Occupational Health Clinics for Ontario Workers Inc.

Measuring workplace psychological health and safety

Institute for Work & Health Open Plenary

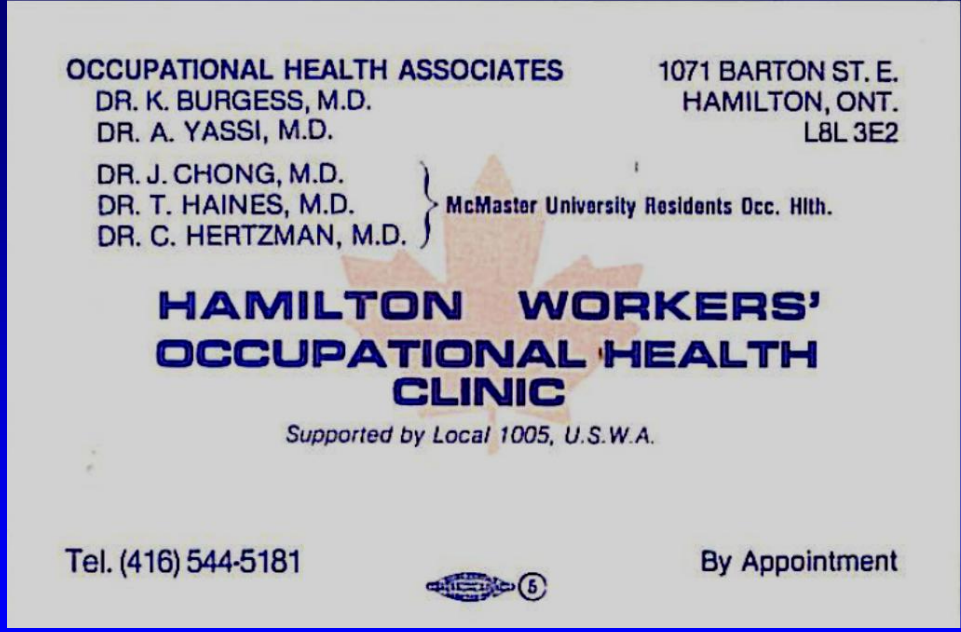
John Oudyk
October 9, 2012

Occupational Health Clinics for Ontario Workers (OHCOW)

- an inter-disciplinary occupational health team:
  - occupational physicians
  - occupational health nurses
  - ergonomists
  - occupational hygienists
  - client services co-ordinators

- funded though the Ministry of Labour (& WSIB)
- Board of Directors are all labour representatives

Background History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Supported by Local 1005, U.S.W.A.
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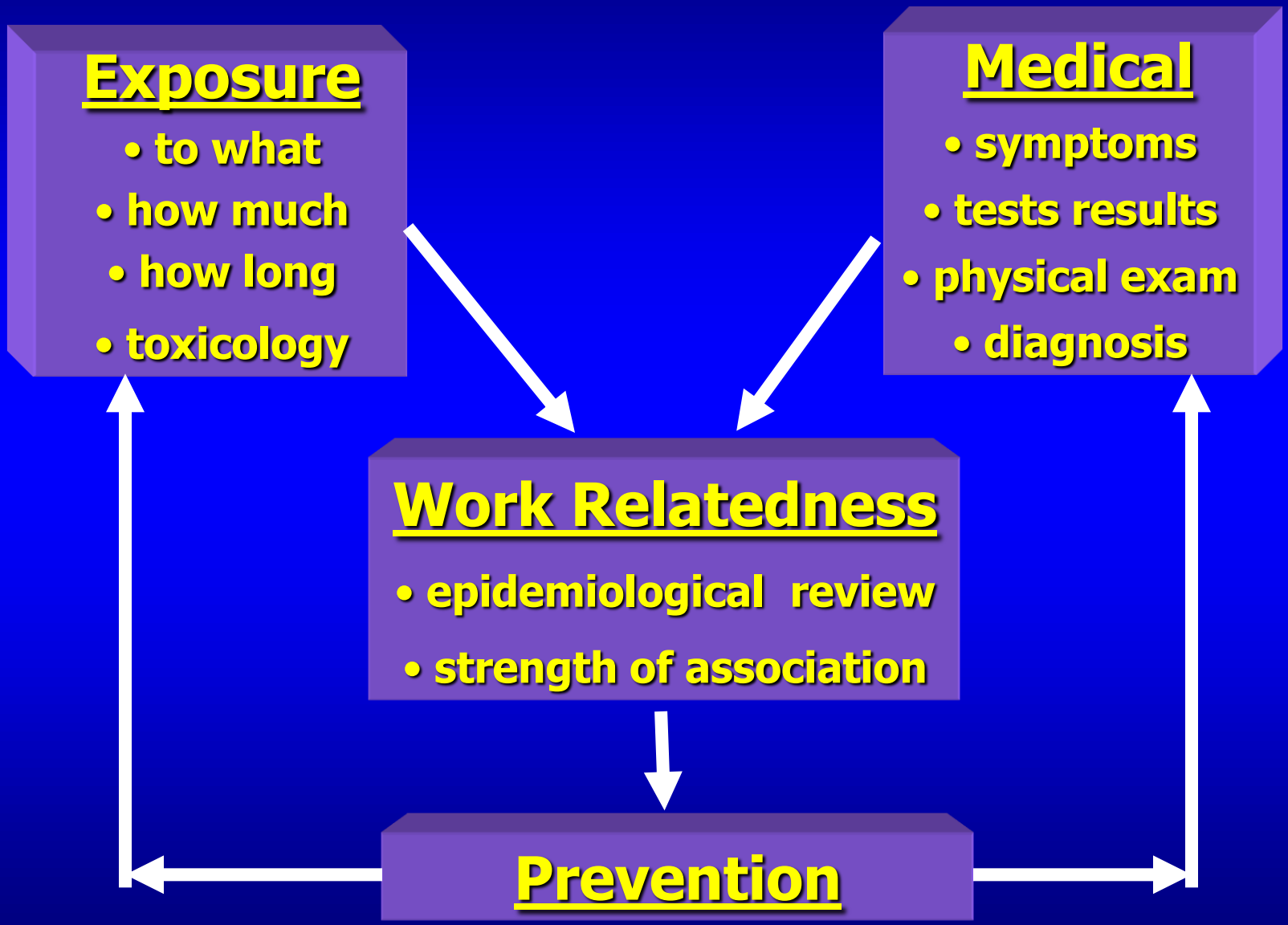
By Appointment

- In 1980 Local 1005 set up a committee to establish an occupational health centre for their members
- They were able to connect with a number of interested doctors associated with McMaster who helped out with the OFL H&S training courses.
- Through this interaction Local 1005 hired some of these doctors and the first union sponsored occupational health clinic in North America was established in March 1981

What OHCOW does:



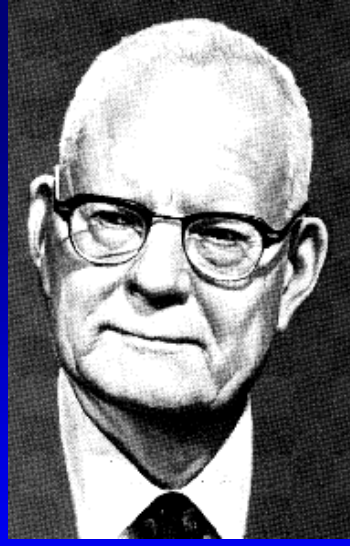
Clinic Services:

1. **individual client** (clinical)
2. answer **questions** (work/health related)
3. **informational presentations**
4. workplace **visits**
   - requested by co-chairs of JH&SC
5. exposure/health **investigations**
   - medical/hygiene/ergonomic combined

What's a chemical engineer doing measuring stress?

- Plastimet fire Firefighter survey (1997)
  - obvious from symptom survey that stress was an important reaction to the fire
  - in follow-up surveillance program asked about stress related incidents (PTSD?) – developed customized scale from these reports
- Indoor Air Quality investigations (1991)
  - Survey instrument used had 4 brief questions on stress
  - Later (2000) added a short version of Karasek's JCQ (14 questions)

If you can't measure it ...



- Misquote from Deming
- Some of the most important things at work (in life) can't be measured (e.g. Valentine's)
- **Objective** and **Subjective** measures: objective bias (more scientific)
- However, perceived "stress" (psychological strain) is the "gold standard"

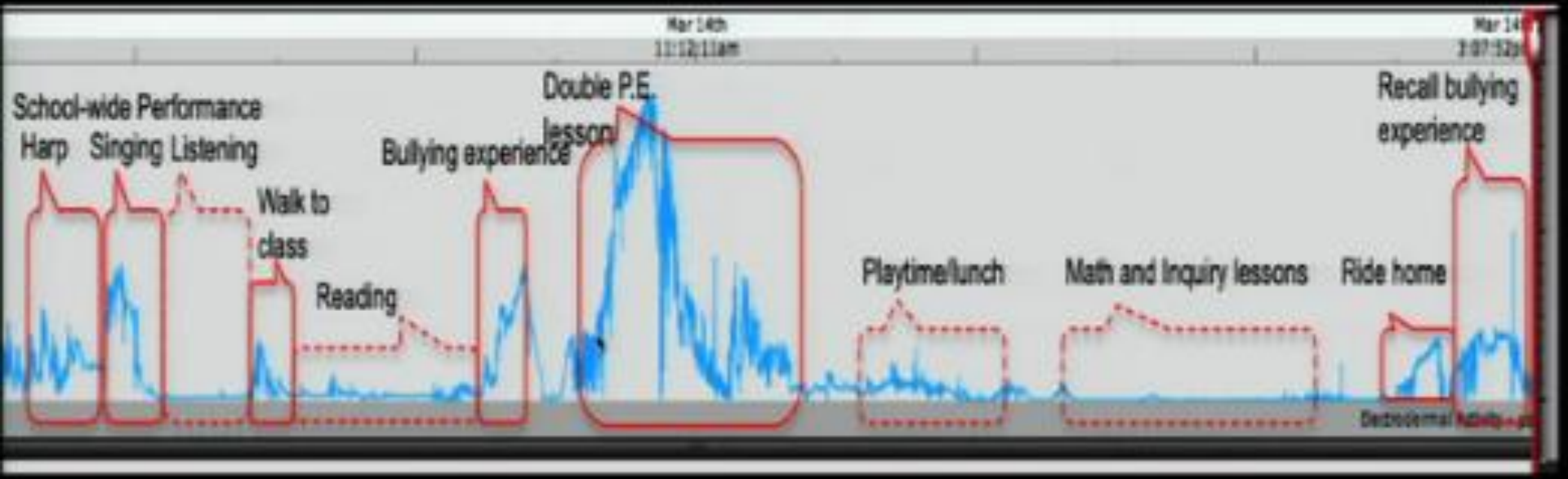
Objective measures:

- Number of days absent due to "stress leave" – how scientific is that?
- Biological markers (HPA) – measuring stress related chemicals in saliva (catecholamines (i.e., adrenaline and noradrenaline) and cortisol);
- Wristband gadget which measures skin conductivity (moisture = arousal)

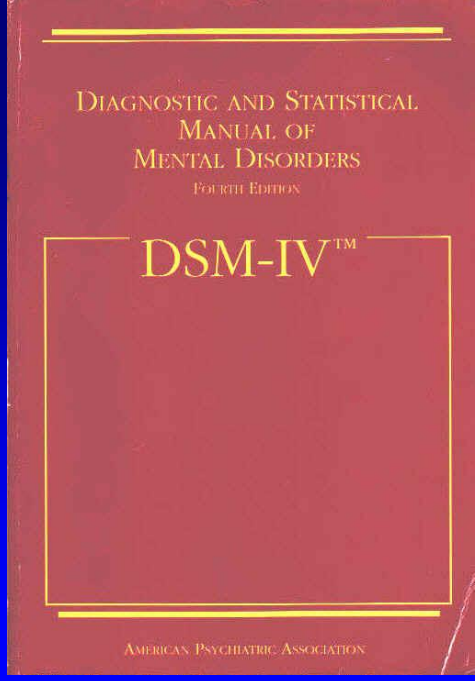
Q Sensor 2.0
Measuring Emotions

A 6-yr old girl's school day – bullying?

http://www.affectiva.com/q-sensor/



Psychological "Subjective" Measures:



- Remember, perceptions/symptoms are the "gold standard" (DSM-IV)
- Diagnoses made on the basis of answers to a series of questions (some of which are observable by others; some not)
- Some questions don't work directly (… are you depressed?) and thus need to be questioned indirectly

DSM-IV: Major Depressive Episode

Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning;

(1) depressed mood most of the day,
(2) markedly diminished interest or pleasure almost all,
(3) significant weight loss when not dieting or weight gain
(4) insomnia or hypersomnia
(5) psychomotor agitation or retardation
(6) fatigue or loss of energy
(7) feelings of worthlessness or excessive or inappropriate guilt
(8) diminished ability to think or concentrate, or indecisiveness
(9) recurrent thoughts of death

Wind turbine study

- Recently Health Canada posted a proposed methodology to study the health effects of wind turbine noise
- They distinguished between "objective" and "subjective" measures – implying "objective" measures were superior (no doubt when it comes to decibels)
- However, their "objective" measures for chronic stress were blood pressure and hair cortisol concentrations
- Reviewing the literature on these measures revealed some major issues with respect to validity and reliability as measures of chronic stress which questioned the implied bias for "objective" measures.

http://www.hc-sc.gc.ca/ewh-semt/consult/_2012/wind_turbine-eoliennes/index-eng.php

Measurement – lay vs. academic perspectives:

- Stress is a theoretical construct (not directly observable)
- Establishing the psychometric properties of measures of stress has had its challenges (perceptions of stress can change over the course of a day)
- Lay persons do not have these issues and can perceive stress directly
- Can we use a challenging theoretical construct with dubious psychometric properties to assist lay workers in improving their workplace situations?

outline

1. History
2. Perspectives
3. Survey tool
4. Survey administration
5. Survey analysis
6. Addressing risk factors

outline

1. **History**
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History:

- The Mental Injuries Tool group was established out of a stakeholder sub-committee of worker representatives and the Occupational Health Clinics for Ontario Workers who were charged with "supporting worker representatives in taking action on prevention and workers' compensation".
- This sub-committee held a workshop (September 2010) to review possible tools and projects which could be developed jointly to address common concerns.
- The topic which received the most interest was mental injuries (workplace psychosocial risk factors and recognition & compensation for mental injuries).

