



Lakehead
UNIVERSITY



EPID
at work

Northwestern Ontario Workplace & Worker Health Study

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Land Acknowledgement

- Lakehead University's EPID@Work Research Institute respectively acknowledges its location on the traditional lands of Indigenous Peoples.
- EPID is located on the traditional lands of the Anishinaabeg Fort William First Nation, Signatory to the Robinson Superior Treaty of 1850.
- EPID acknowledges the history that many nations hold in the areas around our office. We are committed to eliminating systemic discrimination and to building and maintaining relationships with First Nations, Métis, and Inuit Peoples based on the principles of mutual trust, respect, reciprocity, and collaboration in the spirit of reconciliation.

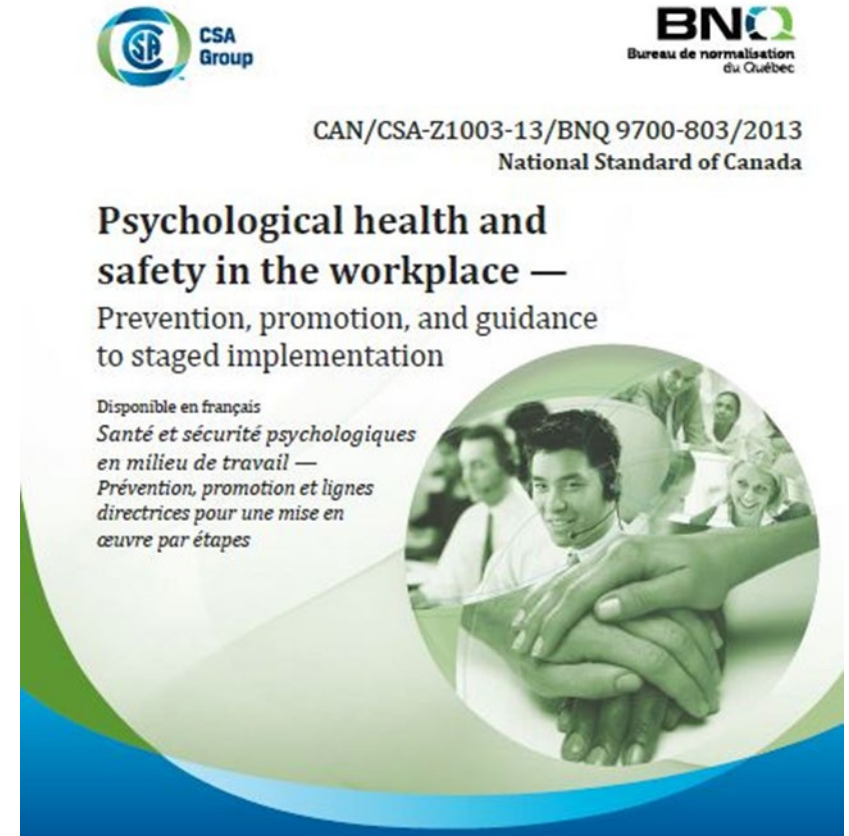
Mental health burden in NWO

- Workplace mental health in NWO
 - Anecdotally, OHS issue for some time
 - 62% of employers rate employee mental health as Fair or Poor
 - What is the annual prevalence and incidence in NWO?



The Standard

- Canadian National Standard
 - 34% of employers are not at all familiar with it
 - Only 8% have a plan developed, rest don't have a plan in place
 - Standard, Implementation guide, online toolkit to support implementation



13 Factors in the Standard



Recommended measurement tool

Quality & Quantity (2022) 56:3111–3133
<https://doi.org/10.1007/s11135-021-01269-6>



Assessing the psychometric properties of the Guarding Minds @ Work questionnaire recommended in the Canadian Standard for Psychological Health and Safety in the Workplace

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Abstract

Objectives This study examines the item and dimension distribution and factorial reliability and validity of the GM@W questionnaire for assessing the 13 dimensions of the work environment outlined in The Canadian National Standard for Psychological Health and Safety in the Workplace (The Standard). **Methods** An internet survey of 1,006 Ontario workers was conducted between February 10th and March 5th, 2020. Respondents had to be employed in a workplace with five or more employees. The survey included the 65 items from the GM@W questionnaire, and questions to assess sociodemographic characteristics and employment arrangements. Analyses examined the distribution of scores for items and for overall dimensions. A confirmatory factor analysis (CFA) examined the relationship between the 13 proposed dimensions and each of the 65 questions, using only respondents with complete information (N=900). **Results** Low levels of missing responses were observed, although 14 of the 65 items had potential ceiling effects. CFA analyses demonstrated poor fit for the conceptual model linking the 13 dimensions of The Standard to the 65-items. High correlations between dimensions were also noted. The GM@W questionnaire displayed poor discriminant in measuring the specific dimensions proposed in The Standard. **Conclusions** Our results suggest the GM@W survey is unable to isolate the proposed dimensions of the psychosocial work environment as outlined in The Standard. These limitations are important, as workplaces using the GM@W survey will not be able to identify dimensions of the work environment which require attention or assess changes in particular dimensions over time.

