MEASURING INTEGRATED APPROACHES TO ADVANCE WORKER SAFETY, HEALTH AND WELLBEING

Jessica A. Williams, PhD, MA*, University of Kansas Medical Center, Glorian Sorensen, PhD, MPH, Harvard T.H. Chan School of Public Health, Tamara M. Schult, PhD, MPH, Veterans Health Administration, Gregory R Wagner, M.D., National Institute for Occupational Safety and Health, Jeffrey N Katz, MD, Brigham and Women's Hospital, Nicolaas P. Pronk, PhD, HealthPartners, Inc., and Deborah L. McLellan, PhD, MHS, Dana-Farber Cancer Institute.

Statement of problem: Improving the safety, health, and wellbeing of workers through integrated approaches is the essence of Total Worker Health® (TWH) as conceptualized by the National Institute for Occupational Safety and Health (NIOSH) (Schill & Chosewood, 2013). As awareness of TWH has grown, there have been calls for the design, evaluation, and implementation of measurement tools and interventions (Loeppke et al., 2015; Sorensen et al., 2013). There are several tools that can be used to assess the integration of worker health protection and promotion, most at the organizational level (Pronk et al., 2016) as well as a checklist metric similar to the Dow Jones Sustainability Index (Loeppke et al., 2015). Given the rapidly expanding set of measurement tools, validation and testing of measures of integration is critically important.

Procedures: Developing and validating a measurement instrument for integrated approaches to address personal and workplace safety and health factors has been a major focus of the Harvard T.H. Chan Center for Work, Health, and Wellbeing for the past several years. Initially, an instrument was developed using a modified Delphi process based on the definition of integration as "a strategic and operational coordination of policies, programs, and practices designed to simultaneously prevent work-related injuries and illnesses and enhance overall workforce health and well-being" (Sorensen et al., 2013). This process yielded an instrument, the Indicators of Integration, with several domains to concretely capture organizational policies, processes, program content, and leadership, that make up integrated approaches to advancing worker health and wellbeing. Additional work was then undertaken to validate the instrument in multiple samples.

Analyses: The initial validation work used a survey of small- to medium- sized employers (N=111) to address the convergent validity and reliability of the 23-item instrument (J. A. R. Williams et al., 2015). Additional work extended the validation to include a sample of Department of Veterans Affairs (VA) administrative parents (collection of all the points of service that a VA leadership group manage, N=140), testing the dimensionality of the instrument in both samples (J. A. Williams et al., 2016).

Results: The initial validation study found excellent reliability using Cronbach's alpha coefficient as well as positive associations of the Indicators of Integration with organizational policies and strategies to protect and promote safety and health (J. A. R. Williams et al., 2015). Validation in the VA sample also showed the Indicators of Integration to be reliable (J. A. Williams et al., 2016). Exploratory factor analysis in two samples identified the instrument as one unified factor (J. A. Williams et al., 2016). A few questions could potentially be dropped from the instrument; but additional work is needed to determine whether this is the case in other samples.

Practical implications: Slight adaptations were made to the VA version of the Indicators of Integration, such as changing examples of programs/policies to make them relevant to the VA. Even with these slight changes the validation and dimensionality assessments were nearly the same as results obtained from the survey of small- to medium-sized employers—such changes may make the instrument more organization specific but not adversely affect validity. Recent work tested the practical applications of measures of integration; it described the Indicators of Integration and their use in conjunction with additional measurement tools to provide integrated feedback and plans of action to three employers over the course of a year (Pronk et al., 2016). The quantitative and qualitative results of this study documented change among the involved employers as well as the palatability and usefulness of the approach from both the perspectives of management and employees (Pronk et al., 2016). The use of both organizational and individual measures as well as the provision of feedback and action plans demonstrates the feasibility of using measurement of TWH concepts of integration to guide change at a practical level.

Conclusions: Efforts to measure and implement integrated approaches to address personal and workplace safety and health have been shown to be feasible. The Indicators of Integration, along with other metrics can be used to measure organization's levels of integration and to provide feedback that can be acted on by employers.

