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Development of a new questionnaire to assess mental workload in the return to work process.

1

2 **INTRODUCTION**

Origins of this project





Challenges as a clinician
 Progression of work activities¹

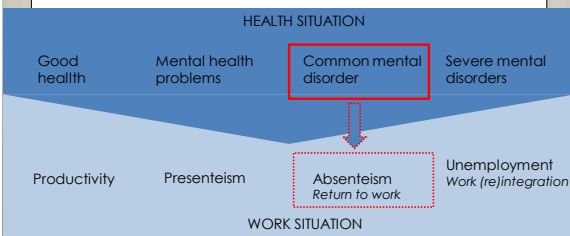
Desire to assess mental workload
 Related to long term sick leave²
 Obstacle to return to work³
 Successful return to work if progressive workload³

Need for a better tool
 Limits of actual tools⁵

1 Barabot et Coulombe (2008); 2 Durand et al. (2010); 3 van Oostrom et al. (2009); 4 St-Arnaud et al. (2006); 5 Tremblay-Boudreault et al. (2011)

3 **INTRODUCTION**

Common mental disorder¹



1 Free translation adapted from Corbière et Durand (2011)

4 **INTRODUCTION**

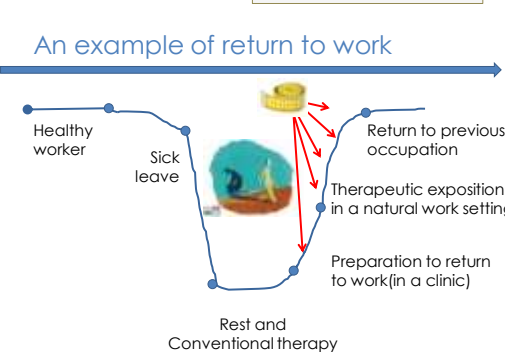
Work rehabilitation in Québec (Canada)




1 Durand et al. (1998); 2 Durand et al. (2011);

5 **INTRODUCTION**

An example of return to work



6 **OBJECTIVE**



How to measure mental workload in the return to work process?

Proposition of an operational definition.

METHODOLOGY

Steps of tool development¹

Items writing

- Based on the concept analysis² results

Items revision by experts

- Two-round Delphi consultation (relevance and clarity)
- 9-level Likert scale³

1 Crocker et Algin (1986); 2 Walker et Avant (2005) 3 Brook (1994)

METHODOLOGY

Cotation by experts¹

Legend: 1= not at all relevant 9 = totally relevant

- Based on median scores (relevance or clarity level)

Item 1.2 :

1	2	3	4	5	6	7	8	9
Item not relevant			Uncertain item			Item relevant		
Item REJECTED			Item TO BE SCORED AGAIN			Item CONSERVED		

1 Brook (1994)

METHODOLOGY

Steps of tool development¹

Items writing

- Based on the concept analysis² results

Items revision by experts

- Two-round Delphi consultation (relevance and clarity)
- 9-level Likert scale³

Qualitative pretesting

- Semi-structured interviews
- Transcription and synthesis of verbatims
- 5 workers and 5 clinicians

1 Crocker et Algin (1986); 2 Walker et Avant (2005) 3 Brook (1994)

RESULTS

RESULTS

Step 1: Writing the items

EFFORT
(15 items)

COGNITIVE and EMOTIVE EFFECTS
(29 items)

OTHER ITEMS
(9 items)

QUESTION :	RESPONSE SCALE			
	Almost never	Sometimes	Often	Almost always
3.4 Had the feeling that your work was not a challenge for you?				
3.2F Felt that you controlled your work tasks?				
3.13 Felt tense or under pressure at work?				

Free translation

1 Coufu et al. (2011); 2 Illfeld (1976); 3 Heutte et Fenouillet (2011)

RESULTS

Step 2: Revising the items

- Experts panel(N=16):

Ergonomist (n=3)

Psychologists (n=2)

Occup. therapists (n=3)

Neuropsychologists (n=3)



Researchers (n=3)

Psychiatrists (n=2)

RESULTS

Step 2: Revising the items


- Experts characteristics

Sex:  75%  25%

Age: Median (25° centile, 75° centile)
39 years old [36, 46]

Expérience (work rehabilitation / common mental disorders):
Median (25° centile, 75° centile)
7 years old [3, 12]

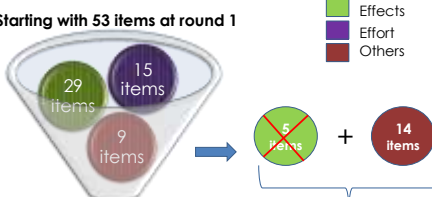
Types of work practice :
Public: 25%
Private: 63%
Both: 12%



RESULTS

Step 2: Revising the items

Starting with 53 items at round 1



Ending with 62 items after round 2

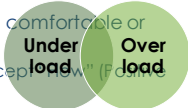
Relevance: median ≥ 8
Clarity: median $\geq 7^*$

* Except 1 item (median = 6)

DISCUSSION

Measurement of MWL

- First attempt to discriminate between underload, comfortable load and overload
- There is overlapping between the sub-concepts
- Little is known about comfortable or positive MWL
 - Related to the concept of "MWL" (from psychology)¹




Next step: empirical validation studies to confirm the structure of the MWL in the perspective of "work consequence"

¹ Csikszentmihalyi (2006)


CONCLUSION

Take-home messages

- A new questionnaire of MWL was developed to meet the needs of the work rehabilitation practitioners. It is now **ready for empirical validation studies**.
- Further research is needed to fully discriminate between underload, comfortable load and overload, including a **better understanding of "positive" or "comfortable" load**.



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