- Guarding Minds @ Work questionnaire
 - To assess 13 factors in the Standard
- Smith & Oudyk
 - 14 items with ceiling effects
 - Poor CFA model fit for the conceptual model linking the 13 factors to the 65 items
 - High correlations between dimensions
 - Poor discrimination in measuring the factors
 - Using GM@Work will not be able to identify dimensions of the work environment that require attention

Objectives of NOWWHS

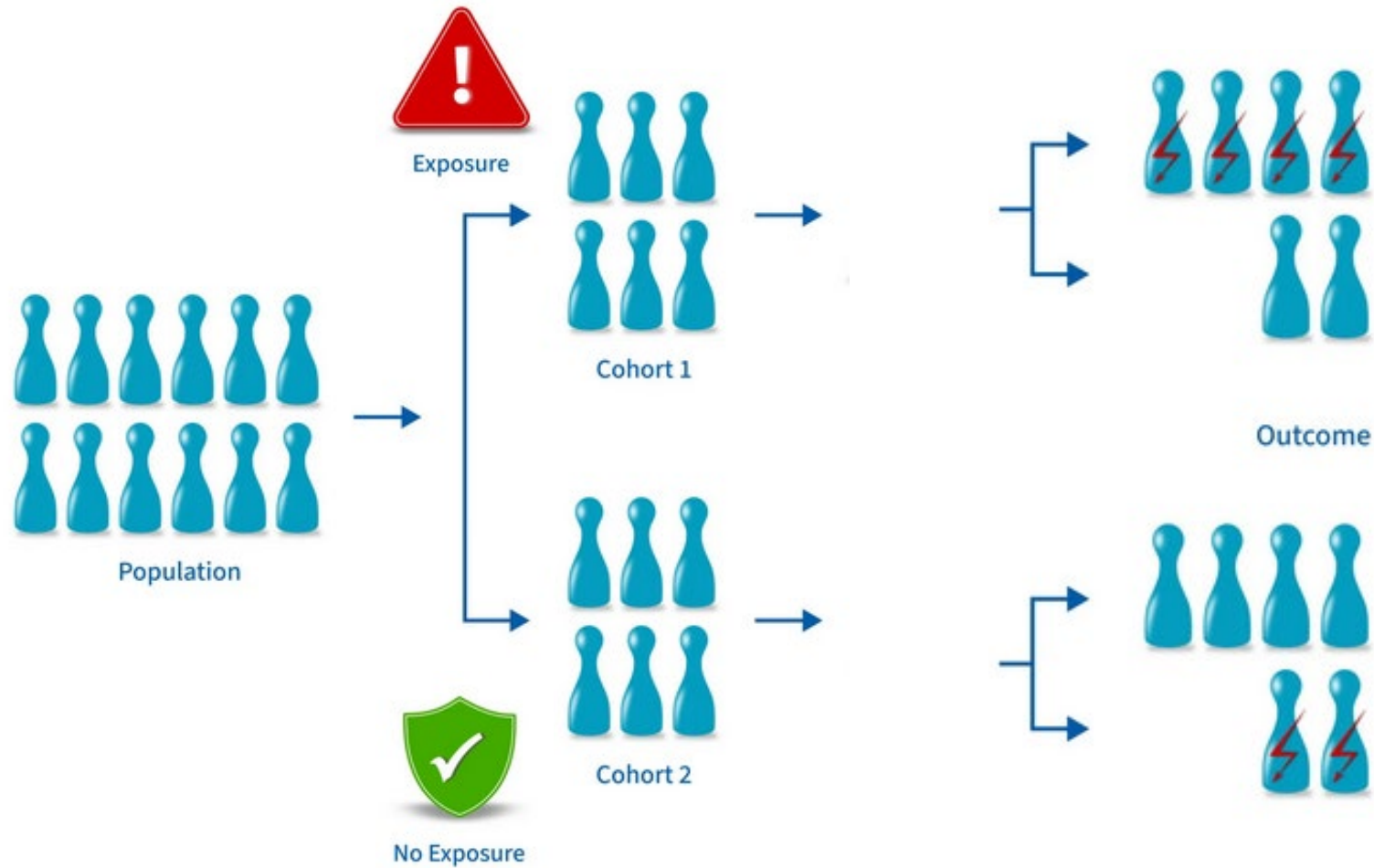
1. Determine the prevalence and incidence of mental wellbeing and mental disorders in Northwestern Ontario workplaces
2. Determine the workplace and worker risk factors associated with mental wellbeing and mental disorders in Northwestern Ontario workplaces
 - This includes validated measures for the 13 factors in the Standard
3. Develop a cohort for surveillance, prognostic factor identification, and intervention assessment in Northwestern Ontario workplaces (**Community Research Tool**)

