# RETAIN Virtual Annual Convening



Day 2: November 3, 2021

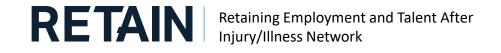






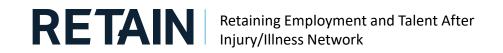
## Disclaimer

This event is conducted by the American Institutes for Research for the U.S. Department of Labor (DOL) Office of Disability Employment Policy and Retaining Employment and Talent After Injury/Illness Network (RETAIN) state grantees, under DOL Contract Number 1605DC-18-F-00429. The views expressed are those of the authors and should not be attributed to DOL, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the U.S. Government.



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## WELCOME BACK AND OVERVIEW



# The Business Perspective: Engaging and Sustaining Business and Employer Partnerships for Stay-at-Work/Return-to-Work



### Introductions



Panelist
 Brian Stierle, Director,
 Human Resources, Sysco
 Michigan



Panelist
 Jeff Cofield, MA, SPHR,
 SHRM-SCP, Manager,
 Disability Management,
 Alabama Power Company



Moderator
 GeMar Neloms, Director,
 RETAIN TA





Brian Stierle Director, Human Resources, Sysco Michigan



- Sysco Food Service
  - Ranked as the #60 company (Fortune 500)
  - Largest food service company in the United States
  - We sell food to restaurants, hospitals, schools, etc.
- Sysco Detroit (part of Michigan region)
  - Over \$700 million in sales.
  - Over 400 associates
  - Majority in Sales, Warehouse, and Transportation.



- Work with reemployability for workers' compensation
  - When restrictions can be met, pair associate with nonprofit (museums, Goodwill, food bank, etc.)
  - We make a bona fide job offer.
  - Associates are paid their hourly rate and maintain all benefits.
- Decided this was the best path for our associates and the company.
  - We noticed that associates were struggling upon return.
  - Weight gain and lack of motivation.
  - Some were facing depression from being stuck at home.



- Challenges
  - Convincing those who wanted to be at home to participate.
  - Convince skeptical leadership worried about cost.
- Solutions and strategies to address
  - Associate conversations centered on our past experience with being home bound.
  - Leadership had to see the financial impact of associates ill prepared to return to physically demanding jobs.



- Benefits for Sysco and associates
  - Associates have better physical and mental outcomes.
  - Associates feel like they are not forgotten by their company.
  - Sysco Fewer reoccurring injuries from returned associates.
  - Sysco Healthy associates are more productive.

# Retaining A Valued Employee

Presented by:

**Jeff Cofield**, MA, SPHR, SHRM-SCP

Manager, Disability Management Department
Alabama Power Company
Birmingham, AL



## **Alabama Power Company**

- Part of the *Southern Company:* One of 14 subsidiaries, serving nine million customers in seven states.
- Facts: Serves 1.5 million customers in homes, businesses, and industries in the southern two thirds of Alabama. More than 83,700 miles of power lines carry electricity from 77 generating units (coal, solar, gas, bio-fuel, nuclear) to customers throughout two thirds of the state. Total poles and towers equal 1.5 million.



#### Mission: Fully Integrated Disability Management Team

Center of expertise in helping with disabilities by consultative services to return employees to productive work.

#### **Scope:** (Approx. 9,000) Western Region Area

Alabama Power Co., - 40 locations in AL Southern Co. Svcs.- AL, Southern Power, Western US Southern LINC – AL

#### **Occupational Health and Medical Consulting**

- A. Medical Treatment for Injury Response and Medical Claim Management
- **B. Family Medical Leave Act Process and**
- C. Return to Work Reasonable Accommodation Process

#### **Compliance Services**

- A. Drug and Alcohol program management (DOT and Non-DOT)
- B. Workers Compensation Program management (indemnity focus)
- C. Disability Leave of absences program and related benefits (LTD, A&S)
- D. Medical Records
- E. Scholarship Oversight for Education Benefits to dependents of fatally injured employees

## Examples of disabilities that have surfaced in my workplace:

- An employee who suffered a head injury in a car wreck was unable to return to work.
- Employees with low vision need accommodation to do their job (current employees in customer service, appliance repair, public relations).
- An employee working in the Information Technology department could not open doors due to paralysis (front door and bathroom).
- A lineman who lost their CDL license due to DOT rules and a health condition.
- A new hire who suffered a war injury in Iraq could not do the job they were originally hired to do.

- A manager developed a neurological condition and could not ambulate into and around the office.
- Several employees had accidents while participating in recreational activities (swimming and ATV), resulting in paralysis.
- Pioneered a collaborative program with Alabama Department of Rehabilitation Services
- "R.A.V.E." That stands for "Retaining A Valued Employee."
  - Relationships with ADRS
    - Disability: IN (Charter Member, Admin Support)
    - State Rehabilitation Council
    - Business Relations Contacts Single-Point Contact

## Alabama Power Results of RAVE

- ✓ On-site assessment
- ✓ Problem solving for return to work
- ✓ Identification of Essential Job Functions (EJF)
- ✓ Identification of accommodations (technology, equipment, devices)
- ✓ Counseling, education, medical, emotional issues
- ✓ Provision of job-site trainers
- ✓ Comprehensive communication with employee, employer, unions
- ✓ Modified duty transitional work options
- ✓ Prepaid work experience (PWE) internship program Job Shadowing



## Benefits of the RAVE program

- 1. Keep an employee at work and productive.
  - a. Reduces hiring costs, training costs, lost time, disability insurance costs, reduced absences.
  - b. Are employees the most valuable asset?
- 2. Provides access to certified, credible, knowledgeable experts in the field of disability management.
- 3. Provides access to the latest technology in disability management field.
- 4. The best benefit of all is the cost = \$0.



