literature, such as, analyses of social marketing, may indicate approaches that could influence intent. There is some literature available on motivation to achieve workplace health and safety. The areas of motivation are:

- good business
- reputation
- being able to comply
- social responsibility

Organisations can be segmented according to intent and ability. There are a number of segmentation models. Market segmentation is typically used to modify intervention because each segment will respond better to a different kind of intervention (Donovan & Henley 2003). Different segments can be reached through different channels, influenced by different communication approaches or may be motivated by different factors.

A market segmentation model could be overlaid on the outcome hierarchy model being developed for the Workplace Health and Safety Strategy. This could be one tool to assist in the identification of interim outcomes, and priorities for intervention. It will influence the prevalence of interventions such as informing, assisting, simplification of compliance, financial incentives, marketing or enforcement.

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