Northwestern Ontario

- When we say NWO, we are referencing from Manitouwadge (E) to the Manitoba border (W), and from the US border (S) to Hudson Bay (N)



Cohort Study



Design



Eligibility

- **Workplaces:** any workplace located in Northwestern Ontario with at least 1 employee
- **Workers:** working in Northwestern Ontario in the past year; aged 14 or older; workers who wanted to work in the past year but were unable due to a workplace injury or health event
- Self-employed workers are eligible to participate in the worker survey

Recruitment

- Open invitation for workers and workplaces at www.workinghealth.ca



The screenshot shows a webpage titled "TAKE THE SURVEY" with a background image of diverse people in a meeting. The page is divided into two main sections: "WORKERS" and "EMPLOYERS".

WORKERS
Old, new, injured, part-time, full-time, and everything in between - we are looking to hear from all workers in Northwestern Ontario. If your workplace is not participating, individual workers can still elect to take the survey. Click the button below to start the survey; you will be brought to a consent form before you begin.

EMPLOYERS
Whether you are a small business owner or the CEO of a large corporation, we want to help you better understand the mental health of your organization. If you are a leader within your workplace, sign up today and the EPID@Work team will contact you with next steps to deliver the NOWWHS to your workers.

Buttons for workers: "TAKE THE SURVEY NOW" and "SIGN UP FOR LATER".
Button for employers: "SIGN UP YOUR WORKPLACE".

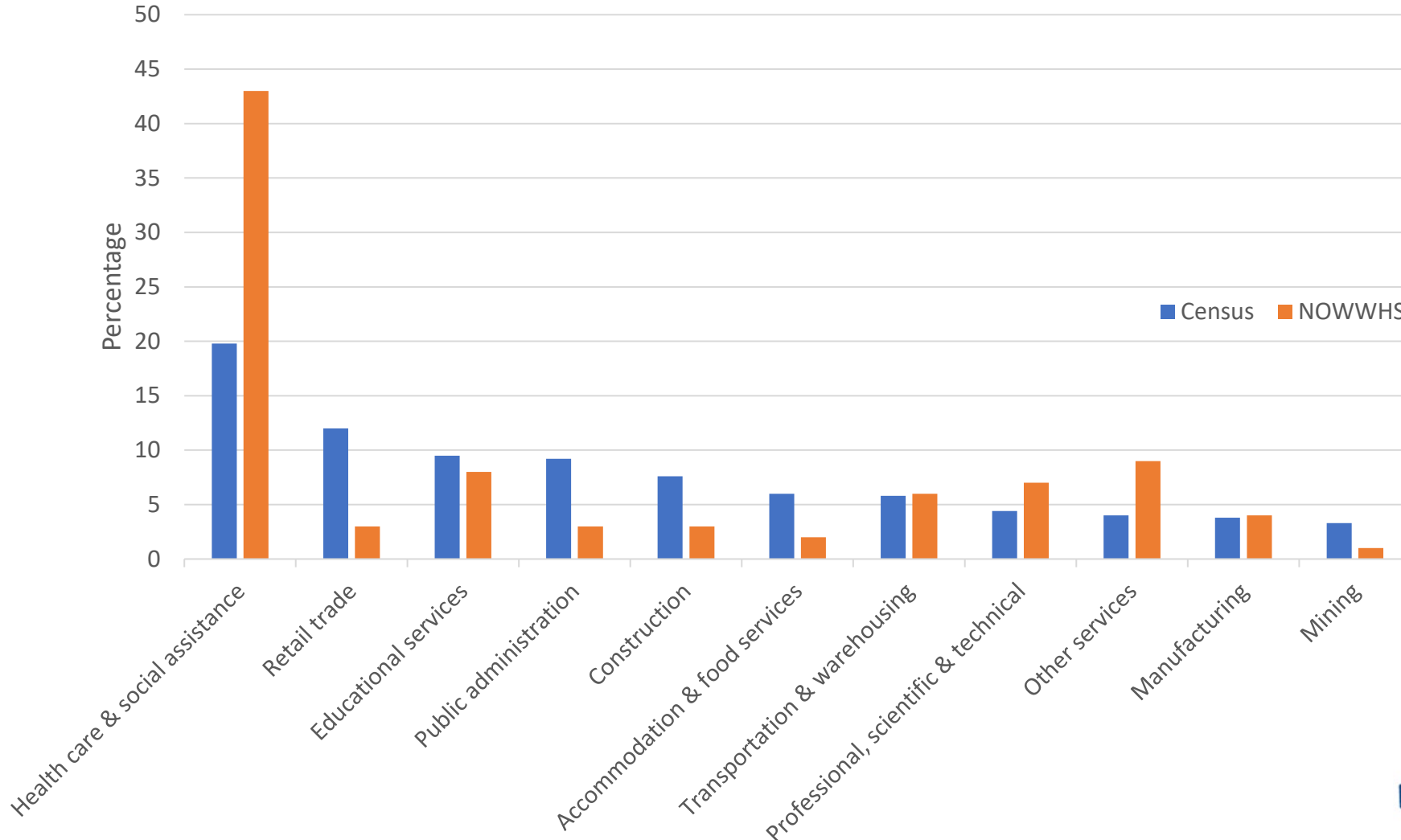
Links for information letters:
Workers: [Click here to read the worker information letter.](#)
Employers: [Click here to read the workplace information letter.](#)

- Workplaces by invitation through random selection

What information are we collecting?