History:

- In December 2010 the MIT group held their first meeting/conference call and decided to plan a workshop to review various tools to measure stress.
- In February 2011 members of the working group and other interested people attended a workshop which reviewed the theory behind common psychosocial measurement tools.
- Based on these deliberations, the group decided to administer the Copenhagen Psychosocial Questionnaire (COPSOQ) survey at upcoming union conferences.

History:

- The results of these trial administrations were presented at the Labour, OHCOW, Academic Research Collaboration (LOARC) Teach-in called "Stopping the spread of psychosocial hazards at work in Quebec and Ontario - A Teach-in" held in Ottawa October 24/25 2011 (http://www.opseu.org/hands/teachin_3/6%20Oudyk%20en.pdf).
- Based on these trials we agreed that the COPSOQ was a useful tool to use
- The MIT group developed a guidebook and other tools to address all aspects of stress in the workplace (launch October 10th)

Who's involved:

- Laura Lozanski, CAUT
- Terri Aversa, Brendan Kilcline, OPSEU
- Sari Sairanen, CAW
- David Chezzi, Andréane Chénier, Blaine Morin, CUPE
- Keith McMillan, CEP
- Nancy Johnson, Erna Bujna, ONA
- Valence Young, ETFO
- Robert Mason, USW
- Janice Klenot, Michele Miller, UFCW 175/633
- Jane Ste. Marie, John Watson, OSSTF
- Kathy Yamich, Workers United Union
- Alec Farquhar, Margaret Keys, OWA
- Tom Parkin, Workers Health and Safety Centre (WHSC)
- Sophia Berolo, University of Waterloo
- Andy King, LOARC
- Maryth Yachnin, IAVGO
- Syed Naqvi, Alex Cohen, Ivan Bauer, Curtis VanderGriendt, Ted Haines, Mark Parent, John Oudyk (OHCOW)

it's been done before …

- in Spain the unions got together with some researchers and developed a tool to address psychosocial hazards at work
- it's based on a survey developed in Denmark (COPSOQ)
- it's been used in thousands of workplaces (a few in Canada too)

Overall strategy:

- collect data on the shop floor in a way that helps reps make workplace change
- also feed back to the union so that they can produce sector-specific supports
- then, together with other unions push for legislative and compensation changes

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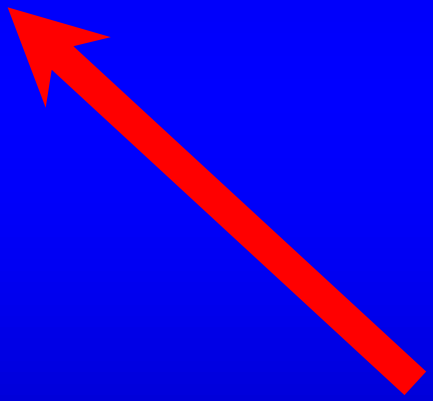
Perspectives:

Behaviouralism

behaviour



personality

environment

Perspectives:

Personality theory

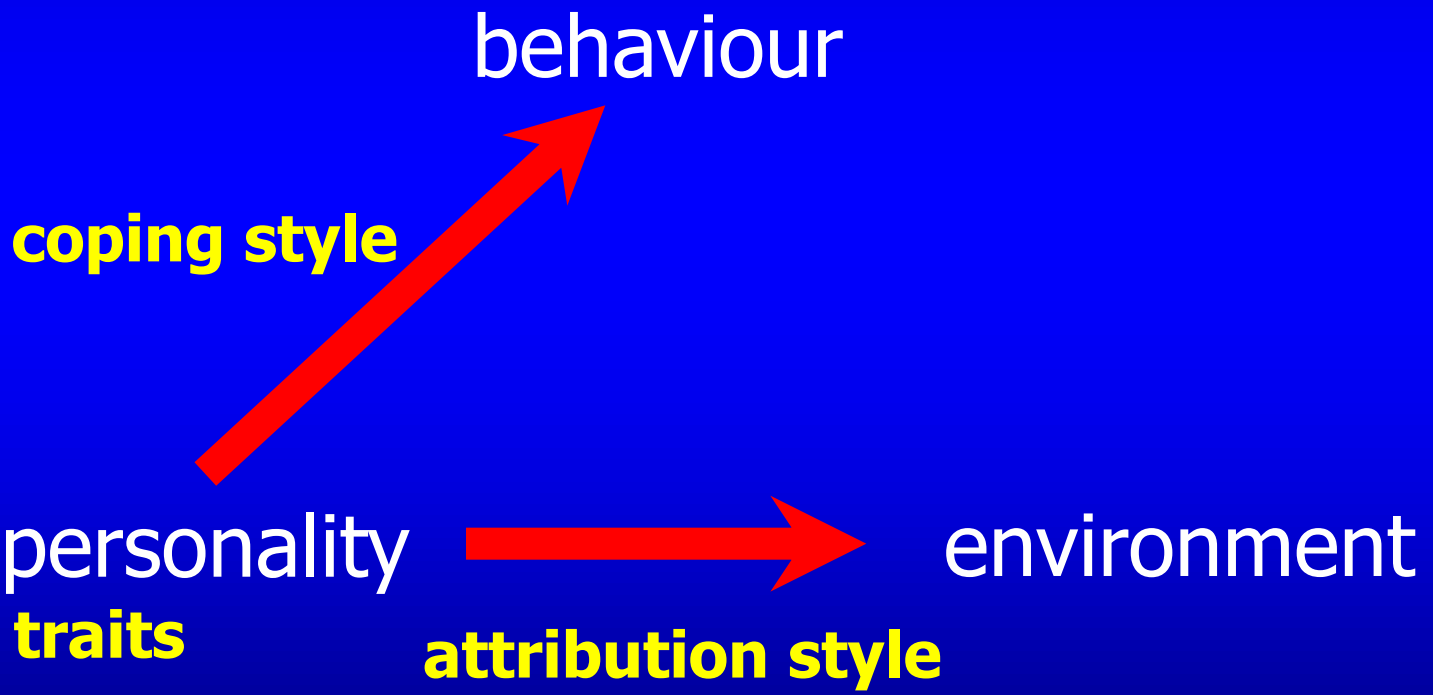
behaviour

personality

environment

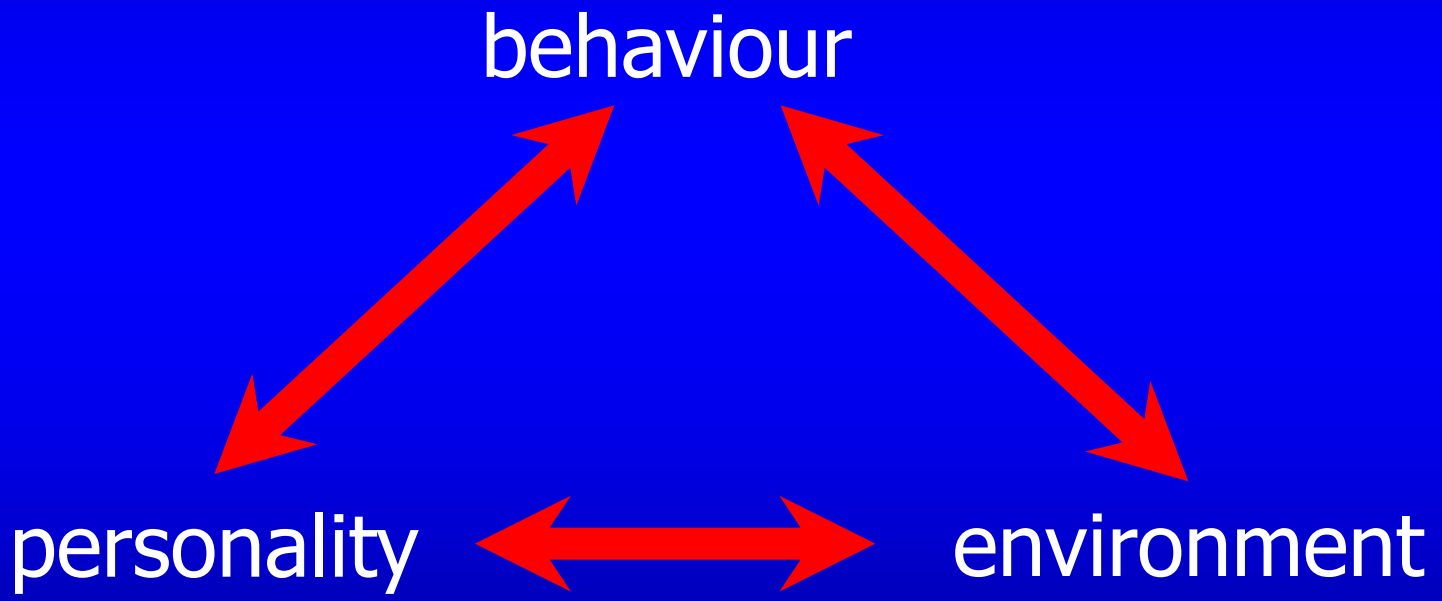
Perspectives:

