

## DEFINITION

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# OHS–ADM 6520 Operational Analysis Framework

## ADM6520: ADM6520 - Organization, Health and Safety (OHS) Issues in Current Organizational Diversified Realities

The ADM 6520 OHS Operational Analysis Framework that is presented in this course is based on two frequently used models in occupational health and safety research. These are the social production model of occupational health and safety (Montreuil et al., 2013, pp. 8–15, who in turn drew from Leplat and Cuny, 1984; Lamonde and Montreuil, 1995; Guérin et al., 2007 and St-Vincent et al., 2011) and the work situation model that focuses on the individual doing the work (St-Vincent et al., 2011, pp. 39, 44–51, 126–127). The ADM 6520 OHS Operational Analysis Framework is based on five broad dimensions of operational analysis:

1. Macro
2. Meso
3. Micro
4. Effects on the individual
5. Effects on the organization.

Work activity is influenced by workers and their characteristics (micro), workplace conditions (meso) and the economic, social and political context, particularly social and labour policies (macro). Some important determinants are included in this framework to guide your analysis process. However, depending on the situation, other factors that are not mentioned may also be significant.



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## Macro dimension

### CONTEXT

The economic, political and social context incorporates a variety of issues. These include issues related to labour market developments (such as more extensive employer-union relations or the unionization rate), government and political party direction, and the social context. The following determinants are included in the context of the macro dimension:

- Unemployment rate, job shortages, etc.
- Declining or expanding economic sectors (primary, secondary, tertiary)
  - Primary sector: extraction and exploitation of natural resources (materials, energy, forestry, mining, fishing and agriculture)
  - Secondary sector: raw material processing industries (industrial production, construction, wood processing, refining, electronics, aeronautics)
  - Tertiary sector: service industry
- Social context (feminization of work, generational impact).

### POLICIES

Each country, province or State has a set of public policies containing the rules governing occupational health and safety. These laws and policies should take into account society's changing needs, and guide organizational (meso) policies. The following are examples of political determinants:

- Social policies (health, work/family balance, etc.)
- Labour market policies (to promote employment or counter unemployment)
- Minimum labour standards
- Labour relations regime (laws governing unionized work)
- Occupational health and safety regime (laws aimed specifically at prevention and compensation, harassment).

## Meso dimension

### WORKPLACE

The work situation represents what is actually experienced in a specific work environment. This includes the relationships that are established between individuals and this work environment. The meso dimension comprises several determinants. What follows are examples of these determinants, along with a brief description for each:

**a) Conditions of performance:**

- Organization of work
- Organization of the production of goods or provision of services
- Organization of training and conditions for learning
- Physical environment (workstation)
- Technical features

**b) Tasks and requirements****c) Management practices****d) OHS culture****e) Structural characteristics****f) Social environment:**

- Social structures and corporate culture
- Functional and hierarchical relationships
- Types of relationships
- Relationships with clients or users

**g) Collective working modes****a) CONDITIONS OF PERFORMANCE**

Each organization has its own conditions for performing work. The following are examples:

**Conditions of performance: organization of work**

The organization of work influences activity given that it is the basis for the distribution of tasks between workstations, dependencies between workstations, team composition, job rotation, schedules (degree of flexibility in start/finish times, shifts, etc.), method of remuneration (hourly wage, contract, bonus, etc.) and work evaluation, the absentee replacement system and return-to-work procedures (temporary assignment) (St-Vincent et al, 2011, p. 46).

**Conditions of performance: organization of the production of goods or provision of services**

We are referring here to the type of goods or services offered by the organization, as well as to the production philosophy (lean, just-in-time, total quality, etc.) (St-Vincent et al., 2011, p. 46). Organization of the production of goods or provision of services depends on external factors, such as size, sector, mission, competitive positioning, etc.

**Conditions of performance: organization of training and conditions for learning**

Training is seen as a way for workers to deal with work-related constraints. Consideration must be given to learning conditions, the choice of trainers, the training mechanism (theoretical and practical content, duration of training, workstation adapted to learning, tasks that are progressively more demanding, etc.). (St-Vincent et al., 2011, p. 47).