1. Workplace demographics
 - Employment status, Job(s), work schedule, work time, exposures, pay...
2. Mental & Physical health
 - MH diagnoses, mental well-being, anxiety, burn-out, depression, activity limitations, health problems...
3. Workplace factors
 - Organizational culture, support, leadership, civility & respect, demands, growth & development, recognition & reward, involvement & influences...
4. Personal factors
 - Perceived stress, coping, social support, substance use, sleep, sedentary behaviour, job and life satisfaction...
5. Personal demographics
 - DOB, sex, education, marital status, ethnicity, ...

Industrial Sectors (NAICS)



Data collection goals

- Baseline: N=300 workers from each of 20 industrial sectors
 - Total N = 6,000
- Follow-up: every 6 months
 - Top up sample each year with 30 additional workers from each sector
- [Dashboard](#): show real-time data collection on website
- Website workinghealth.ca: highlight findings from the study

Additional information groups

- Injured workers
- **Nursing**
- Paramedics
- Mining
- Supervisors
- **Working from home**
- Older workers
- Indigenous workers
- **Immigrant workers**

Supporting Indigenous workplace mental health: a mixed methods approach

- In partnership with the Nokiiwin Tribal Council...
- Determine the prevalence and incidence of mental well-being and disorders in Indigenous working populations
- Identify workplace predictors of Indigenous mental health
- Gain an in-depth understanding of how the workplace affects Indigenous worker's mental health
- Develop a tool to assist workplaces in supporting Indigenous workers



CIHR IRSC



Canadian Institutes of Health Research
Instituts de recherche en santé du Canada



Communication and Marketing

WORK CAN BE HARD. WE GET IT.

Tell us about your experiences of mental health in the workplace for a groundbreaking new study in Northwestern Ontario

CALLING ALL WORKERS AND EMPLOYERS IN NORTHWESTERN ONTARIO: WE WANT TO TALK ABOUT YOUR MENTAL HEALTH

EPID@Work

CONTACT US
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ABOUT EPID@WORK
EPID@Work Research Institute is a research institute at Lakehead University and is funded by the Ministry of Labour, Immigration, Training and Skills Development. We conduct community-driven research in the areas of work related injury and disability prevention with a particular focus on issues relevant to Northwestern Ontario.

NOW IS THE TIME: NORTHWESTERN ONTARIO WORKPLACE & WORKER HEALTH COHORT STUDY (NOW)

CALLING ALL WORKERS: JOIN OUR MENTAL HEALTH STUDY!

Scan the QR Code to register or learn more!

Who? All workers and employers in NWO

What? Tell us about your experiences of mental health in the workplace for the largest cohort study ever conducted in Northwestern Ontario

For more info, contact cohortstudy@lakeheadu.ca

WHAT ARE THE GOALS?
The NOWWKS cohort study could have a big impact on the mental health and wellness of workers and employers in our region. With a large sample size and a long-term goal, EPID is hopeful that this will become a powerful tool for change.

WHAT IS A COHORT STUDY?
A cohort study is an observational, long-term study that follows a group of people over time. Anyone who completes the study will be contacted again in six months for a follow-up survey, and every six months after that as long as the study continues.

WHO CAN PARTICIPATE?
All workers and all employers in Northwestern Ontario are encouraged to participate. If your workplace is not participating, individual workers can still elect to take the survey. We are looking to hear from all workers and workplaces in Northwestern Ontario.

www.workinghealth.ca



Field Research on Wheels



Connecting with the community



Preliminary findings after 1 year

- Descriptive examination of N=1211 participants
 - Prevalence of mental health outcomes by participation type (workplace vs. online) and top five sectors
 - Bivariable associations between workplace factors and mental wellbeing