Transactional Process Model

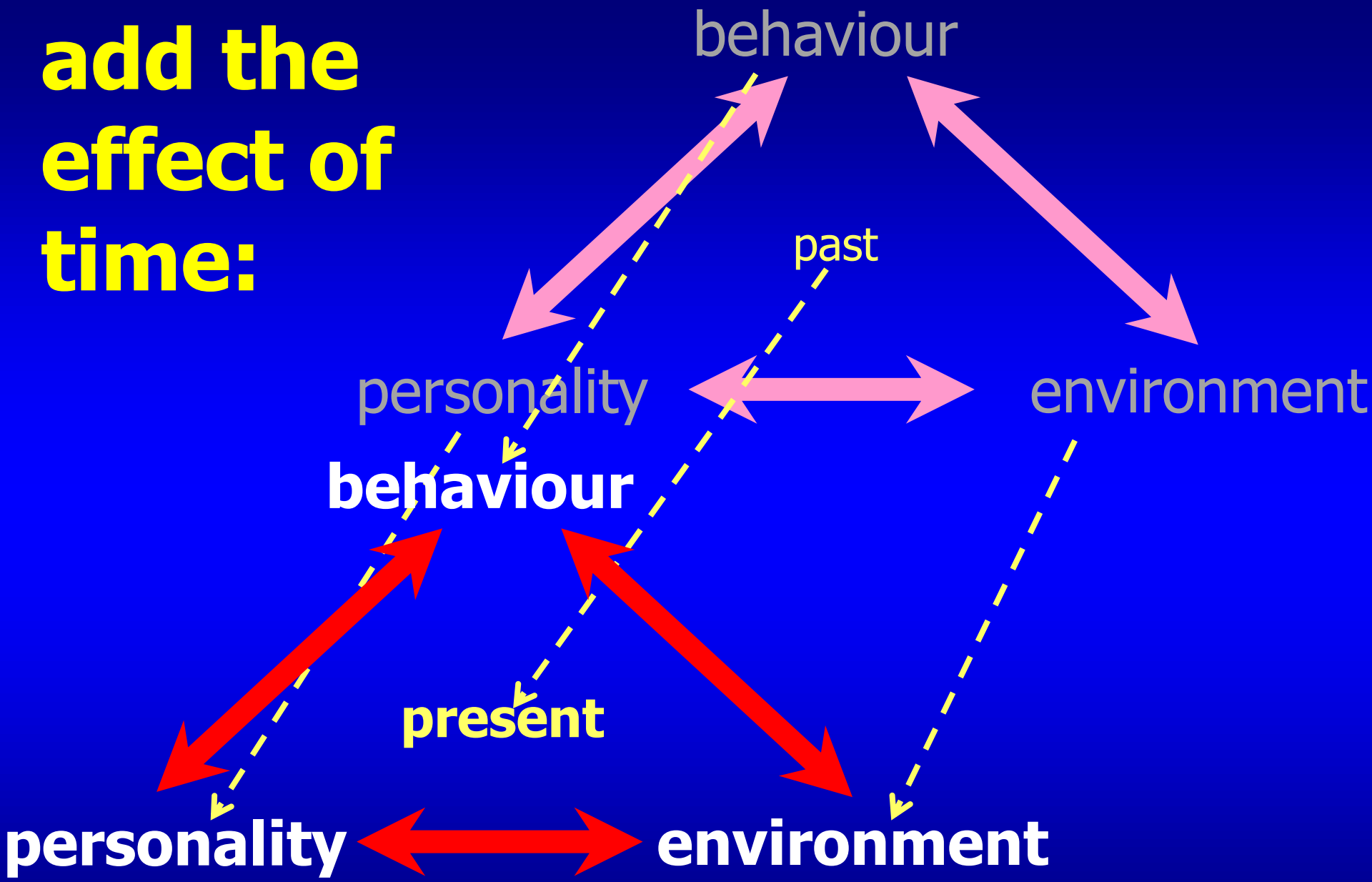


Perspectives:

Reciprocal Determinism

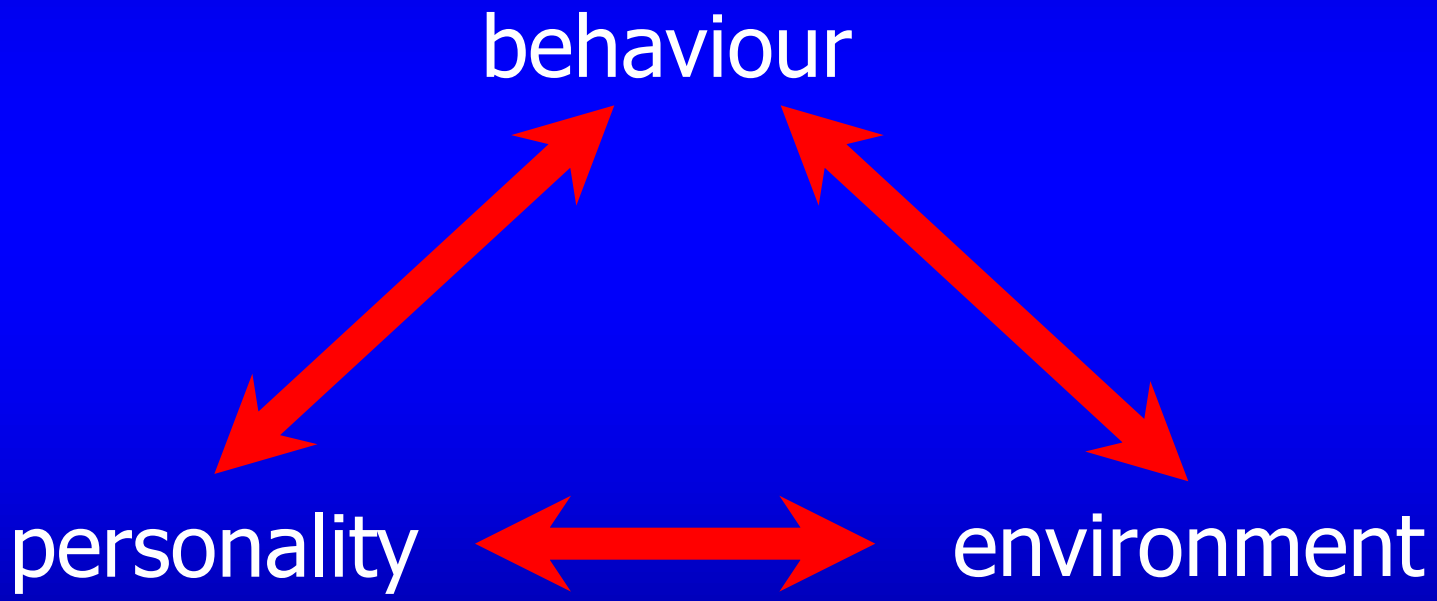


add the effect of time:



Perspectives:

… so where is it easiest to intervene?



Two types of perspectives:

Biomedical Model: "…disease the result of disruption of psychological processes wherein subjective perceptions, behaviors and personality factors (e.g., neuroticism) are of primary importance (i.e., disease proceeds from the individual to the environment)."
– Occupational Psychology

Social Epidemiological Model: "negative health outcomes (illnesses) are due to the impact of social epidemiologic factors (in general class, work, race and gender)" – Occupational Sociology

P. Schnall, Session # 1 – Part 1: Introduction to "Work and Health", UCLA SPH EHS 270/CHS 278 Spring 2009 (March 31, 2009)

Prevention levels:

Primary prevention (at the source)

- job design, organizational adaptations, flexibility – collective agreement, H&S Committee, management policy/program

Secondary prevention (early detection)

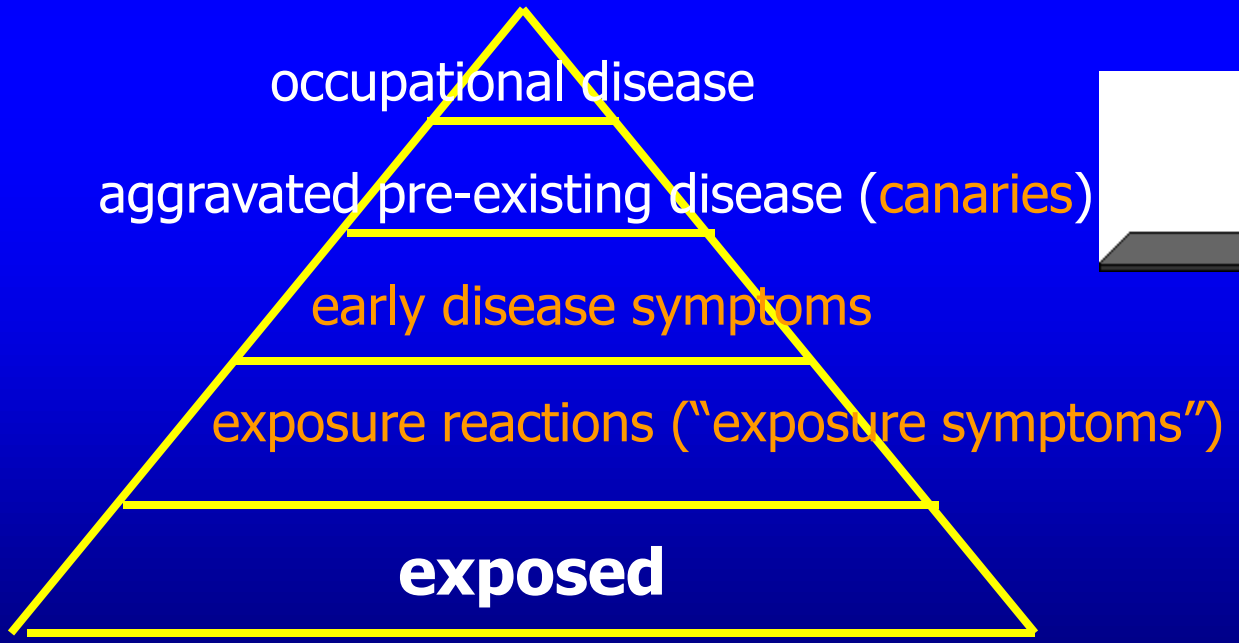
- educate people about symptoms and on coping skills – wellness programs, screening

Tertiary prevention (help the victims)

- get good treatment, compensation recognition, return to work support – EAP, therapy

Early interventions:

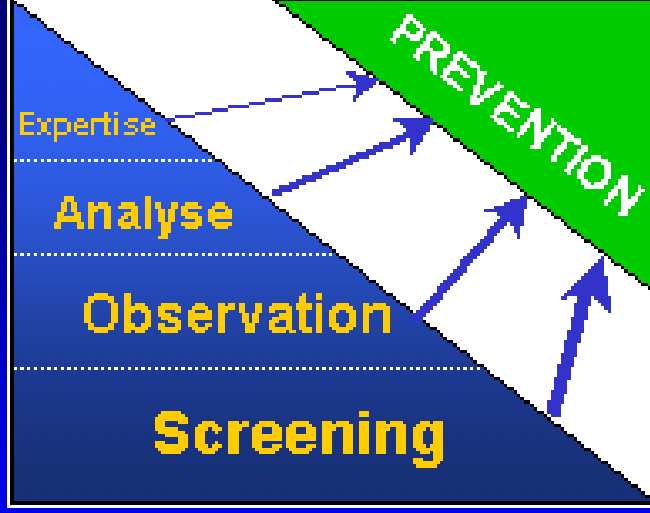
- Exposure/symptom surveys be viewed as lower part of the proverbial "occupational disease iceberg"



Who is qualified to identify psychosocial hazards?

- **Screening** – if it's bad enough (poisoned workplace) anyone walking into the workplace can identify a problem, let alone the workers who deal with it every day
- **Observation** – with checklists, surveys, resources and a little training, H&S reps/activists can identify psychosocial hazards and recommend solutions
- **Analysis** – in Europe there is a new discipline called Work Organization Specialist who are trained (MS/MA) to deal with assessing and trying to solve workplace psychosocial issues
- **Expert** – depending on your perspective either an occupational psychologist or an occupational sociologist

SOBANE



Screening: is when workers identify hazards based on their first hand experience

OBservation: is qualitatively organized investigations using checklists (JH&SC's)

ANalysis: is the quantitative evaluation traditionally associated with trained practitioners

Expertise: is the help the practitioner needs to solve a particularly difficult problem

J.B. Malchaire, "Participative management strategy for occupational health, safety and well-being risks", G Ital Med Lav Erg 28:478-486 (2006).

CSA Standard Z1003

- "Championed by The Mental Health Commission of Canada, this standard is being developed collaboratively with the Bureau de normalisation du Québec (BNQ) and the Canadian Standards Association (CSA)."
- "The completed voluntary National Standard of Canada for Psychological Health and Safety in the Workplace is scheduled to be released in the second half of 2012."
- A draft was published November 1, 2011 for public consultation; comments were received until January 6, 2012;

http://www.csa.ca/cm/ca/en/news/article/public-consultation-workplace-mental-health-standard

Funding & Structure:

- The combined contribution of Human Resources and Skills Development Canada (HRSDC), Health Canada and Public Health Agency of Canada is $320,000. Bell made a $150,000 contribution.
- The Standard will follow the 5-element ISO format so that it aligns with other standards — particularly the British Standards Institute Performance Standard (PAS 1010), OHSAS 18000, the CSA Z1000 series, and BNQ's Healthy Enterprise Standard.