## Thank you!

**QUESTIONS?** 





## Questions and Open Discussion

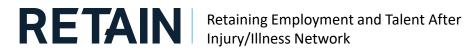


# Engagement Track: Breakout Discussion Sessions



## Engagement Track: Breakout Sessions (one of five topics listed below)

- Topic Room 1: Relationship Building and Sustainability: Health Care Providers—Subject
  matter expert (SME): Glenn Pransky, MD, MOcc Health, Associate Professor, University of
  Massachusetts Medical School; Thomas Wickizer, PhD, Professor Emeritus, The Ohio State
  University College of Public Health and the Institute for Work and Health
- Topic Room 2: Expert Review Panels/Advisory Boards: Composition, Engagement, and Involvement—SME: Lee Thompson, PhD, Senior Researcher, Health Services, AIR
- Topic Room 3: Communication Needs and Approaches between Employer and Health Care Providers—SME: Trevis Cage, MS, Director of Communications, The Bizzell Group; Eboni Jackson, Communications Specialist, The Bizzell Group
- Topic Room 4: Relationship Building and Sustainability: Social Determinants of Health
  Wraparound and Referral Services—SME: Mark Humowiecki, JD, Senior Director, National
  Center for Complex Health and Social Needs, Camden Coalition of Healthcare Providers



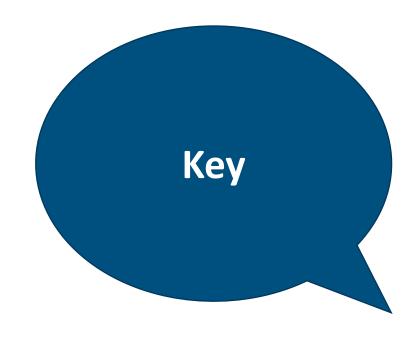
## Break



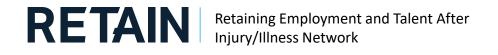
## Engagement Track Groups Present Their Key Takeaways



## **Share Out**







## Panel Discussion



# COVID-19 and Long Haulers: Techniques to Address Brain Fog and Promote Return-to-Work



## Introductions



 Kristine Lokken, PhD, Associate Professor, Neuropsychologist, and Chief Psychologist, Department of Psychiatry, University of Alabama at Birmingham



 Edward Taub, PhD, Professor of Psychology at University Alabama at Birmingham and Co-Director of the Cognitive Impairment Therapy Research Group

## Introductions (continued)



 Gitendra Uswatte, PhD, Professor of Psychology and Physical Therapy at University Alabama-Birmingham and Co-Director of the Cognitive Impairment Therapy Research Group



 Moderator: Leslie Dawson, MA, CRC, NCC, State Administrator, Business Relations Program, Alabama Department of Rehabilitation Services



Department of Psychiatry

## COVID-19 and Long Haulers:

**Techniques to Address Brain Fog** and Promote Return-to-Work

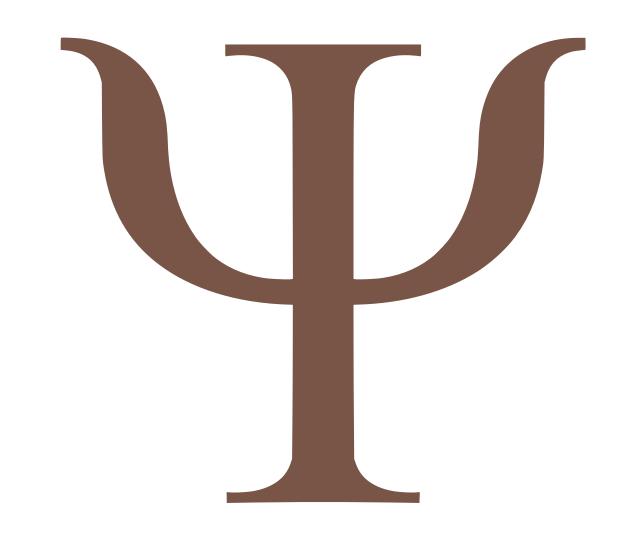
Kristine Lokken, Ph.D. 11.3.2021



## Presentation Overview

- 1. Effects of Pandemic on Mental Health
- 2. Neuropsychiatric Effects of COVID-19
- 3. Brief Review of the Neurocognitive Literature
- 4. Recommendations and Resources

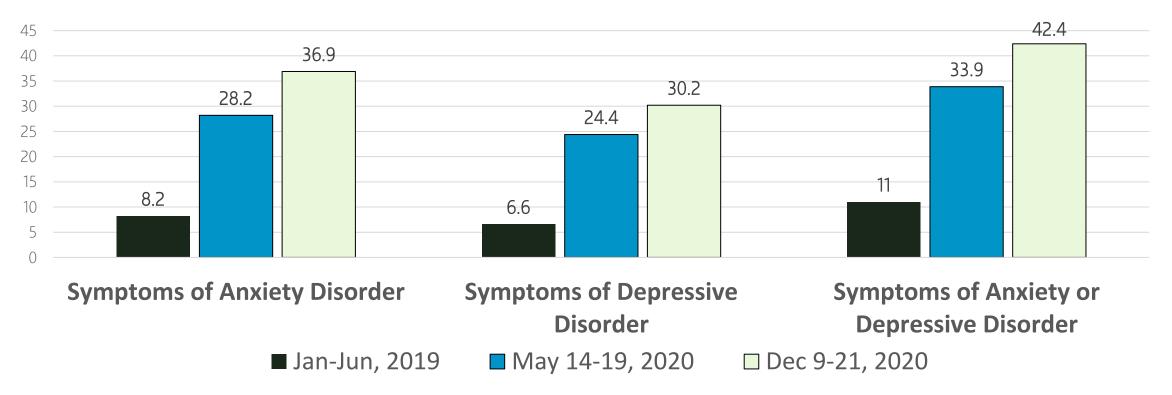
Effects of the Pandemic on Mental Health



#### **COVID-19 & Mental Health**

### Pandemic caused spike in anxiety and depression

Percentage of U.S. adults showing symptoms of anxiety and depressive disorder:



Sources: The Centers for Disease Control and Prevention (CDC), U.S. Census Bureau, and the National Center for Health Statistics; Credit: Statista.com

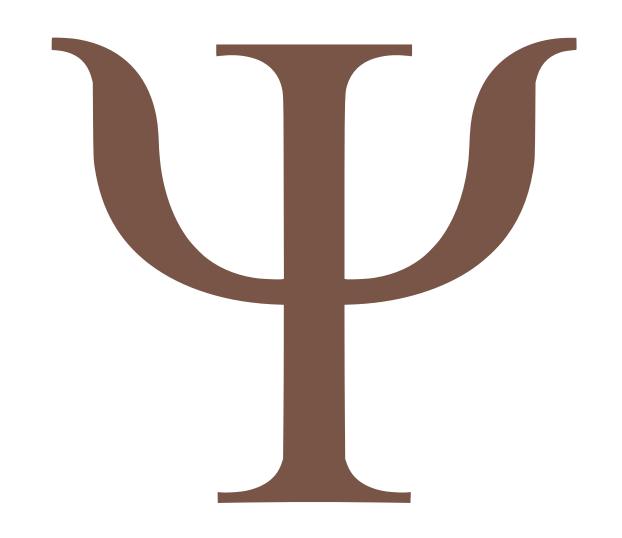


## Positive COVID-19 Diagnosis

- Bidirectional associations between COVID-19 and mental health
  - Pre-existing mental health issues increase the risk of COVID-19 infection
  - More reported mental health issues after COVID-19 infection
- In days 14–90 postinfection, there is an increased first diagnosis of:
  - Anxiety, PTSD, insomnia, and dementia (six times higher among those 65+)
- ICU admissions resulted in higher risk of psychiatric complications
- More psychiatric sequelae, even with mild COVID-19