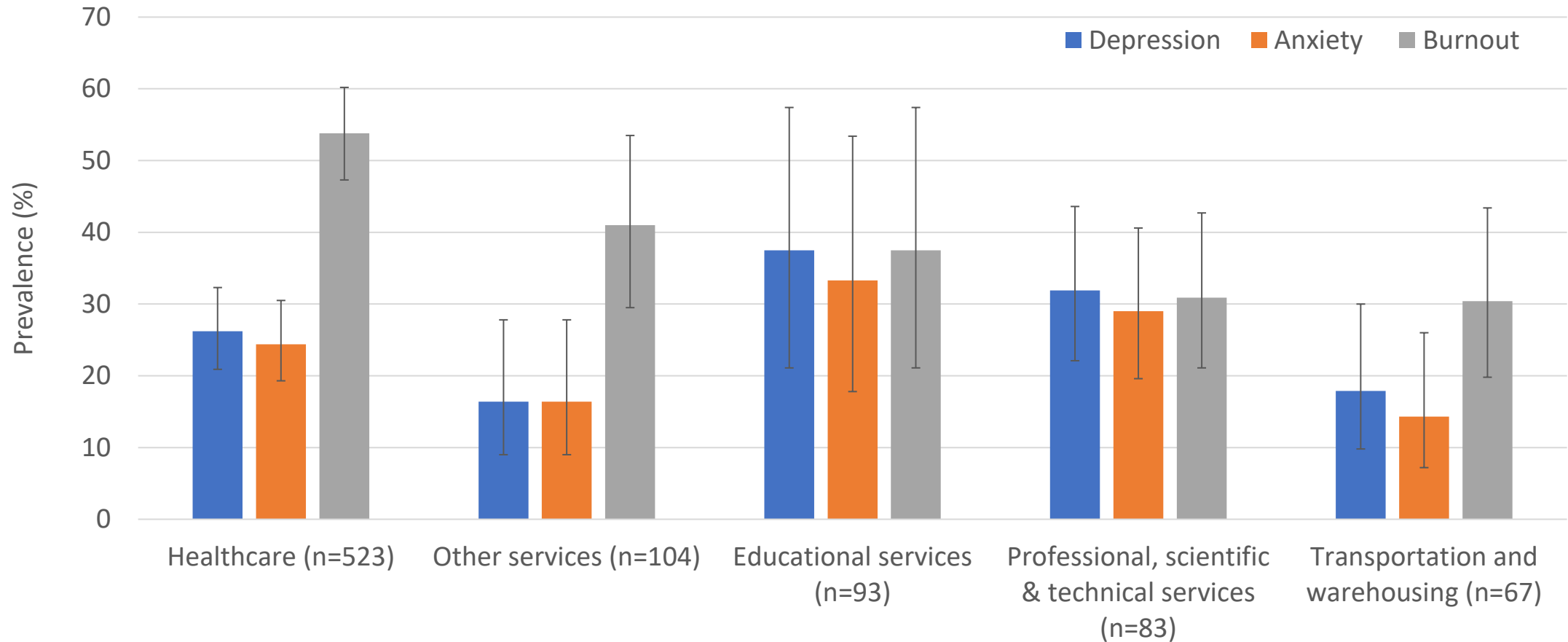
Five key findings so far

1. There is a high burden of mental health disorders in NWO
2. Burnout is a problem for all sectors, not just healthcare
3. Organizational culture and leadership are key cross-sectional factors associated with depression, anxiety, and burnout
4. Industrial sector matters – there are sector-specific associations between burnout and workplace factors
5. Participating in this study can change your life!

Prevalence of Mental Health Disorders

Participation Source	Depression (%)	Anxiety (%)	PTSD diagnosis (%)	Burnout (%)
Workplace	25.8 (22.6, 29.3)	23.8 (20.7, 27.2)	13.4 (11.0, 16.3)	41.8 (38.1, 45.7)
Online	34.1 (30.3, 38.2)	33.9 (30.1, 37.9)	26.1 (22.6, 29.9)	60.6 (56.5, 64.6)