**Conditions of performance: physical environment (workstation)**

The physical environment corresponds to physical work spaces and environments (sound, visual and thermal environments, air quality, physical, chemical and biological stressors), equipment, raw materials used for the work, passageways, delimitation of areas for different uses, etc. These elements are important because they facilitate or constrain work activity. For example, St-Vincent et al. state that accessible storage facilities reduce unnecessary trips (St-Vincent et al., 2011, p. 48).

**Conditions of performance: technical features**

Technical features include the layout and size of workstations, types of machines, tools, equipment, etc., and personal protection equipment. (St-Vincent et al., 2011, p. 49). Technical features may be defined by specified duties and requirements, management practices, and the health and safety culture.

**b) TASKS AND REQUIREMENTS (SPECIFIED)**

For St-Vincent et al (2011), the “task” is what is specified by the institution with its procedures, guidelines and expected outcomes in terms of quantity and quality of work (p. 44). The individual engaged in work activity will be assigned one or more tasks.

**c) MANAGEMENT PRACTICES**

Management practices impact on labour relations, HRM and OHS. For example, they can guide communications, performance evaluations, employee recognition, change, and job and OHS protection (potential for compensation). These management practices influence employment and workers’ flexibility to perform well at work while safeguarding their physical and psychological health. Effective management practices will have a positive impact on the health and mobilization of human resources. They will reduce risk factors for both the mental and physical health of workers. These practices are based on organizational values that promote health, both organizational and individual.

**d) CULTURE OF HEALTH AND SAFETY**

The purpose of the Quebec *Act respecting occupational health and safety* (LSST) is “the elimination, at the source, of dangers to the health, safety and physical well-being of workers” (section 2). The Act consequently calls for the implementation of prevention activities to safeguard the health and safety of all employees in Quebec. To that end, the LSST establishes rights for workers (sections 9 to 48) and their employers (section 50), as well as obligations for workers (section 49) and employers (section 51). It also provides for establishing mechanisms for the participation of workers, workers’ associations, employers and employer associations in the realization of this goal.

To achieve the objectives set out by the Act, organizations must create a culture of workplace health and safety. This requires establishing organizational structures, procedures and policies, as well as formal modes of participation.

Members of the organization can ensure workplace health and safety when they are able to manage risks and hazards in a way that prevents occupational injuries while achieving organizational objectives (Reason, 2000).

Baril et al. define the “culture of workplace health and safety” as a subset of organizational culture. More precisely, this culture is founded on a frame of reference composed of beliefs, values and behaviours—shared by members of the same organization—underlying the collective unconscious and conditioning the organization’s perceptions of itself and its environment (Baril et al., 2012, p. 10).

#### e) STRUCTURAL CHARACTERISTICS

Structural characteristics may be defined by the size of the establishment or company, the skill level of the workforce, the distribution of the workforce (gender, age, status), etc.

#### f) SOCIAL ENVIRONMENT

St-Vincent et al (2011, p. 50 and 51) identify two aspects of the social environment: one involves social structures and culture, while the other is more concerned with the interactions between the individual engaged in work activity and other organizational actors. Here we define in more detail several elements of the social environment.

##### **Social environment: social structures and corporate culture**

The company’s social structures and culture are elements that shape the relationships between individuals (hierarchy, committees, union representation); consultation, communication and decision-making processes; the preferred management style; work recognition procedures; and the establishment’s priorities. Social structures and culture take into account the sexual division of labour, generational relationships, immigration status, etc. (St-Vincent et al., 2011, p. 126).

They also include social policies and all the elements that will influence relationships between individuals, as well as the flexibility that exists at each hierarchical level (St-Vincent et al., 2011, p. 51).

##### **Social environment: functional and hierarchical relationships**

Here we find the characteristics, contributions, needs and expectations of colleagues and other contacts: team leaders, superiors, workers from other departments (for example, maintenance, computer science or quality control) (St-Vincent et al., 2011, p. 126).

**Social environment: types of relationships**

The social environment corresponds to the various types of relationship that are formed between individuals through different types of activity. This can include collaboration, mutual assistance, cooperation, based on the relationship with authority, interdependence, etc. (St-Vincent et al., 2011, p. 126).