# Neuropsychiatric Effects of COVID-19



## Suggested Pathways of CNS Involvement

- 1) Direct (neurotropic: neuroinvasive and neurovirulent)
- 2) Indirect
  - Vascular and inflammatory mechanisms
    - Blood pressure imbalance: damage of the ACE2 receptor
    - Neuroinflammation
  - Hypoxia: Acute Respiratory Distress Syndrome (ARDS)
  - Issues from ICU admission (e.g., ventilation, sedation, delirium)
  - Complicating psychiatric issues (e.g., PTSD)



## **Neuropsychiatric Effects of COVID-19**

#### **ACUTE COVID-19**

- Severe fatigue
- Anxiety
- Depression
- Insomnia

### **CHRONIC COVID-19**

Symptoms persist and new symptoms can develop

Brain fog

#### **SEVERE COVID-19**

Increased risk with age and underlying medical conditions:

- Hospitalization/ICU
- Confusion
- Delirium
- Impaired consciousness
- Encephalitis
- Encephalomyelitis
- Seizures
- Stroke



### **Chronic COVID-19**

#### **TERMINOLOGY**

Post-COVID

Long-COVID / "Long Haulers"

Chronic COVID

Post-Acute Sequelae of SARS-CoV-2 infection (PASC)

#### POST-COVID PRESENTATION

- Headaches
- Sleep disturbances: "COVID-somnia"
- Anosmia, phantosmia, dysguesia
- Neurocognitive deficits: "brain fog"
- Fatigue
- POTS/dysautonomia
- Paresthesias: small fiber neuropathy
- Anxiety
- Mood changes
- Trauma response
- Functional neurological disorders



### **Post-COVID Conditions**

umbrella term for the wide range of health consequences that are present **more than four weeks** after infection with SARS-CoV-2



**CDC** 

### What is "Post-COVID"?

ACUTE COVID-19

Symptoms last up to 4 weeks after illness starts

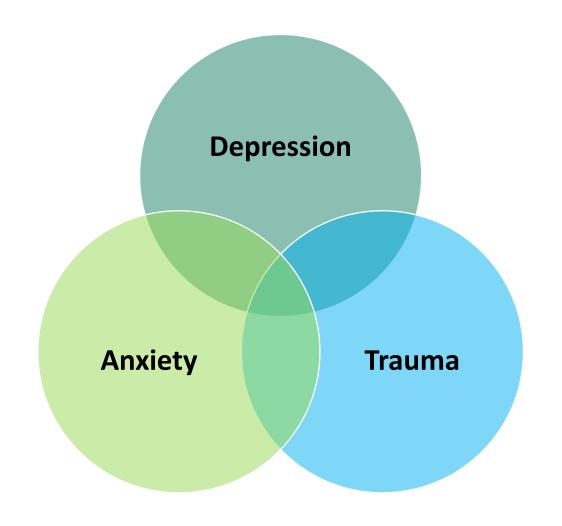
ONGOING
SYMPTOMATIC
COVID-19

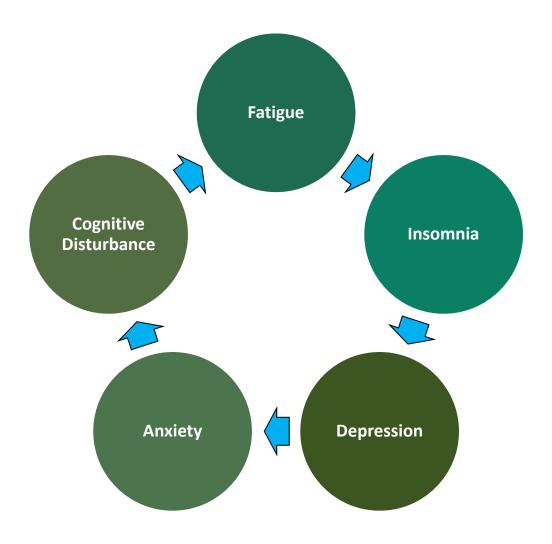
Symptoms last up to 4 to 12 weeks after illness starts

### **POST-COVID-19**

- Symptoms develop during or after COVID-19
- Continue beyond 12
   weeks after illness starts
- Not explained by other diagnoses

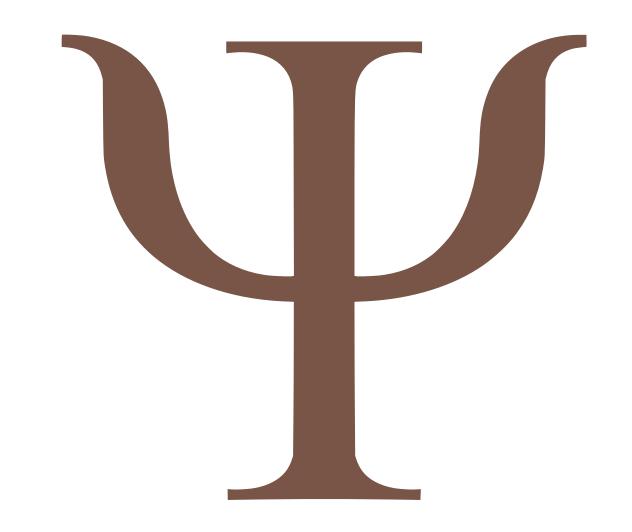
# **Circularity of Symptoms**







Brief Review of the COVID-19 Neurocognitive Literature



## **Poorer Neurocognitive Outcomes**

Those with increased risk for cognitive impairment after COVID-19

- Severe course of COVID-19
  - Those hospitalized, intubated, or on a ventilator fare worse.
  - 80% of patients hospitalized on a rehab unit after COVID-19 infection with neuropsychological deficits.
- Having delirium during the acute stage
  - 44% had a memory impairment post-illness.
- Pre-existing neurodegenerative diseases
- Pre-existing psychiatric comorbidities



## **Overall Patterns of Neurocognitive Deficits**

- Processing speed
- Executive functioning
- Verbal fluency
- Memory encoding
- Memory recall
- Intact memory recognition