Sector-specific mental health



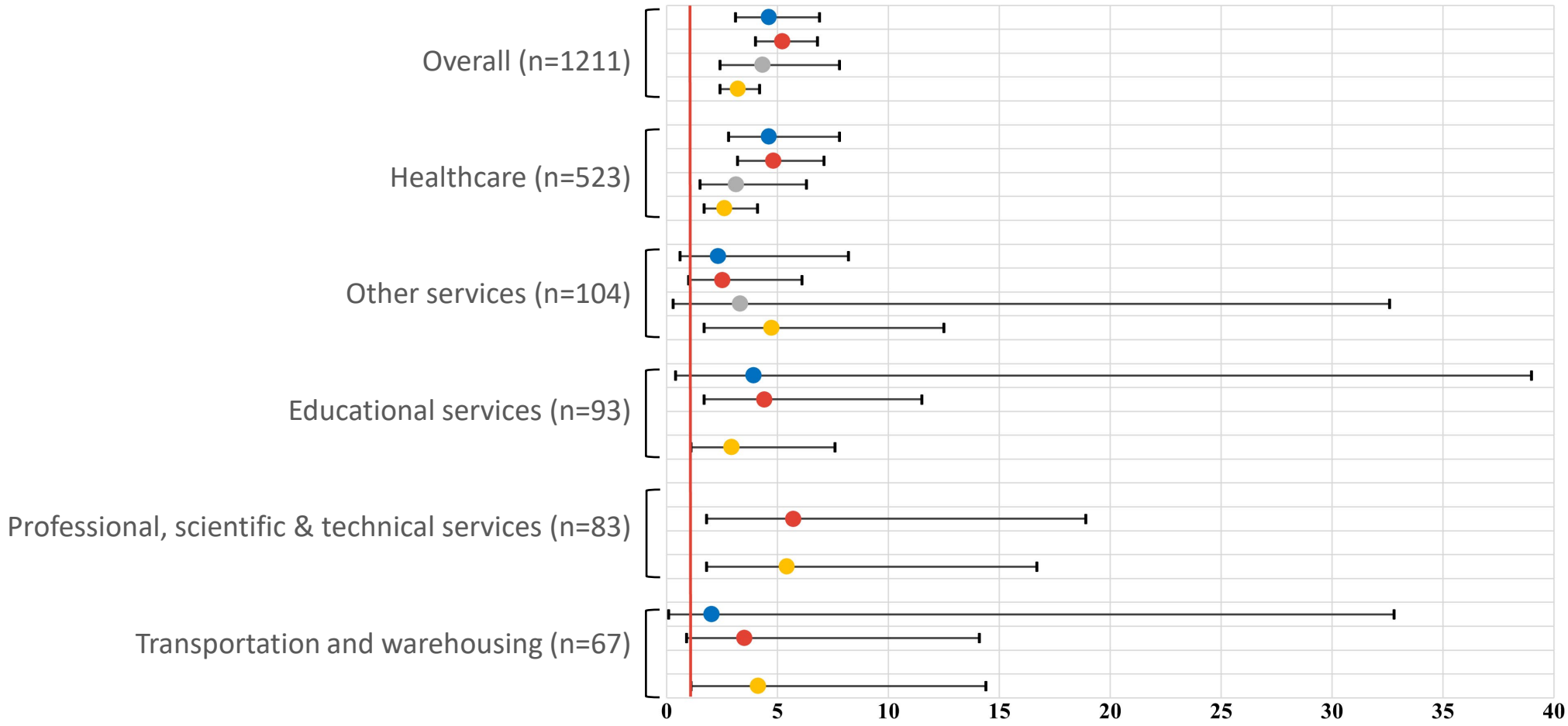
Organizational culture and leadership are two important workplace factors

Workplace factor	Depression Difference Mean (No depression) – Mean (Mod/Severe)	Anxiety Difference Mean (Minimal/mild) – Mean (Mod/Severe)	Burnout Difference Mean (Low) – Mean (High)	P-value
Organizational culture	6.6 (4.6, 8.7)	6.1 (4.0, 8.1)	11.8 (10.0, 13.5)	0.000
Leadership	3.6 (2.7, 4.5)	3.7 (2.8, 4.7)	5.9 (5.0, 6.7)	0.000

Workplace factors & burnout are sector-specific

■ Experienced Physical Violence
 ■ Experienced Workplace Bullying
 ■ Experienced Sexual Harassment
 ■ Experienced Discrimination

Odds Ratio (95% C.I.)



Limitations

- Cross-sectional baseline data
- Preliminary analysis on fairly small numbers
 - Primarily from a few sectors
- No control for any confounding factors
- Stay Tuned!

Impact – participation can be life changing

"I signed up for this survey around this time last year. Filled it out, cried, realized how burnt out I was and it basically forced me to acknowledge on paper how the job was affecting my mental health, my life, my relationships, just everything. It kind of made me think about things and prioritize and get some help.

Today I got a message to fill out a follow up survey and wow... first question I noted I got my new job, and then filling out the survey was such a different experience. The answers I was giving were complete opposite to where I was last year. No crying, no reevaluating everything, just feeling really good about where I am."

Workplace reports

HIGHLIGHTS

13% OF WORKERS FROM [WORKPLACE NAME] RESPONDED TO THE NOWHS SURVEY. WHAT THEY HAD TO SAY.

82%

of respondents are satisfied or very satisfied with their jobs

3

of respondents reported leaving their jobs in the past year

WORKER HEALTH

Respondents reported the following health issues having a moderate effect on their work:

30%

Muscle, bone or joint problems

11%

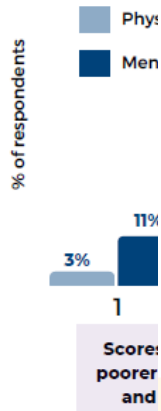
Headaches

10%

Life-threatening illness

WORKER WELLBEING

This graph shows how workers rate their health.



57%

of respondents are experiencing high levels of burnout

WORKPLACE FACTORS

DO

51

7

WORK MOTIVATION

Recognition & reward

Intellectual engagement (focus, concentration, attention to work)

Social engagement (work goals, shared attitudes)

Emotional engagement (positivity, energy, enthusiasm)

Growth & development

0%

Feeling Discriminated

WORKPLACE FACTORS

Workplace factors that have been adopted from the National Longitudinal Survey of the Workplace and integrated into the survey results are provided below

Scores for Workplace Factors. The bar graphs show the scores for each factor.