**Social environment: relationships with clients or users**

St-Vincent et al (2011) suggest that there is a diversity of client and user types. As such, a worker may be called upon to work with beneficiaries, citizens, consumers, students, residents, school children, parents, etc.

All of these people have individual characteristics (physical and mental), expectations or needs. These same people may or may not meet workers' achievement needs. Some relationships between individuals are also influenced by the nature of the interaction: authority, dependence, cooperation, etc.

**g) COLLECTIVE WORKING MODES**

This determinant integrates group, co-action, aid/assistance, cooperation and collaboration.

“The different forms of collective activity depend on the operators' goals, and on their space and time coordinates” (Caroly & Weill-Fassina, 2007, p. 103). This notion corresponds to a group of operators with a common history (workers, their union and their managers) who work in the same organization for a common purpose. This group is a potential resource for safeguarding the health of every operator (St-Vincent et al., 2011, p. 51).

The collective working activities are resources allowing a group to achieve a common objective and ensure organizational performance. It involves coordinated action (co-action, aid/assistance, cooperation and collaboration) and a form of interdependence in tasks (de la Garza and Weill-Fassina, 2000; Caroly, 2010).

## Micro dimension

The determinants of this dimension include issues related to the suitability of the work and the individual.

### WORKER

Here, we take into account the physical, mental and social mobilization of the individuals engaged in work activity, and the control strategies and compromises they implement in order to acquire the leeway to carry out the expected work with the means at their disposal and within the constraints imposed upon them (Montreuil, Fournier and Baril-Gingras, 2013, p. 10).

This includes:

- The individual **characteristics** of workers as a whole: age, gender, cultural community, training, qualifications, experience, health status, anthropometric characteristics, perceptions, aspirations, etc.
- Social **representations** of age, gender and body
- **What the worker has actually experienced:** individuals at work are considered to be part of a family and social network. As such, they have family responsibilities, but they also have access to resources (individual and collective) that allow them to create flexibility in the work situation. We are therefore talking here about characteristics of work and personal life. Actual experience includes physical, mental, social and environmental dimensions (risk factors associated with work).

### REAL WORK ACTIVITY

The term “real work” refers to work as it is actually performed, which does not always correspond to what is prescribed. Real work corresponds to the work that the operator does on a daily basis on the job. It requires the physical, cognitive and psychological mobilization of the operator. This enables the operator to perform his or her tasks, or produce a good or service in such a way as to achieve the work objectives (Castang, 2012). This production may be lower or higher than formally established expectations. Factors related to the determinants affect the operator’s production.

### CONTROL STRATEGIES

Here we use Marie-Ève Major’s definition: Control strategies or methods are behaviours, skills, or attitudes that people develop in order to create a balance between who they are and their environment (Major, 2011, p. 50).

## Effects on the individual and the organization

- Physical health
- Mental health

### EFFECTS ON THE INDIVIDUAL

#### *Positive effects*

Some conditions have positive effects on physical and mental health status. Physical health is protected when working conditions prevent accidents, injuries and occupational diseases. Mental health status is more closely related to what makes work meaningful, what is satisfying at work, what increases workers' leeway for protecting their health or better balancing work with personal and family life.

#### *Negative effects*

Some conditions have negative impacts on physical and mental health status. This is reflected in deteriorating physical and mental health, increased accidents, injuries, occupational diseases, dissatisfaction, difficulty in meeting work requirements, absenteeism, resignations and issues with work/life balance (disruption of family life or domestic activities), as well as decreased availability for other activities (community involvement).

### EFFECTS ON THE ORGANIZATION

- Productivity
- Quality of product or service

#### *Positive effects*

Among the positive effects are the achievement of quantity- and quality-related objectives in the production of goods or services, and improved organizational performance (retention, reduced compensation expenditures or costs for group health insurance programs).

#### *Negative effects*

Negative effects include failure to achieve objectives, management problems (high absenteeism, staff turnover), obstacles to development, higher insurance costs, increased number of complaints, scrap, rejections, delays, etc.

### LEEWAY

Leeway depends on workers' ability to use the available resources to achieve their work objectives without harming their health. Are the individuals engaged in work activity able to maintain a balance between safeguarding their health and achieving their professional objectives?

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The following bibliographic references were used to define the elements of our operational analysis framework.

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