Dysexecutive syndrome



# Neurocognitive Issues in Non-Hospitalized/Mild Course of COVID-19

• "Brain fog" (81%)

Impaired quality of life

 Attention and working memory deficits "Brain fog": Perception that the mind is "clouded by a haze"

- Slowed thinking
- Difficulty making decisions
- Difficulty multitasking
- Trouble sustaining concentration
- Memory problems

### Similar to other conditions:

- Multiple sclerosis
- Chemo brain
- Chronic fatigue syndrome
- Lupus
- Post-viral infections
- Traumatic brain injury

Myalgic encephalomyelitis

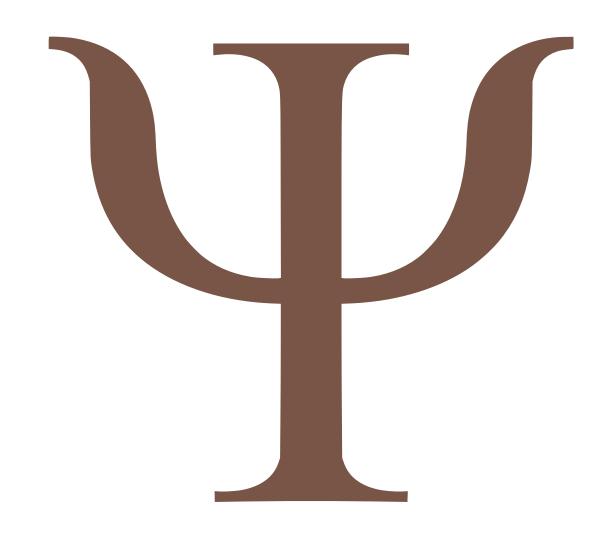


## **Our Patient Findings**

- Severe Fatigue, insomnia, depression, anxiety, trauma/PTSD, somatic complaints
- Severe processing speed deficits
- Executive function deficits
- Learning and memory intact
- Return to work issues
- Dismissed and ostracized



Implications and Recommendations



### **Future Directions**

- More research and interventions are needed.
  - Early identification and treatment of individuals most at risk for cognitive issues/cognitive decline following COVID-19 diagnoses
  - Testing interventions (e.g., cognitive training, non-invasive brain stimulation, lifestyle modification, resilience) to foster recovery and successful cognitive aging in PASC
  - Easy-to-disseminate interventions targeting attention, executive function, fatigue, insomnia, and mental health

## **Return-to-Work Implications**

- Dysexecutive syndrome has considerable implications for occupational, psychological, and functional outcomes.
- Needed:
  - Early intervention strategies to improve stay-at-work/return-to-work
  - Early coordination of health care and employment services
  - Increased education for patients, employers, and health care providers
  - Accommodations and job modifications
  - Retraining and rehabilitation services

### **Return-to-Work Recommendations**

Structured, individual return-to-work strategies for patients with PASC

- Follow typical accommodations related to fatigue reduced time at work
  - Reduced work volume
  - Starting work later to compensate for sleep disruption, autonomy to selfpace the workload
  - Avoiding tight deadlines
  - Excused from more complex work with higher cognitive demands.
- Periodically reassess and adjust based on the clinical or work progress



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Thank you.

Questions?



# COVID-19 and Long Haulers: Techniques to Address Brain Fog and Promote Return-to-Work

I. Nature and Development of the Intervention

Edward Taub, PhD

University Professor

Director, CI Therapy Research Group, Taub Therapy Clinic

University of Alabama at Birmingham



## Collaborators

- UAB CI Therapy Research Group Core Members
  - Edward Taub
     Co-Director
     University Professor, Psychology
  - Gitendra Uswatte, PhD Co-Director Professor, Psychology
  - Victor Mark, MD
     Medical Director
     Associate Professor, PM&R
  - David Morris, PT, PhD
     Training Director
     Chair & Professor, Physical Therapy
  - External Collaborator
     Neal Miller, PhD
     Professor, Rockefeller University

- Collaborators on CICT (all at UAB)
  - Karlene Ball, PhD
     University Professor, Psychology
  - Kristine Lokken, PhD
     Associate Professor, Psychiatry
  - Amy Knight, PhD
     Associate Professor, PM&R
  - Shruti Agnihotri, MD
     Associate Professor, Neurology
  - Chen Lin, MD
     Associate Professor, PM&R
  - David Knight, PhD
     Professor, Psychology
  - Michael Saag, MD
     Associate Dean
     Professor, Medicine

# CI Therapy Research Group

- Current Members
  - Staci McKay, BA
  - Brandon Mitchell, BS
  - Morgan Smith, BS
  - Piper Hempfling
  - Terika Miller
  - Elizabeth Pollard
  - Arnob Iftekar
  - Mary Bowman, PT, MS
  - Jean Crago, OT, MS

## **Outline of Talk**

- Historical background of Constraint-Induced Therapy (CIT)
- Main thrust and general objectives of this therapeutic approach
- Key elements of method
- Different variants of this family of rehabilitation therapies, leading to...
- CI Cognitive Therapy (CICT)



# Historical Background of Constraint-Induced Therapy (CIT)

- A family of treatments for the rehabilitation of impaired function
- Origin in basic research with monkeys after forelimb deafferentation
  - Development of two of the three main strategies
    - Prevention or constraint of compensatory behaviors
    - Restoration of original function, use of a behavioral training method Shaping



# Historical Background of Constraint-Induced Therapy (CIT)

- Initial application to humans—upper extremity motor deficit after stroke
  - Constraint—accomplished by physical restraint of less-affected arm
  - Restoration of original function
    - Attempted by training by shaping of behavior in treatment setting
  - Transfer package
    - <u>New Element</u> designed to facilitate transfer of improved function from treatment setting to everyday situations outside treatment setting



# Main Thrust and General Objectives of This Therapeutic Approach

- Restoration of function and not training of compensatory or substitute behaviors
- Main Focus: To transfer improved function to the real world outside the treatment setting, including return-to-work



# Main Thrust and General Objectives of This Therapeutic Approach

- Frequent, poor correlation between improvement achieved by training in treatment setting and performance in real-world outside treatment setting
  - Frequent weakness of this correlation, not generally recognized
  - Person is capable of improved function as demonstrated in treatment setting (produced by training), but lack of transfer to everyday situations
  - Why? Principle of Learned Nonuse
- Overcoming Learned Nonuse With the CI Therapy Transfer Package