Vision
A workplace that promotes workers' psychological well-being and allows no harm to workers mental health.
Key Drivers
Risk Management
Cost Effectiveness
Recruitment & Retention
Excellence & sustainability
Strategic pillars
Prevention
Promotion
Resolution
Psychological support
Organizational culture
Clear leadership and expectations
Civility and respect
Psychological job fit
Growth and development
Recognition and reward
Involvement and influence
Workload management
Engagement
Balance
Psychological protection
Supportive physical environment

Guarding Minds @ Work

12 psychosocial risk factors (PSR-12):

1. Psychological Support
2. Organizational Culture
3. Clear Leadership & Expectations
4. Civility & Respect
5. Psychological Job Fit
6. Growth & Development
7. Recognition & Reward
8. Involvement & Influence
9. Workload Management
10. Engagement
11. Balance
12. Psychological protection
13. Supportive physical environment (CSA)

Guarding Minds @ Work

http://www.guardingmindsatwork.ca/info

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Survey tools considered (face validity):

1. Karasek's demand-control (JCQ)
2. Siegrist's effort-reward questionnaire
3. HSE's Management Standards Indictor Tool
4. Guarding Minds at Work (PSR-12)
5. MM-040 IAQ survey's four stress questions
6. Copenhagen Psychosocial Questionnaire
7. ISTAS' PSQ CAT21 (COPSOQ 21)

COPSOQ

Copenhagen Psychosocial Questionnaire

http://www.arbejdsmiljoforskning.dk/Sp%C3%B8rgeskemaer/Psykisk%20arbejdsmilj%C3%B8.aspx?lang=en

COPSOQ

Copenhagen Psychosocial Questionnaire:

- 3 versions (short, medium & long)
- short (40 questions) ideal for screening
- medium (87 questions) good for in-depth evaluation
- long (128 questions) appropriate for research only

http://www.arbejdsmiljoforskning.dk/Sp%C3%B8rgeskemaer/Psykisk%20arbejdsmilj%C3%B8.aspx?lang=en

COPSOQ stress factors:

Demands
- Quantitative demands
- Work pace
- Emotional demands

Work Organization
- Influence
- Possibilities for development
- Meaning of work
- Commitment to the workplace

Work Values
- Trust regarding management
- Justice and respect

Work Relationship
- Predictability
- Recognition
- Role clarity
- Quality of leadership
- Social support from supervisor

Work-Life Balance
- Job satisfaction
- Work-family conflict

Offensive Behaviours
- Sexual harassment
- Threats of violence
- Physical violence
- Bullying

COPSOQ health measures:

- Self-rated overall health status
- Burnout
- Stress
- Sleeping troubles
- Somatic (physical) stress symptoms
- Cognitive stress symptoms (concentrating, thinking clearly, making decisions, remembering)

MIT additions:

- Added demographic questions and questions about other issues thought to be important
- Raised by MIT group and in comments written in during pilot administrations
- Can be customized to the specific situation

Physical work environment questions:

How well are **safety hazards** dealt with? (slip/trip/fall hazards, guarding, railings, fire and explosion hazards)

- ☐ 1 **well designed/controlled**
- ☐ 2 present but **not usually an issue/**concern
- ☐ 3 exposures cause **concern**
- ☐ 4 exposures cause **annoyance**
- ☐ 5 exposures **interfere** with ability to get job done
- ☐ 6 not applicable

further comments: _____

_____

Physical safety factors:

- Safety hazards
- Workstation ergonomics
- Physical factors (noise, lighting)
- Thermal comfort
- Air quality
- Dangerous chemicals
- Biological hazards
- Radiation (ionizing and non-ionizing)
- Driving hazards

What we are not trying to do:

- We intentionally left out questions about depression symptoms and psychological morbidity – avoid dangers of "diagnosing"/labeling individuals
- Not trying to create a report-card – rather an opportunity for dialogue (by "objectifying" issues – depersonalize)
- Not focussing soley on building individual coping skills (wellness) or mental illness supports (EAP, RTW, etc.) – these may be part of the solutions needed (e.g. advocacy for WSIB recognition), rather, we are primarily trying to focus on the root causes

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Should we even use a survey?

1. How bad is it? If the problems are palpable you don't need to measure – you need to do something quick!
2. If everyone knows what the problem is a survey may be seen as a delaying or diversion tactic
3. If doing a survey is problematic and you have some wise people on the JH&SC, checklists might be the better way to go

Should we even use a survey?

4. If you've got lots of good quality data, reviewing absences, Sickness & Accident data might be a good place to start
5. If you're serious about improving things and/or you want evidence to prove your case, doing a survey properly could help
   - however, a survey needs a solid basis of commitment (all levels) and a comprehensive administration plan

Group size

- For **less than 15 responses** the results are very uncertain – this number of responses is really too small to analyze for correlations
- Between **16-30 responses** we can calculate correlations but a fair number of these correlations may be the result of random effects, thus we need to observe the overall patterns rather than focus on individual associations
- Between **31-50 responses**, we still have some random "statistical noise" but the individual associations are approaching a significant degree of confidence
- With **more than 50 responses** we can be confident that each association is statistically significant, although even in these circumstances one in 20 associations could be due to chance.

Response rates:

- If the response rate is **80% or more**, then you can be confident that are representative of the whole group
- A response rate between **67-80%** is reasonable but not as strong as over 80%; there is a bit of uncertainty about representativeness.
- A response rate between from **50-66%** suggests there may be issues among those who did not respond or else the survey was not administered well (surveys need lots of reminders (i.e. nagging) to ensure all those who are willing to participate, actually do participate). At this level of response, we cannot rule out the possibility that, if those who did not participate had been included, the results would be different.
- A response rate of **less than 50%** means that either the administration of the survey was not done properly or that a large proportion of the group being surveyed did not have confidence in the process. Any results of the survey can only be considered as reflecting those who participated not the group as a whole. This can present a serious problem in interpreting the results.

Dilman approach to maximizing survey response:

1) Lay the groundwork – get endorsements/buy-in; set up steering committee; define relationships to JH&SC, union, employer involvement; sort out logistics (electronic or paper, who's in charge of what, confidentiality, data management/security, when do we report results, what do we do next – long term objectives)
2) Pre-survey announcement (1-2 weeks prior) with endorsements
3) Distribute survey – fanfare?; provide time, space, incentives?
4) 1-2 weeks later send out reminder
5) After another 1-2 weeks send a 2nd reminder.
   - if response rate is poor (<66%) you may have to consider a stronger intervention (i.e. start "nagging" people directly)
6) After a reasonable period of time (and depending on response rate) set a closing date and send out a final notice with an urgent message.

The "Soft Guidelines" of COPSOQ

1. Never start a survey of the psychosocial work environment unless there is a clear intention of taking action if indicated.
2. Answering the questionnaire is voluntary, but a response rate below 60% is unsatisfactory and a sign of poor psychological climate at the workplace.
3. All respondents are anonymous. If scores are calculated for groups of less than 15 persons all group members should give their consent.
4. All employees have the right to see and discuss the results.
5. Management as well as supervisors and workers should participate and be committed during the whole process.

TS Kristensen, "The "Soft Guidelines" of NIOH, Copenhagen. How to go from survey to action.", The Eighth International Congress of Behavioral Medicine. Mainz, Germany. August, 2004.

The "Soft Guidelines" of COPSOQ

6. It is important to distinguish between basic conditions of work that are "part of the job" and factors that could be changed. Do not try to change what cannot be changed and do not accept what should be changed.
7. There are no standard solutions to the problems. Solutions should be developed locally and integrated in the other activities of the organization aiming at increased productivity and better quality.
8. If interventions are made, it is a good idea to repeat the survey after 1-2 years in order to see if the intended improvements have occurred.
9. Many workplaces will benefit from surveys with regular intervals as part of the overall concept of the "learning organization" and the "development" work.
10. The survey results should be seen as a tool for dialogue and development – not as a "report card".

TS Kristensen, "The "Soft Guidelines" of NIOH, Copenhagen. How to go from survey to action.", The Eighth International Congress of Behavioral Medicine. Mainz, Germany. August, 2004.

… doing a survey is a lot of work! …

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Example results ...

Occupational Health
Clinics for Ontario
Workers Inc.

Psychosocial factors at work

based on the NRCWE's short questionnaire for assessment of the psychosocial work environment

COPSOQ

2007 edition with additions

Results for:

e-dome participant responses

NB - this report uses colour coding extensively - if possible it would be best to print in colour or view on a screen

number of respondents: 101 number available to fill out survey: 250 response rate: 40.4%

Comments on the response rate:

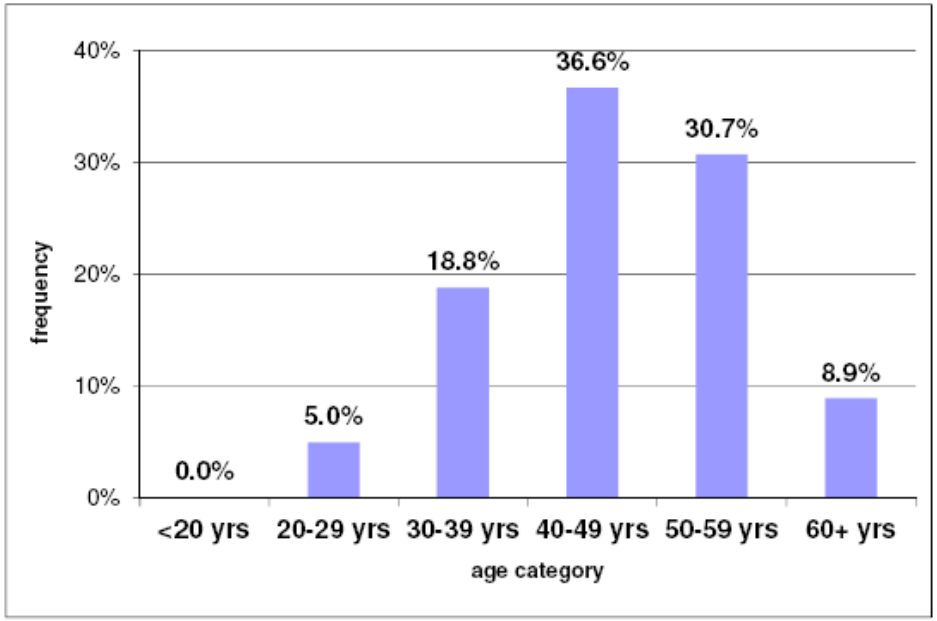
The response rate is calculated by dividing the number of responses received by the number of persons eligible to do the survey. The response rate is important to know because it indicates how confident you can be that the results are representative of the whole group.

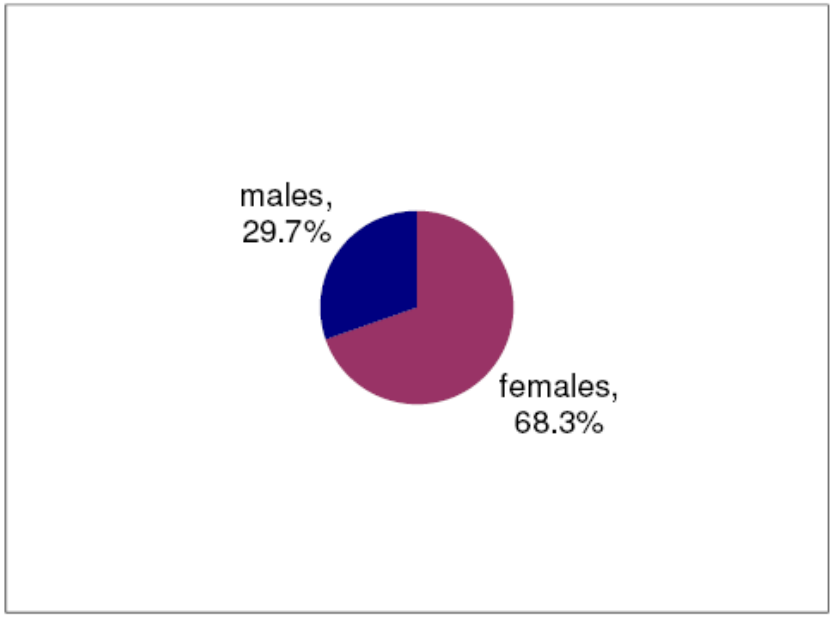
If the **response rate is 80% or more**, then you can be confident that the results in this report are representative of the whole group (the results wouldn't change significantly even if all the eligible people had responded).

A **response rate between 67-80%** is reasonable but not as strong as over 80%; there is a bit of uncertainty about representativeness.

A **response rate between from 50-66%** suggests there may be issues among those who did not respond or else the survey was not administered well (surveys need lots of reminders (i.e. nagging) to ensure all those who are willing to participate, actually do participate). At this level of response, we cannot rule out the possibility that, if those who did not participate had been included, the results would be different.

A **response rate of less than 50%** means that either the administration of the survey was not done properly or that a large proportion of the group being surveyed did not have confidence in the process. Any results of the survey can only be considered as reflecting those who participated not the group as a whole. This can present a serious problem in interpreting the results.