- Green indicates high scores
- Yellow suggests areas for improvement
- Orange suggests areas for attention
- Red highlights factors of concern

For details on the survey methodology and procedures, please refer to the [Appendix and B](#).

CONCLUSIONS

There are strong indicators that [WORKPLACE NAME] has a positive workplace culture. Workers gave the highest ratings on civility & respect, the social aspects of job engagement, support from coworkers and supervisors, and opportunities and support for growth & development. These results reflect the score of 9/10 on 'Group' workplace culture. Previous research links Group culture to higher employee wellbeing, job satisfaction, retention, perceived fairness and credibility of leaders, and higher commitment to the organization. This resonates with high leadership ratings, low mental health stigma, and overall job satisfaction.

In contrast, almost half of respondents reported high burnout, thoughts of leaving, and high incidences of violence and harassment. Areas of concern which may be related to these results are psychological demands, workload management and clear work expectations from supervisors.

These results may be related to the most pressing concerns: almost all workers expressed difficulties around involvement and influence in their jobs. This result may highlight an opportunity for management and supervisors to learn about the sources of their difficulties and gain insights from their expert experience. Together you might develop strategies to involve workers in decisions that affect how they do their work. This may help to identify areas where workers can exercise their own decision-making authority within clear parameters that respect the organization's needs and constraints, such as the requirement for strong adherence to rules and regulations in health care, reflected in the 8/10 score for hierarchical work culture.

These results and interpretations should be treated with caution since the number of respondents do not reflect a representative sample of your workforce. The associations mentioned above have not been examined in your data, however, they have been demonstrated in previous research.



Community Research Tool: How can these data help the community?

1. Answer community questions/identify trends
 - Sector-specific outcomes or exposures
 - Demographic-specific
 - Job-specific (to an extent)
 - Data specific to organization (workplace reports)

How can these data help the community?

2. Test existing interventions

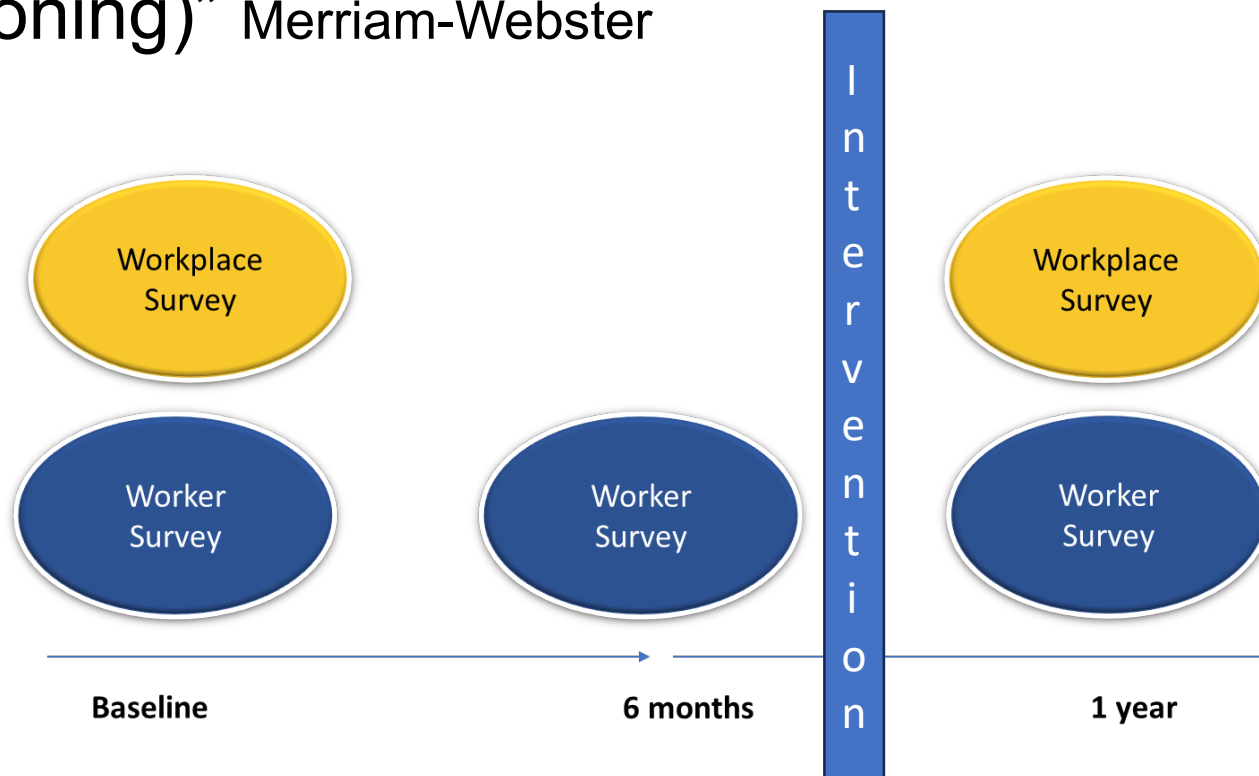
- Are current practices working?
- Will a proposed practice be effective?
- Is the implementation process effective?