# **Key Elements of CI Therapy Method**

- Training impaired function in laboratory—Use of Shaping
- Preventing or constraining compensatory behaviors
  - Physical restraint for movement (e.g., Padded mitt on less-affected arm after stroke in CI Movement Therapy)
  - Nonphysical constraint for other types of impairment (e.g., Speech, Cognition)
    - Instruction in lab
    - Monitoring of behavior:
      - In lab
      - At home—logs, caregivers
- Transfer Package (TP)
  - Set of behavioral techniques
    - In common use in other areas for behavior problems, marital problems, treatment of alcohol and drug abuse, etc.
      - Rarely used in rehabilitation
      - Dr. Uswatte will describe the component techniques of the TP we use for cognitive impairment and brain fog after COVID-19

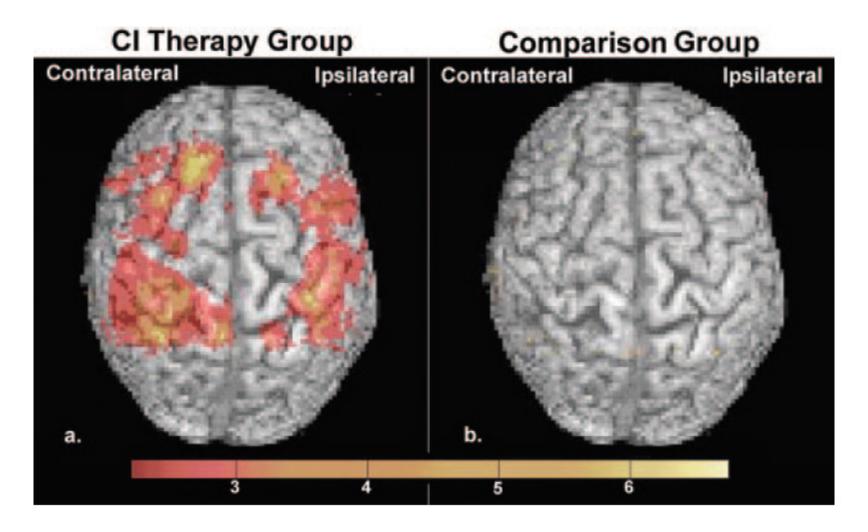


### **Plastic Brain Changes After CI Therapy**

- CI Therapy produces large changes in the structure and function of the brain.
  - CI Movement Therapy
    - Grey matter in motor areas of brain—bilateral (Gauthier et al., 2008)
      - Multiple replications
    - White matter (Barghi et al., 2018)
      - Multiple other studies
    - Transcranial magnetic stimulation (TMS) source mapping (Liepert et al., 2000)
    - EEG source mapping (Kopp et al., 1999)
    - fMRI
      - Multiple studies
  - CI Aphasia Therapy II
    - Grey matter in language areas of brain (Haddad et al., manuscript in preparation)
  - CI Cognitive Therapy
    - Stroke—very preliminary results
      - Apparent changes in grey matter, white matter, and functional measures in prefrontal and posterior parietal areas (Knight et al., 2021)
    - COVID-19—Imaging work planned for the future



## **Plastic Brain Changes After CI Therapy**





## **CI Therapy: Applications in Cognitive Domain**

- CI Aphasia therapy (CIAT)—Expressive aphasia
  - First departure from the motor domain
- CI Cognitive Therapy (CICT)
  - Two applications to date
    - Stroke
    - Cognitive impairment and brain fog long-haul symptoms after COVID-19



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## COVID-19 and Long Haulers: Techniques to Address Brain Fog and Promote Return-to-Work

II. Techniques & Results

Gitendra Uswatte, PhD, Professor of Psychology & Physical Therapy Co-Director, CI Therapy Research Group, University of Alabama at Birmingham

## Outline of Talk

- Describe brain fog.
- Describe the treatments available for brain fog and other cognitive dysfunction due to long COVID-19.
- Describe new therapy we have developed.
- Share outcomes of pilot work.
- Discuss limitations of the work to date and next steps.

## Long COVID Brain Fog Symptoms

- A conservative estimate is that about 1 million Americans suffer from persistent brain fog after recovery from COVID (30 million infected × 35% with long COVID × 10% with cognitive symptoms; Hirschtick et al., 2021).
- Brain fog is marked by the perception that the mind is clouded by a haze accompanied by self-reports of:
  - slow thinking,
  - difficulty making decisions,
  - difficulty multi-tasking,
  - trouble sustaining concentration, and
  - problems with memory (Ocon, 2013).

## Long COVID Brain Fog Symptoms

- These perceptions of brain dysfunction co-exist with measurable but typically mild impairment in specific cognitive functions:
  - Cognitive processing speed
  - Switching attention from one task to another
  - Sustaining concentration
  - Working memory (Ocon, 2013).
- Relatively little else is known about brain fog although it is present in variety of other conditions, in addition to long COVID, in which diffuse brain injury is present or suspected (e.g., traumatic brain injury, multiple sclerosis, and chronic fatigue syndrome).

# Treatment for Long COVID Brain Fog

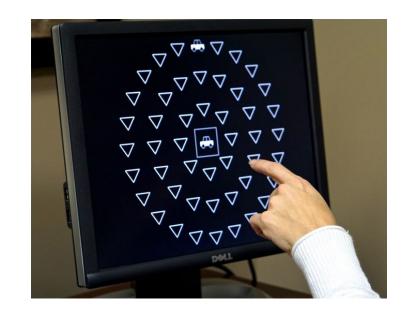
Treatments Currently Offered for Long COVID Brain Fog	
Structured cognitive rehabilitation from neuropsychologists, rehabilitation psychologists, or occupational therapists	Commercial cognitive training programs, e.g., Brain HQ, Lumosity, Neuronation
Electrical stimulation of brain activity, e.g., repetitive transcranial magnetic stimulation	Music-based cognitive training programs
Prescription of cognitive-assistive technology	Psychotherapy for functional cognitive disorder
Yoga	Tai-chi
Breathing exercises	Mindfulness meditation
Sleep hygiene	Nutrition education

### Constraint-Induced Cognitive Therapy (CICT)

- 36 hours in total on outpatient basis
  - Three 3-hour sessions per week for four weeks
- Three major components:
  - Cognitive processing speed training using a computer game
  - Training on simulated everyday cognitive tasks in the clinic
  - Package of behavioral techniques designed to transfer gains from the treatment to everyday setting

### Speed of Processing Training (SOPT)

- SOPT targets how rapidly patients process information (Ball et al., 2002).
- Task is to identify primary target at center of screen and location of secondary target in periphery.
- Task is made progressively more difficult by reducing time between presentation of stimuli and number of distractors.