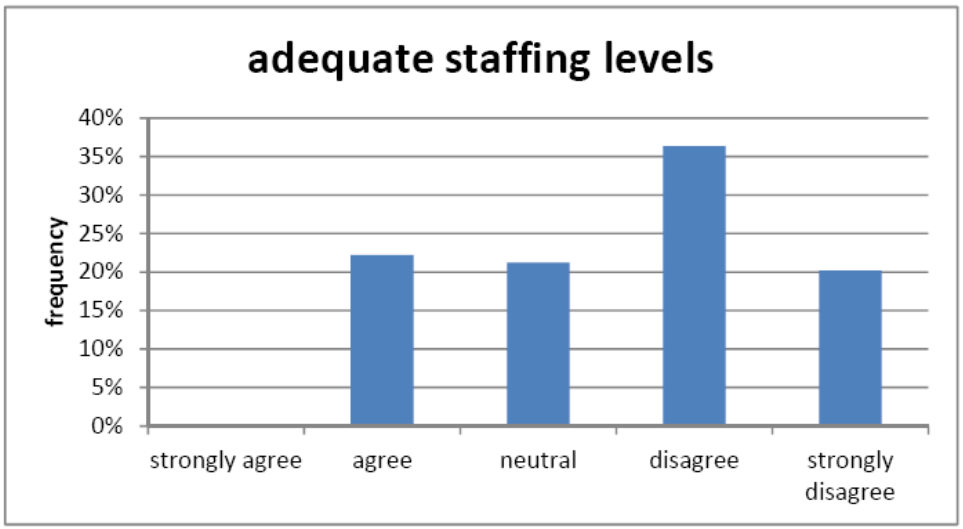


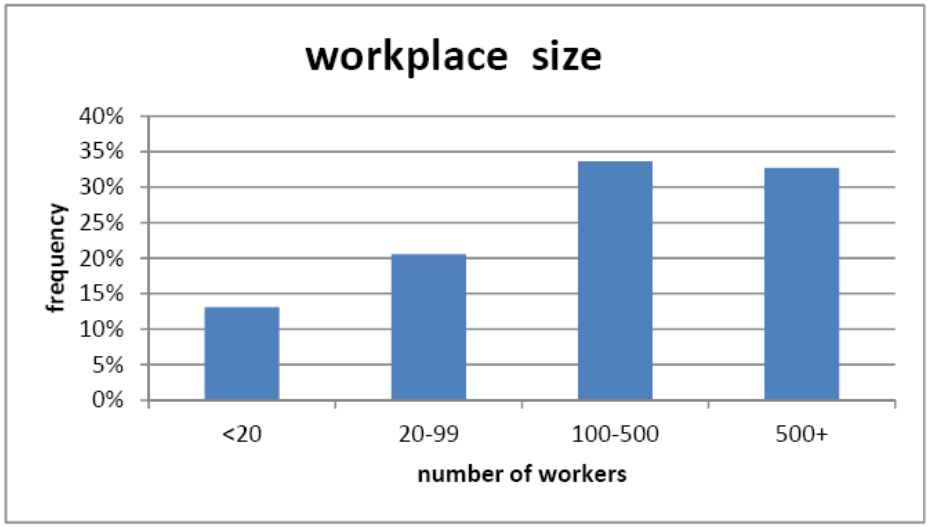
	average	low	high	
scheduled hrs per week	38.0	7.5	72.0	hrs/wk
actual hrs per week	42.9	20.0	112.0	hrs/wk
extra hrs per week	4.7	-6.0	77.0	hrs/wk

full time	88.1%
part-time	4.0%
casual	3.0%
contract	3.0%
seasonal	0.0%
work for ten	0.0%
other	2.0%

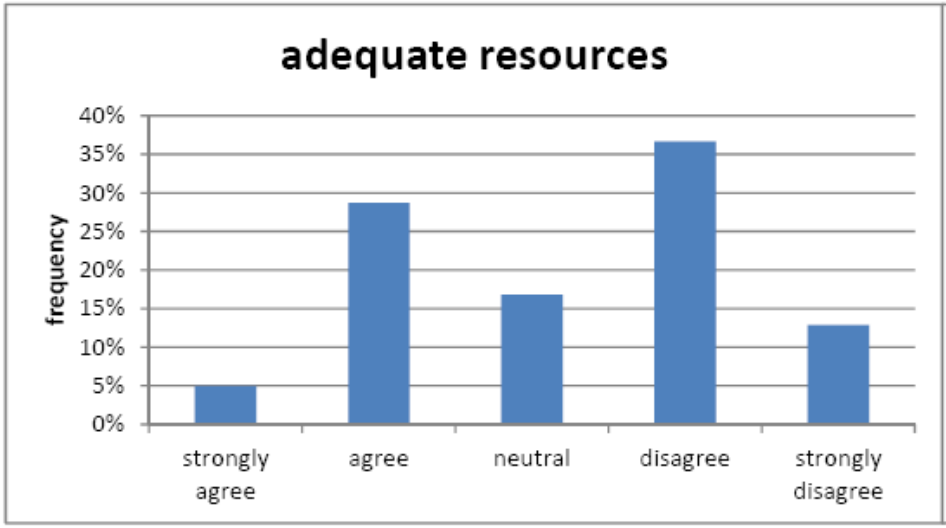
shift type

Regular - daytime schedule or shift	77.8%
Regular - evening shift	0.0%
Regular - night shift	0.0%
Rotating shift (change from days to evenings to nights)	7.1%
Split shift	0.0%
On call	1.0%
Irregular schedule	11.1%
Other	3.0%

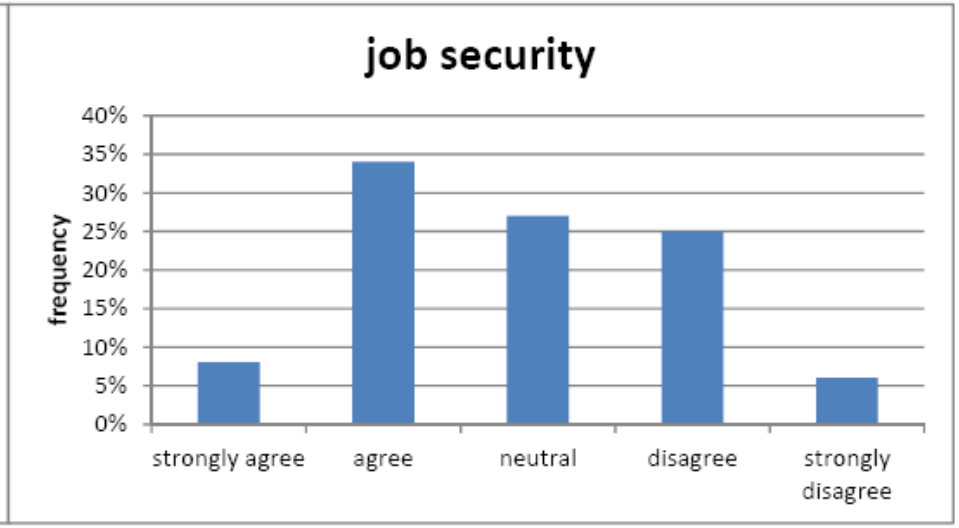




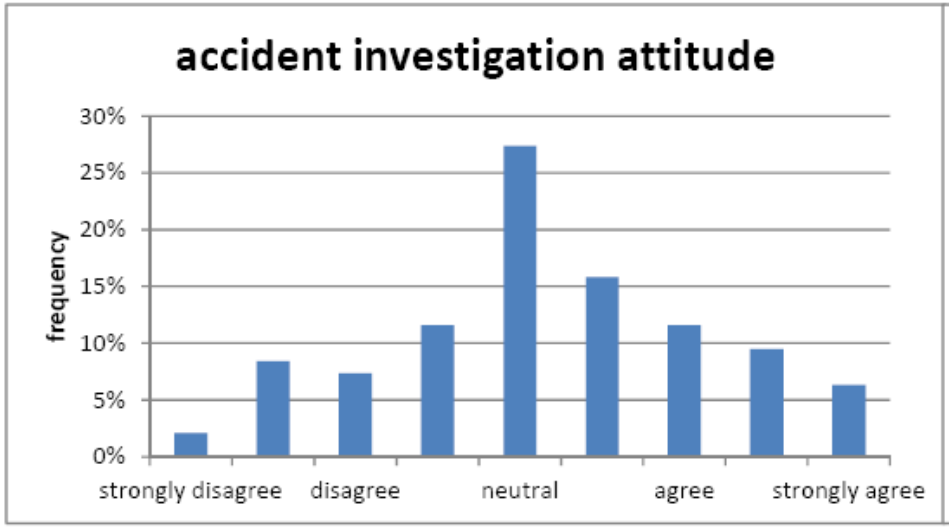
To what extent do you agree that your **workplace has enough resources** to do the job the way it should be done?



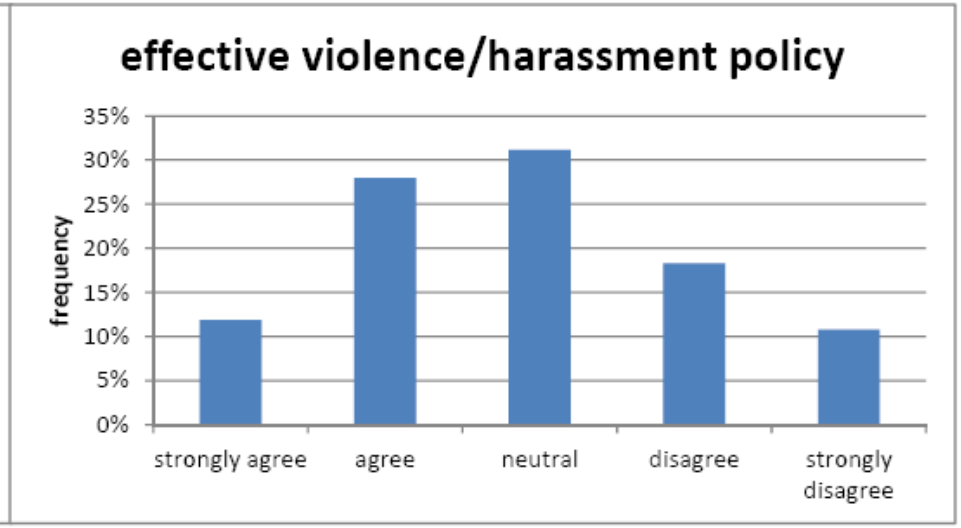
To what extent do you agree that your **job security** is good?



When an accident occurs, management **looks for causes**; and, workers **do not fear sanctions** when reporting near-miss

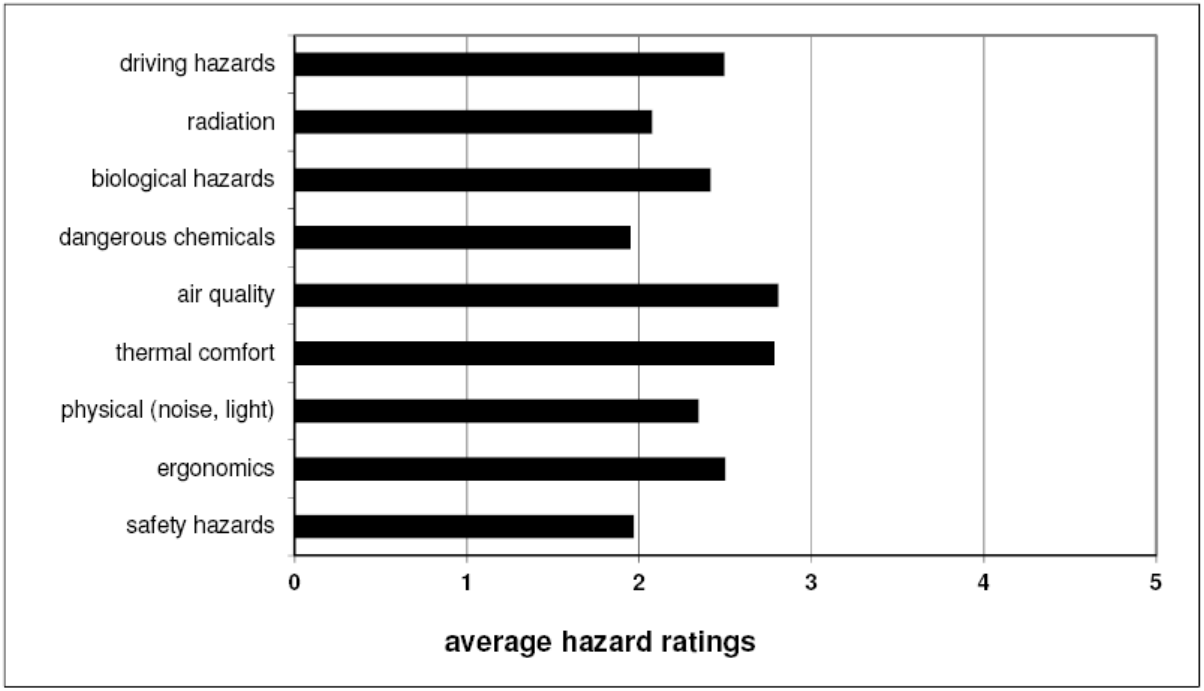


To what extent would you agree that the **violence & harassment policy is effective**?



