



# Developing Leading Indicators of Organizational Performance in Ontario

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## This is a Collaborative Project Between ....

- The WSIB
- The MOL
- Health & Safety Associations
- IWH



## Quickly ...

- Research Question
  - Can we develop a tool to predict firm injury experience, based on an assessment by workplace parties of workplace practices?
- What Do We Have?
  - 808 questionnaires completed and using firm number, IWH linked WSIB data to survey data for 642 firms due to 166 firms with duplicate firm numbers



## Our Health and Safety Association Partners Asked a Workplace Party to ...

1. Tell us the amount of time their organization engaged in 8 practices
  
2. They could answer using 5 categories:
  - a) 80-100%
  - b) 60-80%
  - c) 40-60%
  - d) 20-40%
  - e) 0-20%



## Our Eight Pilots Items

1. Formal safety audits at regular intervals are a normal part of our business.
2. Everyone at this organization values ongoing safety improvement in this organization.
3. This organization considers safety at least as important as production and quality in the way work is done.
4. Workers and supervisors have the information they need to work safely.
5. Employees are always involved in decisions affecting their health and safety.
6. Those in charge of safety have the authority to make the changes they have identified as necessary.
7. Those who act safely receive positive recognition.
8. Everyone has the tools and/or equipment they need to complete their work safely.



## Correlations Between the Eight Items

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8
Item 1	1.00	0.32	0.28	0.29	0.31	0.22	0.29	0.20
Item 2		1.00	0.57	0.44	0.45	0.42	0.35	0.35
Item 3			1.00	0.41	0.48	0.43	0.31	0.37
Item 4				1.00	0.42	0.26	0.30	0.49
Item 5					1.00	0.44	0.46	0.42
Item 6						1.00	0.36	0.39
Item 7							1.00	0.29
Item 8								1.00



## Cronbach's Coefficient Alpha = 0.82 Total of Eight Items

<b>Deleted Item</b>	<b>Correlation with Total Scale Score</b>	<b>Cronbach's Alpha with Item Removed</b>
Item 1	0.386	0.82
Item 2	0.617	0.79
Item 3	0.599	0.79
Item 4	0.540	0.80
Item 5	0.631	0.79
Item 6	0.529	0.80
Item 7	0.490	0.81
Item 8	0.528	0.80