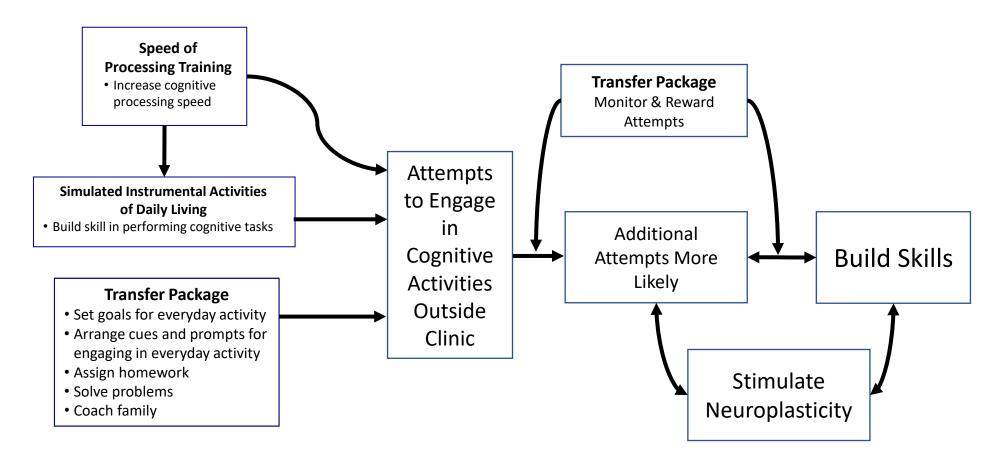
### Training on Simulated Everyday Tasks

- Builds skill in performing everyday tasks with important cognitive components
  - Bridges between the basic cognitive ability that is the target of SOPT and doing tasks in daily life.
- Examples of training tasks include putting appointments in a calendar, making out a recipe, conducting an Internet search.
- Training is organized following principles from behavioral psychology, i.e., uses shaping (Skinner, 1968).

### Transfer Package

- Set of behavioral procedures that are designed to promote transfer of the abilities and skills worked on in the clinic to daily life (Taub, Uswatte, et al., 2013):
  - Negotiate a behavioral contract
  - Coach family members
  - Assign homework
  - Support problem-solving by patients
  - Monitor and reward patients' engagement in cognitive activities at home
  - Conduct follow-up telephone calls
- These procedures together arrange cues and prompts for patients to attempt cognitive activities outside the clinic, thereby generating opportunities to reward patients for doing so.

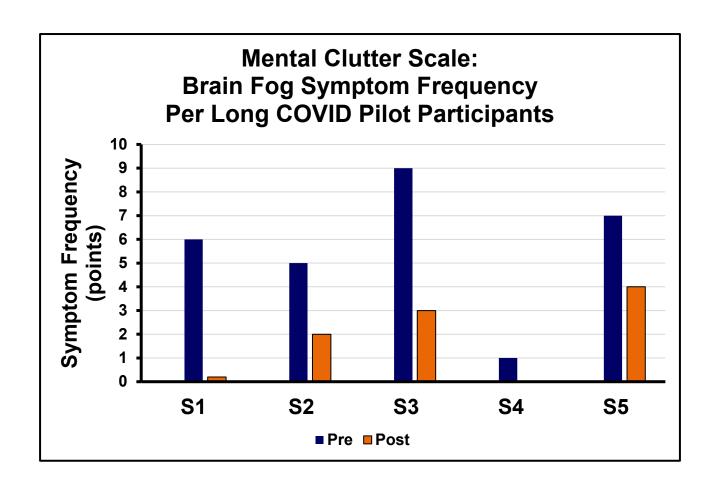
# Constraint-Induced Cognitive Therapy: Sparking a Virtuous Cycle



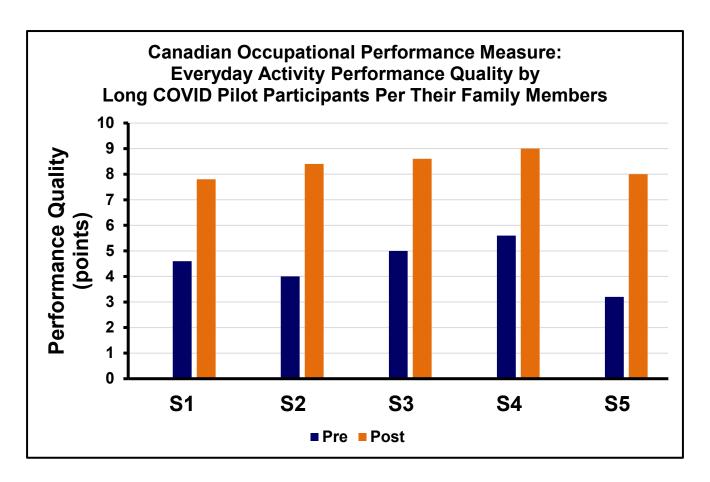
### Pilot Randomized Controlled Trial

- A pilot study of this new therapy is underway.
- Enrolls adults more than 3 months after onset of COVID-19 with the following symptoms:
  - Substantial brain fog
  - Mild to moderate impairment on a cognitive test
  - Problems with carrying out everyday tasks
  - Has family who can attend treatment sessions
- Participants are randomly assigned to get CICT immediately or 120 days later.
- All receive testing on Day 0, Day 30, and Day 120.

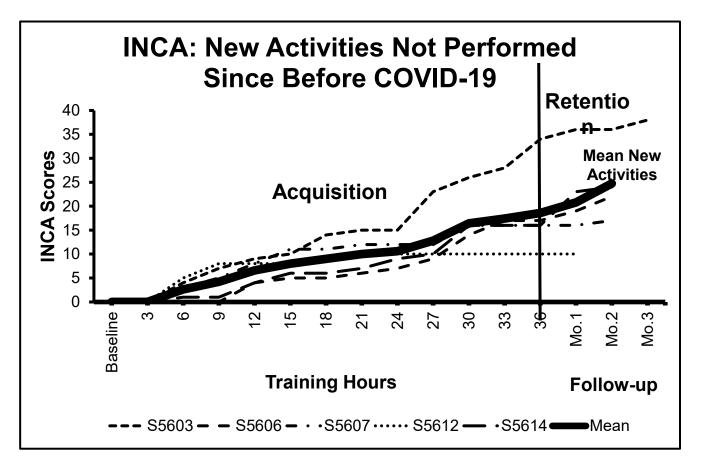
# Mental Clutter Scale: Brain Fog Symptom Frequency Per Long COVID Pilot Participants