Ratings of Workplace Hazards

workplace environmental hazards	average ratings
safety hazards	2.0
ergonomics	2.5
physical (noise, light)	2.3
thermal comfort	2.8
air quality	2.8
dangerous chemicals	2.0
biological hazards	2.4
radiation	2.1
driving hazards	2.5



rating scale	
5	exposures interfere with ability to get job done
4	exposures cause annoyance
3	exposures cause concern
2	present but not usually an issue/concern
1	well designed/controlled
0	not applicable

Comparison with Averages Derived from a Danish Reference Population

DEMANDS	your results	Danish Reference data	The comparison data used are based on a survey of a representative sample of 3,517 Danish employees aged 20-59 years. The response rate was 60.4%; and 52% of the respondents were women.
quantitative demands	4.3	3.3	**quantitative demands:** not having enough time to get your work done
work pace	5.5	4.7	**work pace:** having to work at a high pace to get your work done
emotional demands	4.9	3.3	**emotional demands:** doing work that involves emotional issues
WORK ORGANIZATION			
influence	3.7	4.1	**influence:** having influence over the amount of work and how to do it
possibilities for development	5.2	5.2	**possibilities for development**: able to learn new things, take initiative
meaning of work	5.7	6.0	**meaning of work:** feeling your work is important and meaningful
commitment to the workplace	4.8	4.8	**commitment:** feeling your workplace makes a positive contribution
RELATIONSHIP			
predictability	3.5	4.6	**predictability:** being kept well informed, having enough information
rewards (recognition)	4.0	5.2	**recognition:** being appreciated and treated fairly
role clarity	5.0	5.7	**role clarity:** knowing what is expected and having clear objectives
quality of leadership	3.7	4.5	**leadership:** supervisor has planning skills & values your job satisfaction
social support from supervisor	4.9	5.6	**supervisor support:** your supervisor listens and helps
WORK VALUES			
trust of mgmt	4.2	5.4	**trust:** information from mgmt is trustworthy; mgmt trusts workers
justice & respect	3.4	4.8	**justice & respect:** conflicts resolved fairly, work distributed fairly
OFFENSIVE BEHAVIOURS			
undesired sexual attention	17.0%	2.9%	
threats of violence	24.7%	7.8%	
physical violence	19.1%	3.9%	
bullying	55.8%	8.3%	
discrimination	30.6%	no comparison data available	

legend

- = better than the reference population average
- = worse than the reference population average
- = more than 68% worse than reference population
- = more than 95% worse than reference population

JOB ATTRIBUTES	your results	Danish Reference data
job satisfaction	1.8	2.1
work-life imbalance	3.1	2.1
HEALTH		
self-rated health	2.3	2.6
SYMPTOMS		
burnout	8.7	5.5
stress	7.9	4.3
sleep troubles	7.4	3.4
somatic symptoms	5.0	2.8
cognitive symptoms	6.1	2.8

legend

	= better than the reference population average
	= worse than the reference population average
	= more than 68% worse than reference population
	= more than 95% worse than reference population

burnout: wornout, tired, physically & emotionally exhausted
stress: tense, irritable, stressed, difficulty relaxing
sleep troubles: trouble getting to or staying asleep, waking up early
somatic: headache, stomach ache, tension, palpitations
cognitive: hard to concentrate, remember, think clearly, make decisions

SUMMED SCORES	your results	Danish Reference data
demands_sum	14.7	11.3
workorg_sum	19.4	20.1
relationship_sum	21.2	25.6
workvalues_sum	7.6	10.2
offensive behaviour sum	67.1%	
symp_sum	37.3	19.3

Statistical Associations:

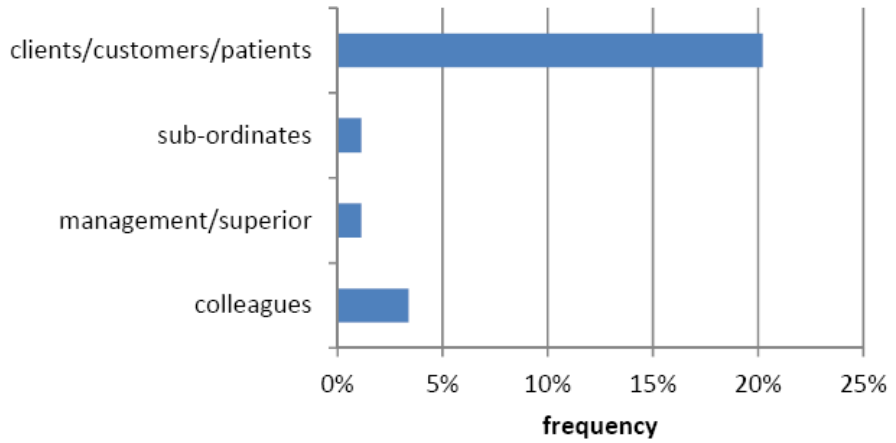
number of respondents: 101

The following tables present the results of correlation calculations. For each psychosocial risk factor (e.g. quantitative demands, bullying, etc.) the correlation with each of the symptoms (e.g. burnout, etc.) was tested. If the correlation was judged to be statistically significant, then an "**X**" is placed in the corresponding cell in the table.

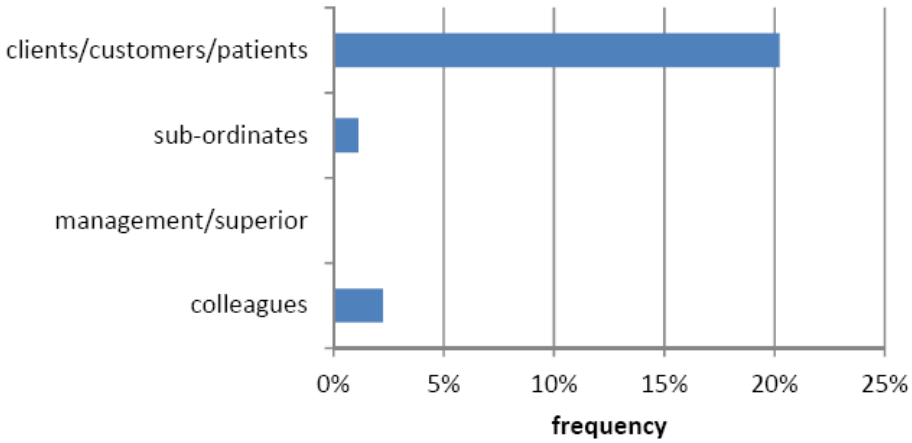
		burnout	stress	sleep troubles	somatic symptoms	cognitive symptoms	symp_sum
offensive behaviours	undesired sexual attention						
	threats of violence						
	physical violence						
	bullying						X
	discrimination				X		

		burnout	stress	sleep troubles	somatic symptoms	cognitive symptoms	symp_sum
demands	quantitative demands						
	work pace						
	emotional demands						
work organization	influence						
	possibilities for development						
	meaning of work						
	commitment to the workplace			X			X
relationships	predictability					X	X
	rewards (recognition)		X		X	X	X
	role clarity						
	quality of leadership						
	social support from supervisor						
work values	trust of mgmt						X
	justice & respect						X

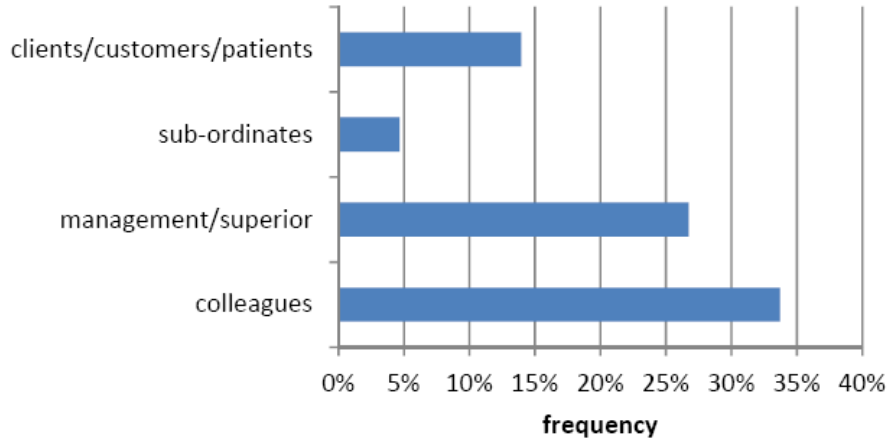
sources of threats of violence



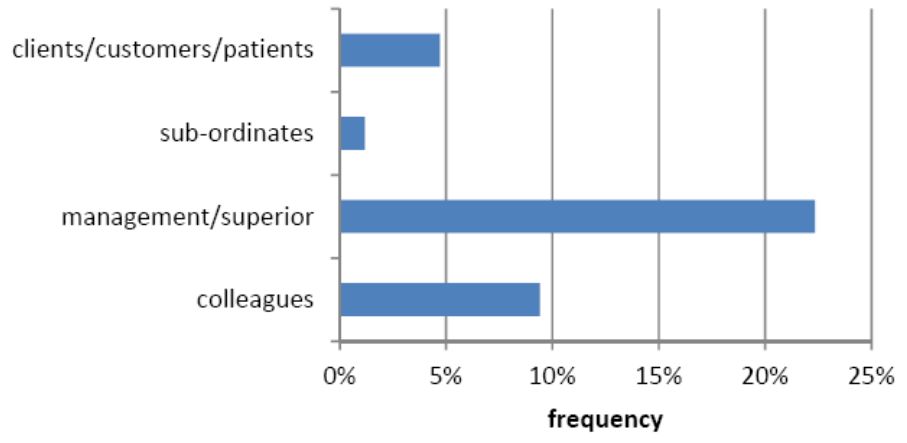
sources of physical violence



sources of bullying



sources of discrimination



offensive behaviours by sources		burnout	stress	sleep troubles	somatic symptoms	cognitive symptoms	symp_sum
undesired sexual attention	colleagues						
	manager/superior						
	sub-ordinates	too few	too few	too few	too few	too few	too few
	clients/customers/patients						
threats of violence	colleagues						
	manager/superior	too few	too few	too few	too few	too few	too few
	sub-ordinates	too few	too few	too few	too few	too few	too few
	clients/customers/patients						
physical violence	colleagues						
	manager/superior	too few	too few	too few	too few	too few	too few
	sub-ordinates	too few	too few	too few	too few	too few	too few
	clients/customers/patients						
bullying	colleagues						
	manager/superior	X			X	X	X
	sub-ordinates						
	clients/customers/patients						
discrimination	colleagues						
	manager/superior		X		X		X
	sub-ordinates	too few	too few	too few	too few	too few	too few
	clients/customers/patients						

	burnout	stress	sleep troubles	somatic symptoms	cognitive symptoms	symp_sum
demands_sum						
workorg_sum						X
relationship_sum		X			X	X
workvalues_sum		X			X	X
offensive behaviour sum						

Note: It is important to realize that associations do not necessarily imply causes. Also, there may be interactions between risk factors that this spreadsheet cannot take into account.

	Top 5 correlations with Burnout	Top 5 correlations with Stress	Top 5 correlations with Sleep Troubles
1.		rewards (recognition)	commitment to the workplace
2.			
3.			
4.			
5.			

	Top 5 correlations with Somatic Symptoms	Top 5 correlations with Cognitive Symptoms	Top 5 correlations with total Symptom Score
1.	rewards (recognition)	predictability	rewards (recognition)
2.		rewards (recognition)	predictability
3.			trust of mgmt
4.			justice & respect
5.			commitment to the workplace

Executive Summary

method

An expanded version of the Copenhagen Psychosocial Questionnaire (COPSOQ) was provided via an online link to the members of e-dome participant responses

Members were asked to answer the survey questions and the Occupational Health Clinics for Ontario Workers (OHCOW) managed the data collection and the analysis - this report summarizes this analysis

response rate

first response date: **October 3, 2012** last response date: **October 5, 2012**

number of respondents: 101 **number available to fill out survey:** 250 **response rate:** 40.4%

A response rate of less than 50% means that either the administration of the survey was not done properly or that a large proportion of the group being surveyed did not have confidence in the process. Any results of the survey can only be considered as reflecting those who participated not the group as a whole. This can present a serious problem in interpreting the results.

safety concern issues

The following is a list of the top 3 hazards based on the average rating provided by the respondents:

1. air quality
2. thermal comfort
3. ergonomics

1. bullying
2. undesired sexual attention
3. physical violence

frequencies

the following risk factors were most different (worse) than the Danish reference population data

1. emotional demands
2. justice & respect
3. predictability
4. quantitative demands
5. rewards (recognition)

symptoms:

1. sleep troubles
2. cognitive symptoms
3. stress

sample size

101 responses

With more than 50 responses we can be confident that each association is statistically significant, although even in these circumstances one in 20 associations could be due to chance.

associations

The following is a list of the top 3 risk factors most associated with the combined symptoms:

1. rewards (recognition)
2. predictability
3. trust of mgmt

These are the issues that should be focussed on for prevention purposes!