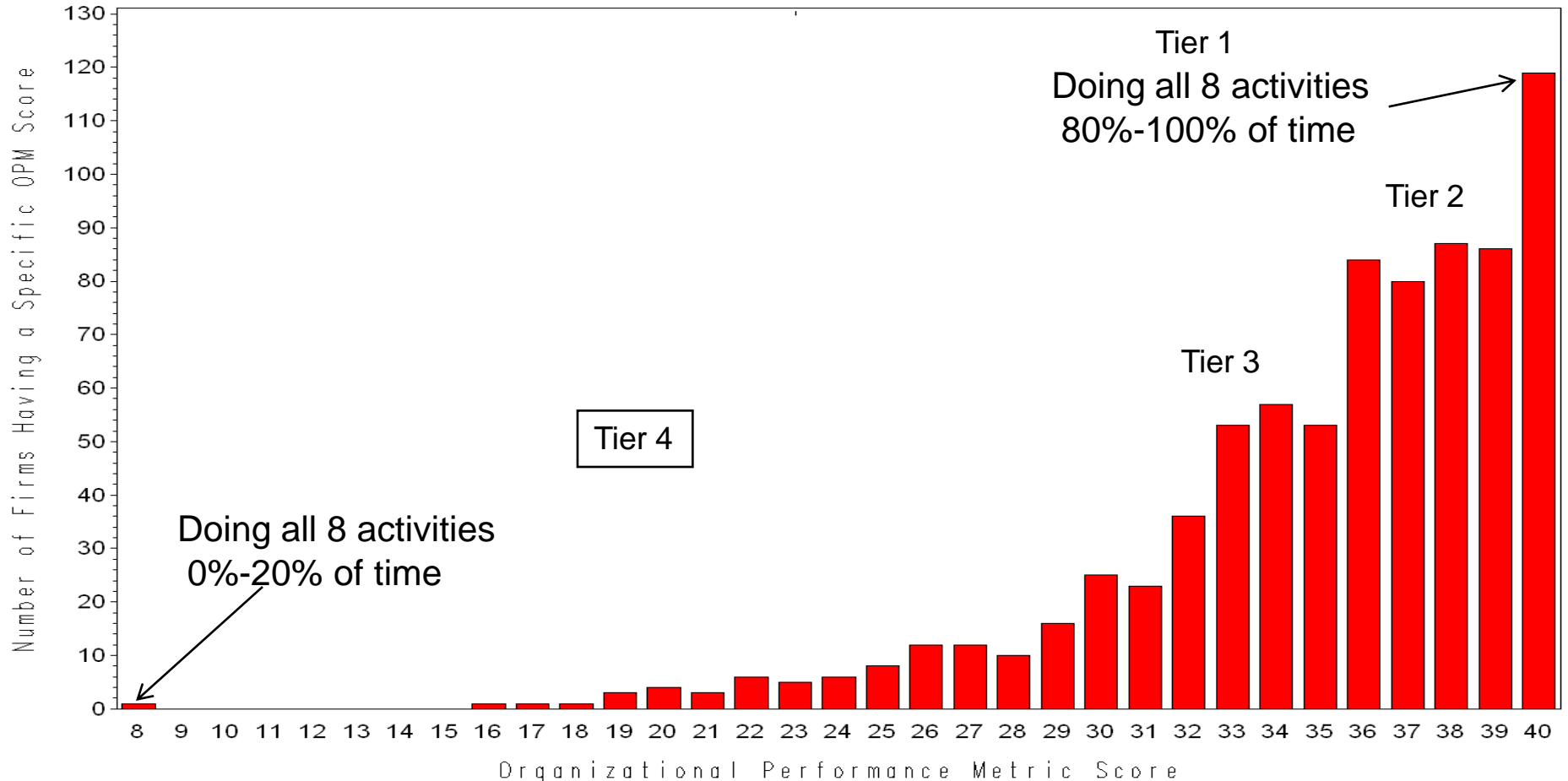
## Factor Loading for the Eight Items

	<b>OPM Factor</b>	<b>Junk Factor 1</b>	<b>Junk Factor 2</b>	<b>Junk Factor 3</b>
Item 1	0.43	0.05	-0.02	0.18
Item 2	0.69	0.06	-0.19	0.01
Item 3	0.67	0.04	-0.19	-0.06
Item 4	0.62	-0.26	-0.02	0.07
Item 5	0.69	0.06	0.12	0.02
Item 6	0.59	0.14	0.06	-0.15
Item 7	0.54	0.13	0.16	0.08
Item 8	0.60	-0.22	0.10	0.09



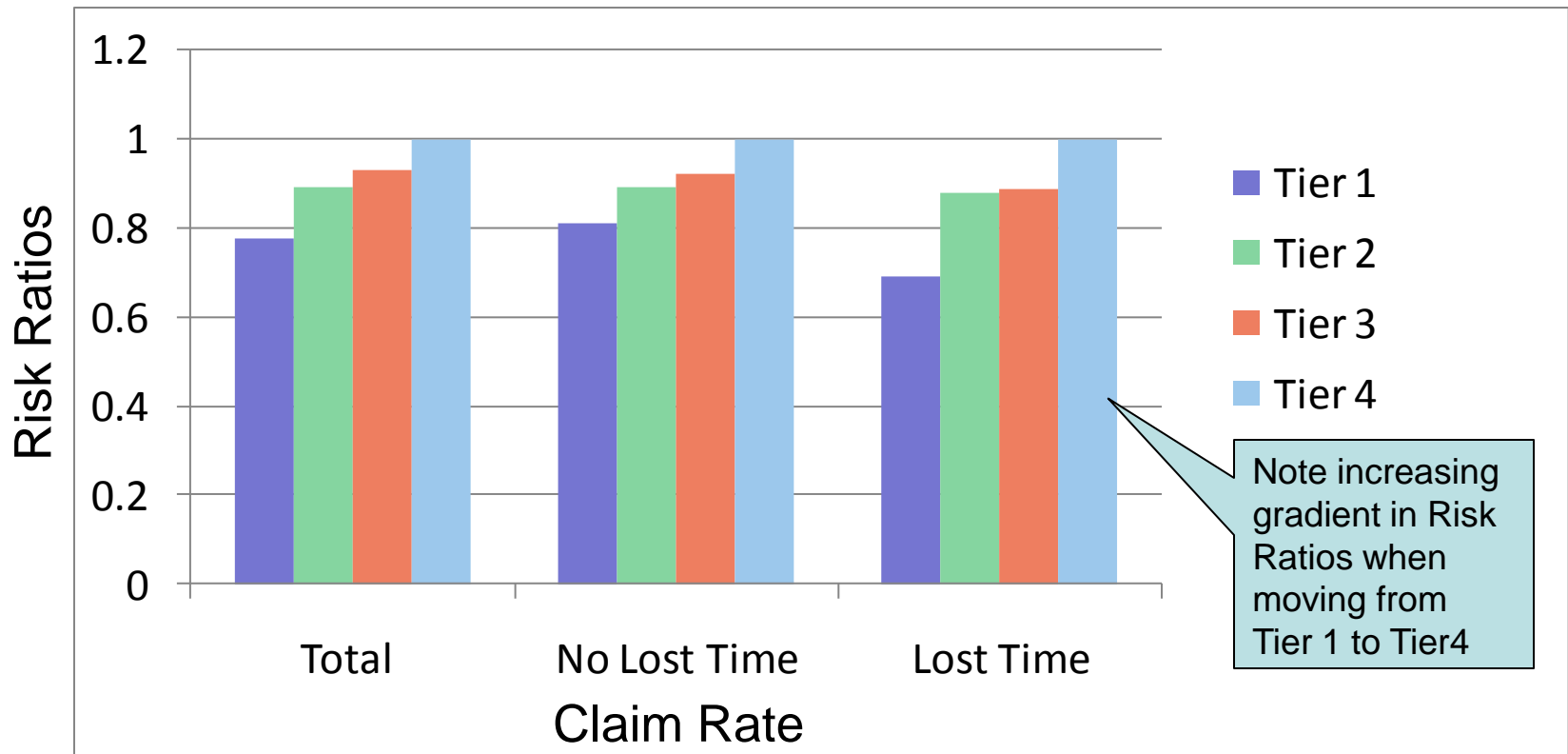


## The Metric Captures Very Good to Very Poor Performers Note Not all Informants Say Good Things About Their Own Firm





## Risk Ratios for Claim Rates by OPM Tier Levels with Tier 4 as Reference





## To Summarize

- There is sound preliminary evidence the 8 item organizational performance metric (OPM) is reliable and has reasonable concurrent validity
- Future work must consider the predictive validity of the OPM – especially whether the OPM predicts future injury experience
- The OPM is relevant to all firms in all sectors and it does not matter at what level the informant works in an organization
- Future work needs to continue to explore the differences in how the information is collected and why asking questions in-person one-on-one, over the phone and in meetings yield different answers



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