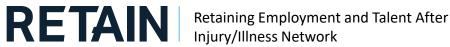


### Canadian Occupational Performance Measure: Everyday Activity Performance Quality by Long COVID Pilot Participants Per Their Family Members

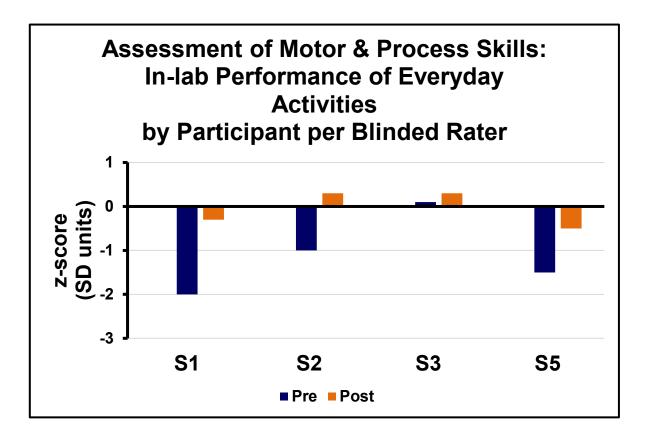


### **INCA: New Activities Not Performed Since Before COVID-19**





# Assessment of Motor & Process Skills: In-lab Performance of Everyday Activities by Participant per Blinded Rater



*Note*. Participant S4 was not able to perform this test because she could not stand.

### Return-to-Work

Participant	Before COVID Onset	After COVID Onset	After CICT
S2	On-site system administrator	Switched to remote work, only able to fulfill limited duty set.	Returned to on-site work, able to fulfill all duties.
S3	Volunteer director of a children's ministry	Unable to fulfill any of her duties.	Able to fulfill all previous duties.
S5	On-campus student at a dance school	Withdrew. Returned home. Not able to work.	Moved to new city to begin new job as a dance instructor.

*Note*. Participants S1 and S4 were retired prior to infection with COVID-19. Return-towork was not a goal for them.

### Limitations

- Small sample: Findings may change as more data comes in.
- Data from the delayed treatment group are not available yet. Some COVID survivors may improve spontaneously with time.
- The study was not designed to formally target or evaluate return-towork.

### **Future Research**

- Eager to take on questions regarding return-to-work of employees with long COVID.
- No other studies (that we know of) address this question.
- Next steps:
  - Modify intervention to focus on work-related issues.
  - Conduct large-scale trial or demonstration project to rigorously evaluate its effects on return-to-work.
  - If successful, disseminate the technique.

### Sponsors

This research was supported by pilot funds from the following bodies at the University of Alabama at Birmingham:

- Integrative Center for Aging Research (ICAR)
- Rehabilitation Research Resource to Enhance Clinical Trials (REACT)
- Department of Psychology

#### **Contact Information**

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## Questions and Open Discussion



### Break



### Plenary Session on RTWC



# Competencies and Practices for Effective Return-to-Work Coordination (RTWC)



### Introductions



# Presenter Glenn Pransky, MD, M.Occ. Health Associate Professor, University of Massachusetts Medical School

# Competencies and Practices for Effective Return-to-Work Coordination

Based on research by

Glenn Pransky and William Shaw at the Liberty Mutual Research Institute University of Massachusetts Medical School

Patrick Loisel and Qua-Nha Hong
University of Sherbrooke
University of Toronto

### Review: Successful workplace RTW interventions

include: (Franche et al., 2005, 2007)

- Adequate workplace accommodations
- Direct contact between healthcare provider and workplace
- Early worker contact, workplace site visits
- Presence of an RTW coordinator (RTWC) or facilitator



### **Definition of RTW Coordination**

- Efforts by a clinician, insurance claims manager, ergonomist, human resource or safety professional
- Goal: early workplace reintegration of an individual worker
- Characteristics: facilitate and initiate communication among workers, supervisors, and others

### Why are RTW coordinators needed?

- Mistrust, complexity, miscommunication
- Inadequate or inappropriate job modifications
- Perception of inability to work
- Reinjury and other concerns

(Williams & Westmorland, 1996)

### RTW Processes Are Complex

- Treat acute injury or medical problem; focus on function
- Reestablish adequate work capacity
- Identify and address worker concerns regarding RTW
- Identify and address employer concerns regarding RTW
- Adapt worker and workplace to enable RTW
- Communication and agreement among all involved regarding RTW plan
- Implement actual RTW plan
- Monitor and readjust as needed



### **Research Goals**

- Identify essential competencies (knowledge, skills, and attitudes) and practices of RTW coordinators
- Evaluate how these vary by setting and RTWC specialty
- Suggest approaches to selection, training, and reinforcement

### Research premise (Marrelli et al., 2005)

 Underlying theory: expert incumbent and stakeholder specification of essential competencies (skills, knowledge, attitudes) and activities – then validation (similar to prior studies in VR, OT, radiology, etc)

### Why is this important?

- Clarify and standardize interventions and reports.
- Open the "black box" for field application.
- Resolve specialty-specific claims to unique ownership of the RTWC domain.

### NIDMAR – RTWC Certification



### **Project Components**

- 1. Literature review of RTW studies
- 2. Principal investigator semistructured interviews
- 3. Focus group of expert practitioners
- 4. Internet survey

# 1. Review RTW Intervention Literature for Information on RTWC

 Successful interventions where the primary goal is to improve RTW outcomes

 Randomized trials, pre-post evaluations after enhancement, modification, or initiation of a specific program for workers out of

work more than 1 year



# Elements of Return-to-Work Coordination Literature Review

Meet on-site with worker, supervisor, stakeholders		
Inventory/prioritize perceived problems or barriers		
Assign responsibilities to implement job modifications		
Provide worker training and instruction at the worksite		
Follow-up on implementation of job modifications		
Resolve differences in plans from multiple providers		
Collective brainstorming of possible solutions		
Obtain organizational support for job modifications		
Brief ergonomic assessment of physical risk factors		
Assessment of workplace psychosocial stressors		
Direct observation of work tasks		
Review daily pain diary with worker		
Provide on-site physiotherapy		
Develop plan for work modifications		

Facilitate access to on-site physician		
Review physician restrictions with worker		
Discuss accommodation requests with supervisor		
Conduct formal job analysis		
Meet with health & safety personnel to discuss case		
Query supervisor on specific job tasks and activities		
Facilitate agreement on acceptable accommodations		
Query worker about ways he/she performs job tasks		
Advocate/ express concern for worker well-being		
Meet face-to-face with worker early on		
Clarify role of RTW coordinator to worker		
Respond to individual concerns of worker		
Discuss the possibility of modified work with worker		
Generate written report		
Follow-up or post-RTW ergonomic evaluation		