Please Note: The survey results should be seen as a tool for dialogue and development – not as a "report card".

Evaluation of a Survey Instrument to Assess Workplace Psychosocial Hazards

John Oudyk MSc CIH ROH
Occupational Health Clinics for Ontario Workers,
Hamilton, Ontario, Canada

Abstract (X2012, Edinburgh, Jul/12):

- A group of unions in Ontario, Canada expressed interest in using the Copenhagen Psychosocial Questionnaire (COPSOQ) to measure psychosocial hazards in the workplace.
- Factor analysis was used to compare the derived factor structure with the original dimensions.
- Multiple variable linear regression techniques were used to model the symptom scores
- The risk factors most frequently associated with symptom scores were: working at a high pace, dealing with emotionally disturbing situations, and bullying.

Background:

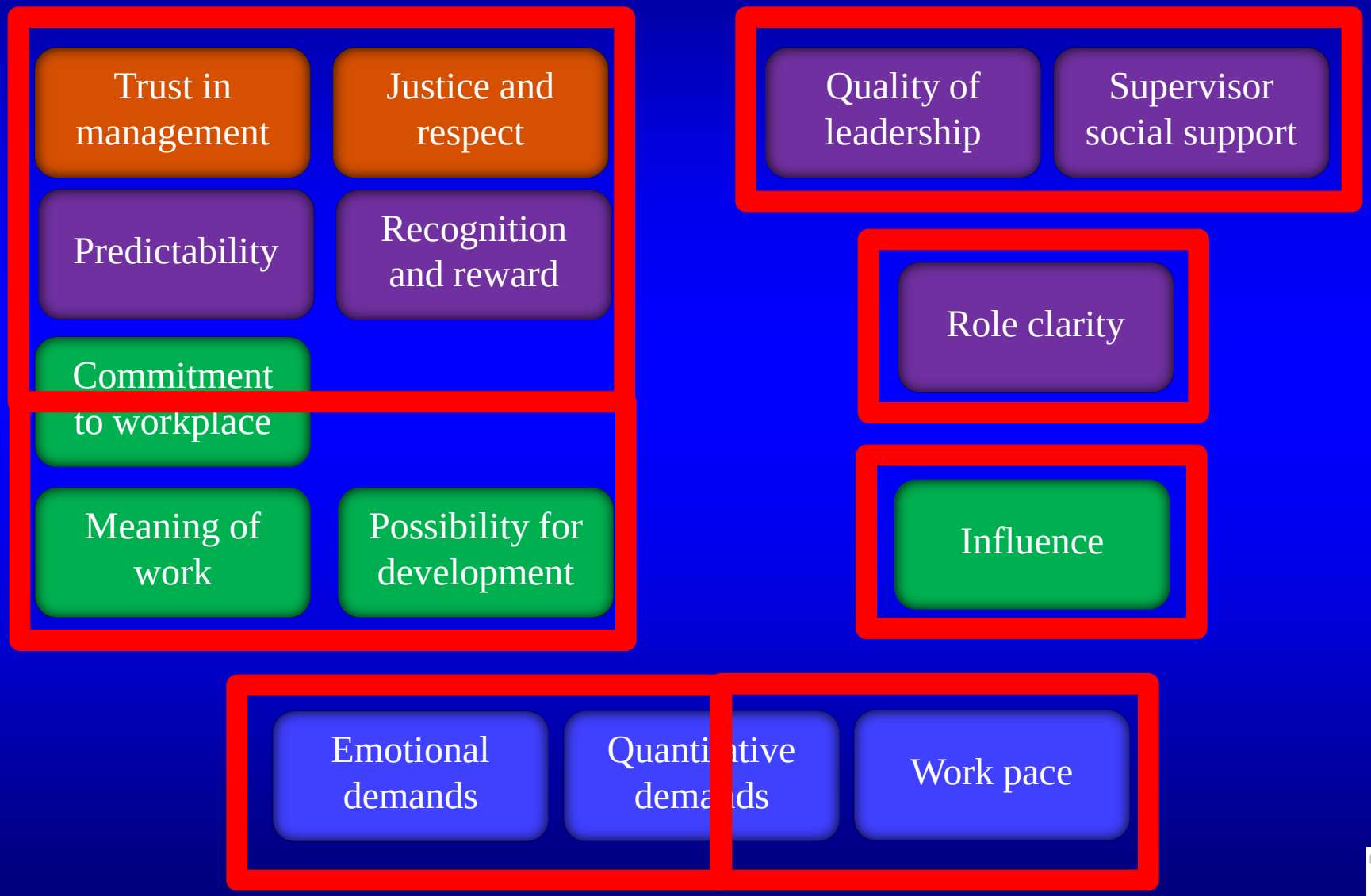
During stakeholder consultation meetings, numerous unions indicated workplace stress was a common issue reps were dealing with in their day-to-day work. A working group was established to explore different tools and strategies to address workplace psychosocial hazard (called the Mental Injuries Tool Group or MIT). The Copenhagen Psychosocial Questionnaire (COPSOQ) was selected as a tool to use to measure workplace stress. Three unions agreed to pilot the survey at their union conferences:

USW HS&E Conference, Vancouver, April 2011 (210 attendees) 159 responses (76%)

OPSEU BPS Conference, Toronto, June 2011 (180 attendees) 153 respondents (85%)

CAW Women's Conference, Port Elgin, August 2011 (160 attendees) 160 respondents (100%)

Factor analysis:



Comparison of exposure categories

symptoms	model coefficients of determination ($r^2_{(adj)}$)			
	individual questions	COPSOQ dimensions	COPSOQ dimensional categories	factor analysis factors
burnout	27.8%	27.7%	27.3%	24.9%
stress	30.8%	29.7%	27.8%	27.3%
sleep troubles	12.9%	13.7%	11.1%	8.9%
somatic symptoms	15.5%	13.8%	11.2%	10.1%
cognitive symptoms	17.1%	16.1%	15.3%	13.6%
all symptoms (summed)	29.9%	28.9%	26.0%	25.3%

Conclusions:

1. Worker representatives found the questionnaire easy to fill out, not too long and, thinking about the questions was found to be educational
2. The factor structure was reasonably similar to the designed structure – the groupings of dimensions however did not correspond well to the original groupings
3. Surprisingly the differences in symptom experience between sectors and unions was minimal (low ICC) although the risk factors reported between sectors was quite varied
4. Regression analysis indicated risk factors consistent with theory and literature
5. The risk factors most frequently associated with symptom scores were: working at a high pace, dealing with emotionally disturbing situations, and bullying.
6. This pilot administration of the COPSOQ survey at union conferences was deemed to be a success and will now be used by unions to measure workplace stress in workplaces

outline

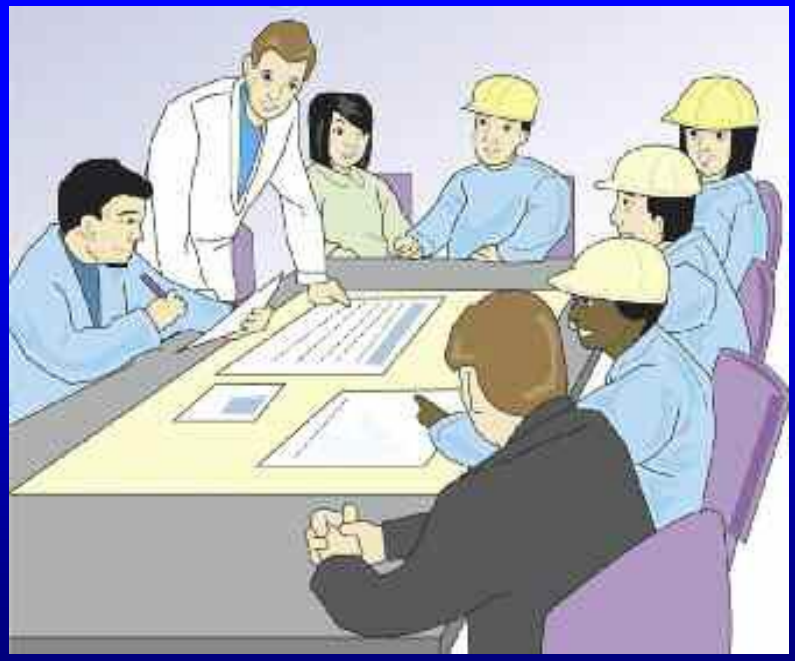
1. History
2. Perspectives
3. Survey tool
4. Survey administration
5. Survey analysis
6. **Addressing risk factors**

Once you've identified issues, what next? …

- Pick the top 3 issues you feel capable of dealing with (start with low hanging fruit)
- Look for resources (plenty online) and don't be afraid to ask for help
- Best not to work alone but with a representative steering committee

ILO Stress Prevention

- checkpoint format (50 topics)
- lists specific hazards
- identifies prevention strategies



http://www.ilo.org/global/publications/books/forthcoming-publications/WCMS_168053/lang--en/index.htm

ILO Checkpoint example

CHECKPOINT 6

- Adjust the total **workload** taking into account the number and capacity of workers.

HOW

1. Assess individual and team workloads through observation and discussion with workers to determine whether change is necessary and feasible.
2. Reduce unnecessary tasks such as control operations, writing reports, filling in forms or registration work.
3. …

PSYCHOSOCIAL RISK ASSESSMENTS

Campaign on psychosocial risks at work in 2012

A joint inspection campaign on psychosocial risks will take place in the EU-Member States during 2012. The campaign documents are presented on this website in all EU languages.

Background

The Committee of Senior Labour Inspectors (SLIC) agreed in May 2010 to develop a campaign on psychosocial risks for delivery in 2012. Sweden was to lead the project of planning the campaign with assistance of a Working Group. The aim of the project is "Development of an inspection toolkit for targeted interventions on occupational health and safety

Self-evaluation tool for employers

PSYCHOSOCIAL RISK ASSESSMENTS

The idea of this interactive Self-evaluation tool is to help the employers to investigate and assess the psychosocial risks at work.

To the self-evalution in:
- English
- Swedish

Country Reports

PSYCHOSOCIAL RISK ASSESSMENTS

- Country report I (Eng)
- Country report II (Eng)

- Instructions (Eng)

Hospital Guidance tool

- Psychological work environment risk factors:
  - Heavy **workload** and time pressure.
  - High **emotional demands** when working with patients and relatives.
  - **Violence**, threats and traumatic incidents.
  - **Bullying** and **sexual harassment**.
  - **Relationships** can often be extremely problematic in this sector.