3. Partnerships to develop new interventions and implementation approaches

- Work with us to develop and test new interventions

Intervention

- “the act of interfering with the outcome or course especially of a condition or process (as to prevent harm or improve functioning)” Merriam-Webster

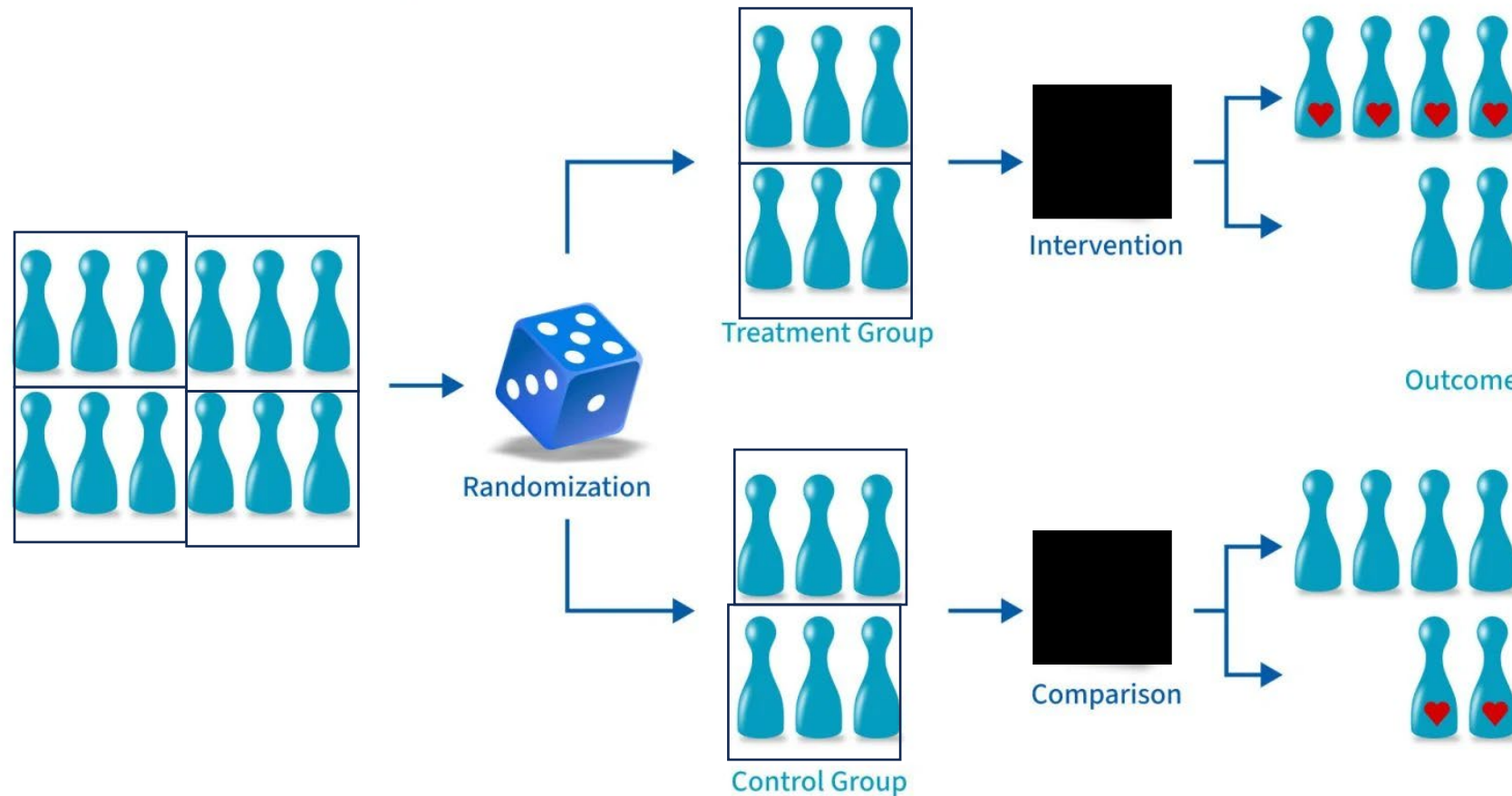


Policy change
Organizational change
Behavioural change
Physical change

Evaluation of the “Small Effort, Giant Impact” Workplace Mental Health Anti-stigma video

- EPID / TBDHU (SMW@Work) Collaboration for many years
 - Address mental health stigma in the workplace
- EPID-funded research resulted in an anti-stigma video & materials intervention
- Will be using the NOWWHS cohort to evaluate the intervention

Cluster randomized controlled trial



Mental health
stigma/attitudes

The Team



Acknowledgements



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