CORRESPONDING AUTHOR: Jessica A.R. Williams, PhD, Department of Health Policy and Management, University of Kansas Medical Center, Mail Stop 3044, 3901 Rainbow Blvd, Kansas City, KS 66160, jwilliams13@kumc.edu



contemporary challenges and opportunities

The 12th International Conference on Occupational Stress and Health

Conference Program • June 7-10, 2017 • Preconference Workshops on June 7, 2017



- Paper 3 Measuring Integration in Total Worker Health*: The
 Center for the Promotion of Health in the New England
 Workforce Participatory Framework
 - Jennifer Cavallari, ScD, University of Conecticut
 Health, Division of Occupational and Environmental
 Medicine, Farmington, CT; Suzanne Nobrega, MS;
 Robert A. Henning, PhD; Mike C. Fitts, BS; Martin G.
 Cherniack, MD; Laura Punnett, ScD
- Paper 4 Measuring Integrated Approaches to Advance Worker Safety, Health and Well-Being
 - Jessica A. Williams, PhD, University of Kansas Medical Center, Kansas City, KS; Glorian Sorensen, PhD; Tamara M. Schult, PhD; Gregory R.Wagner, MD; Jeffrey N. Katz, MD; Nicolaas P. Pronk, PhD; Deborah L. McLellan, PhD
- Paper 5 Integrating Health, Safety, and Well-Being Into
 Management Systems, Business Operations, and Design:
 Introducing Approaches to Evaluate Integration
 - Amin Yazdani, PhD, University of Waterloo, Waterloo, ON, Canada; Richard Wells, PhD

Discussants: Natalie Schwatka, PhD, Colorado School of Public Health, Aurora, CO; Welter R. Christina, DrPH, UIC School of Public Health, Chicago, IL



Opportunities and Challenges in Workplace Inclusion for Individuals With Psychiatric Disabilities

(Symposium)

Marquette III/IV

Chair: Susanne M. Bruyere, PhD, Cornell University, Ithaca, NY

- Paper 1 The Patterns and Context of ADA Discrimination
 Charges Filed by Individual With Psychiatric Disabilities
 - Sarah von Schrader, PhD, Cornell University, Ithaca, NY
- Paper 2 Job Matching for Workers With Psychiatric Disabilities
 - Marjorie L. Baldwin, PhD, Arizona State University, Tempe, AZ
- Paper 3 Peer Support Services in Mental Health Services and Systems
 - E. Sally Rogers, ScD, Boston University, MA; Carina Teixeira, PhD; Steve Harrington, JD; Rita Cronise, MS
- Paper 4 Employer Policies and Practices That Facilitate Disability
 Inclusion
 - Susanne M. Bruyere, PhD, Cornell University, Ithaca, NY

Discussant: Mark Raderstorf, MA, PsyBar LLC, Minneapolis, MN

Engagement for Seniority Years at Work—Promoting Late Career Management in Work Organizations (Symposium)

Marquette V/VI

Chair: Jukka Vuori, PhD, Finnish Institute of Occupational Health, Helsinki, Finland

- Paper 1 Enhancing Late Career Management, Engagement and Health in Work Organizations—A Randomized Controlled Trial Among Older Employees
 - Jukka Vuori, PhD, Finnish Institute of Occupational Health, Finland; Marjo Wallin, PhD; Kaisa Kirves, PhD
- Paper 2 How to Enhance Individual and Organizational
 Resources and Combat Perceived Age Discrimination
 During Late Career
 - Marjo Wallin, PhD; Jukka Vuori, PhD; Kaisa Kirves, PhD
- Paper 3 Effects of the Engagement for Seniority Years at Work Intervention on Perceived Internal Employability
 - Kaisa Kirves, PhD, Finnish Institute of Occupational Health, Helsinki, Finland

Perspectives on Students and Work (Paper Panel Session)

Marquette VII/VIII

Chair: Michael Ford, PhD, University of Albany-SUNY, NY

- Paper 1 Do Working Students Thrive at Work When They Succeed at School?
 - Charles Calderwood, PhD, Virginia Commonwealth University, Richmond, VA
- Paper 2 Enriching Work: The Impact of Part-Time Jobs on School Performance
 - Alec J. Calvo, MA, University of Connecticut, Storrs, CT; Taylor D. Barr, MA; Janet Barnes-Farrell, PhD; Peter Bachiochi, PhD
- Paper 3 The Price of Partying: College Alcohol Consumption and Employment Upon Graduation
 - Peter Bamberger, PhD, Tel Aviv University, Israel;
 Jackie Koopman, PhD; Mo Wang, PhD; Inbal Nahum-Shani, PhD; Mary Larimer, PhD; Irene Geisner, PhD;
 Samuel Bacharach, PhD
- Paper 4 First Generation Students and Burnout: The Risks of Role Overload and Work to School Conflict
 - Lauren Gannon, BS, University of Connecticut, Storrs, CT; Taylor Barr, MA; Janet Barnes-Farrell, PhD