Hospital Guidance tool

- Heavy **workload** and time pressure prevention activities:
  - Continuous adjustments to staffing vis-à-vis the number of patients/demands set
  - Appropriate allocation of assignments in relation to the nature of the task and level of difficulty
  - Temporary cover/temporary staff
  - Prioritization of tasks generally and with unforeseen shortage of staff

Hospital Guidance tool

- High **emotional demands** prevention activities:
  - Feedback, coaching and acknowledgement from colleagues and managers
  - Specific objectives for work (when is the work result good enough/success criteria?)
  - Consensus and practice with regard to care and treatment
  - Overlap/transfer for shift changes
  - Possibility of withdrawing (a place for privacy)

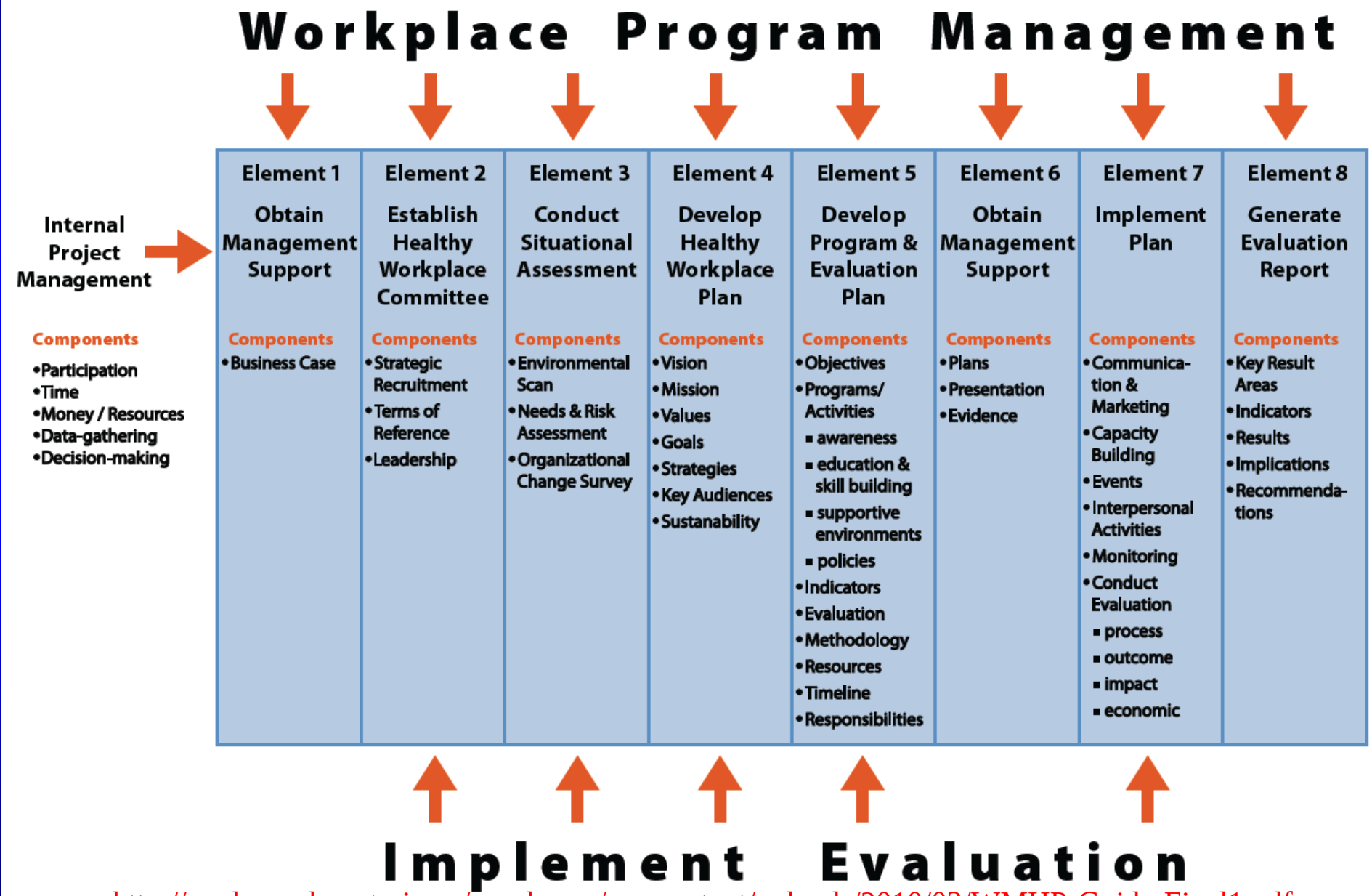
Works Well - CMHA

- New booklet/interactive website: Workplace Mental Health Promotion: A How-To Guide (2010)

  http://wmhp.cmhaontario.ca/

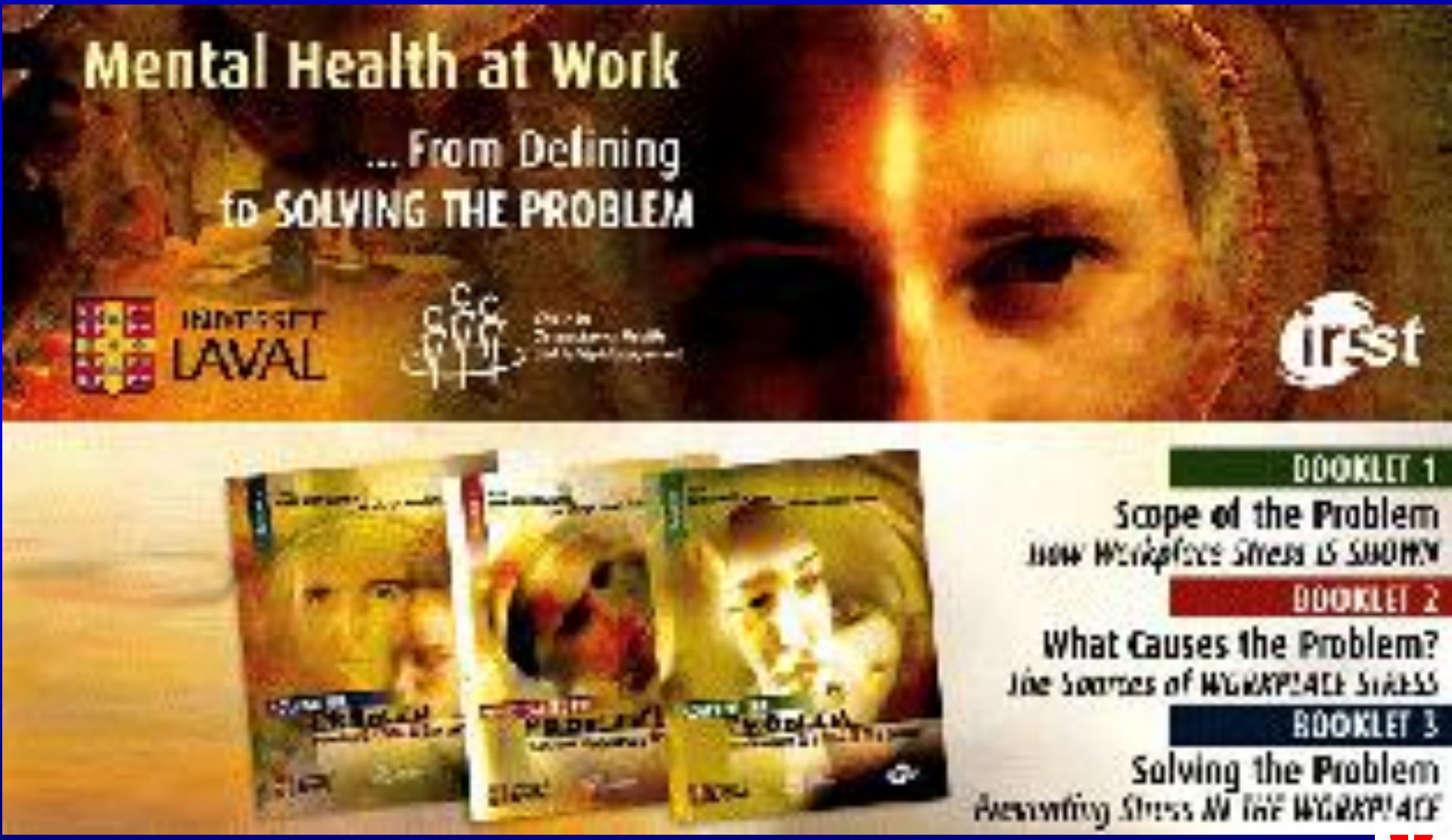
- two sections:
  - core concepts & issues
  - comprehensive workplace health promotion

CMHA plan:



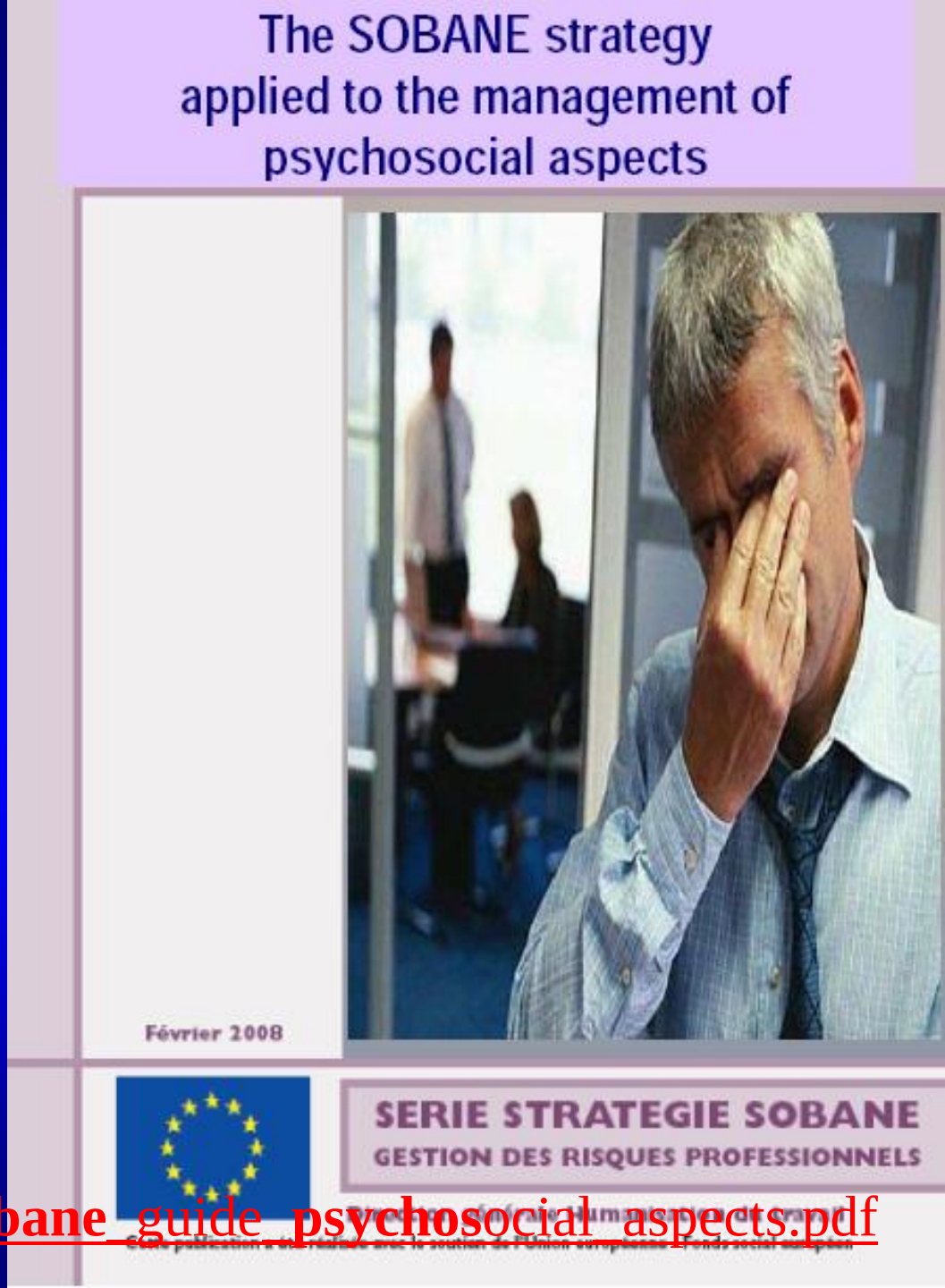
http://wmhp.cmhaontario.ca/wordpress/wp-content/uploads/2010/03/WMHP-Guide-Final1.pdf

Laval Business group (with IRSST & IAPA)



http://www.cgsst.com/eng/publications-sante-psychologique-travail/trousse-la-sante-psychologique-au-travail.asp

English version of SOBANE psychosocial screening & observation tools

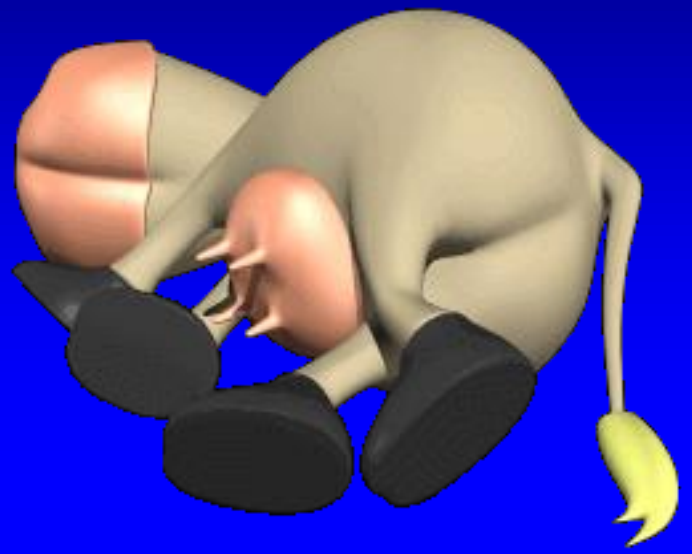


www.deparisnet.be/PSY/Eng/**Sobane**_guide_**psychosocial**_aspects.pdf

Union supports:

- Training union H&S depts to:
  - set up online survey accounts to collect data
  - Use the spreadsheet to analyze data and write covering memos
  - Identify resources to help activists address issues identified
- OHCOW provides backup for technical issues and advice on prevention
- Considering a one day training session for workplace activists on how to use the tool and apply results

The End



Thank-you, …

… any questions, comments?