Little specification of qualifications or training

### 2. Subject Experts (PIs)

- Contact principal investigators (PIs) and hold semistructured interviews
- Focus on selection, training, guidance, and skills, knowledge, attitudes
- Content analysis of answers



### RTW Studies With RTWC: 13 PI Interviews

- RTW coordinator was key to the success of the program! (but not emphasized in scientific report)
- Varied backgrounds (Registered Nurse, Physical Therapist, Occupational Therapist, teacher, Vocational Rehabilitation)
- Characteristics: People person, negotiator, credible communicator, less emphasis on knowledge

### 3. Practitioner and Stakeholder Focus Groups

- Eight focus groups, 75 participants
- Minimum 3 years of experience; primary role RTW coordination
- Nurses, occupational therapists, physical therapists, physicians, psychologists, HR specialists, and case managers
- Three countries, different foci (WC and non-WC, injury vs. disease) and wide range of arrangements for RTWC
- Initially had 904 items; condensed to 255 items

### **Basic Attributes**

Admin skills

### Basic attributes

Collect info skills

Communication skills

Able to be credible

Evaluation skills

General knowledge

Ability to manage conflict

RTWC - specific problem solving

#### Being approachable and available

Having an appropriately positive, noncynical attitude

Patience with each stakeholder involved in the RTW process

Ability to be assertive when necessary

Perseverance even in the face of difficulties, in order to achieve an RTW goal

Knowing the limits of your own knowledge, and being eager to learn when needed

#### Communication Skills

Admin skills

Basic attributes

Collect info skills

#### **Communication skills**

Able to be credible

**Evaluation skills** 

General knowledge

Ability to manage conflict

RTWC - specific prob solving

Ability to adjust communication to a particular situation and individual people

Empathy for the worker, supervisor, and the providers' challenges and problems

Ability to communicate well verbally (phone, in person) and in writing (including email)

**Good listening skills** 

Honesty and frankness in communications

#### How did you become an expert?

"10% prior knowledge, 10% acquired knowledge, 80% mentorship + experience"

### **Focus Group to Questionnaire**

- Questionnaire
  - 90 most commonly identified items
  - 10 less commonly endorsed

#### Questionnaire

- Rate skills, knowledge, and attitudes: How are these important for the RTWC role?
- Examples:
  - Ability to work in collaborative team with health care providers, employers and workers
  - Detailed knowledge of WC laws and regulations
  - Ability to understand basic clinical features of common work-related musculoskeletal disorders
- Practices list: yes or no (scope)
- Cognitive testing then internet survey

#### **Sample Demographics**

- 148 respondents, median age 45 years, 72% female
- 48% U.S., 37% Canada, 13% Australia
- 30% vocational rehabilitation counselors, 22% nurses, various other backgrounds
- Employer: insurers (26%), health care (20%), large employers (26%), self-employed (15%)
- About 80% primarily focused on workers' compensation cases
- Over 80% have more than 5 years of experience

#### Consensus?

93/100 items were rated very important or essential by more than half of respondents

Item	Average Rating
Respecting and maintaining confidentiality	4.8
Having ethical practices as a RTW coordinator	4.67
Having listening skills	4.60
Ability to communicate well verbally (phone, in person) and in writing (including email)	4.59
Being consistent between what you say and what you do	4.56
Being approachable and available	4.52
Being committed to the goal of early RTW	4.51
Ability to relate well to workers and employers	4.50
Ability to respond to others in a timely fashion	4.49
Ability to instill trust and confidence in your role as the RTW coordinator	4.49
Having organizational and planning skills	4.47
Being respectful of other people: their role, their beliefs and their cultures	4.43

#### **Lowest Rated Items**

Item	Mean Rating
Knowledge of functional prognosis for medical conditions	3.74
Ability to see how finances influence RTW outcomes	3.70
Being aware of how socio-cultural differences impact RTW	3.61
Taking a client-centered approach	3.49
Knowledge about efficacy of various medical treatments and best practices	3.31
Having medical evaluation skills	3.27
Being appropriately cautious, not overly trusting	3.26
Ability to find out about co-worker responses to the employee being out of work and returning	2.98
Ability to provide resources and support for the family	2.88

# Average Rating of Items in Each Expert-Defined Affinity Group

Competency Affinity Group	Mean Rating
Professional credibility	4.37
Communication skills	4.32
Inherent individual traits	4.20
Administrative skills	4.14
Conflict resolution skills	4.10
Problem-solving skills	3.87
Case evaluation skills	3.85
Information-gathering skills	3.64

### Difference by Subgroups?

- No significant differences in affinity group category average ratings by profession, years experience, employer, country, WC or non-WC focus
- Supports universality of these principles

#### Several Significant Differences in Individual Items

- Nurses: Scored higher for medical information items (ratings around 4.0, vs. 3.0 for non-nurses)
- Voc counselors: Scored higher ratings for job evaluation and worksite visit-related skills
- U.S.: More focus on quick response + policy development.
   Canada: Emphasis on client-centered approach (around 0.4-point difference on 1–5 scale)
- Workers' compensation: More emphasis on listening, recognizing broad range of disability factors, relationship-building, conflict resolution (0.3- to 0.4-point difference)

#### **Key Features of Success: Application**

- Education: Supervisor, worker
  - Provide necessary and timely information.
- Empathy: Take concerns seriously.
- Communication
  - Keep the messages about RTW positive.
- Negotiation: Meet needs of all parties, accept compromise, manage conflict.
- Support worker and supervisor after RTW.

#### **Summary**

- Consensus by RTWCs across a range of countries, professions, work settings, and types of cases
- More emphasis on specific medical-related skills may reflect individual job differences.

#### **Implications**

- Training: Mentorship case studies vs. classroom
- Selection: Personal attributes, observed performance vs testing
- Certification: Low value of current models vs. actual essential skills
- Practice: Focus on key factors related to outcomes, "soft" skills

#### **Practical Takeaways**

- Many people can develop the required skills; mentorship is key.
- Organizations can support or prevent good outcomes.
  - Policies and procedures: early contact, accommodation, positive message
  - Attitudes and behaviors, especially top management
- Good interaction, trust, confidence, and problem solving are linked to results.

### Thanks for your attention!



#### **Research Results**

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# Questions and Open Discussion



# Wrap-Up



## Thank you for your Day 2 participation!

Please take a moment to complete this evaluation:

https://www.surveymonkey.com/r/Day2 RETAIN Convening 11-3

