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Objectives: This toolkit is designed to improve your understanding of organizational constructs relevant to D&I research and to help you identify the corresponding organizational measures that are most relevant to your research.

Overview: The implementation of an evidence-based practice is complex and requires attention to multiple factors. Organizational factors, which refer to aspects of the organization in which an innovation is being implemented, have been identified as one of five key factors for successful dissemination and implementation (D&I).¹ However, there are few supports available for deciding which organization-level constructs to measure in D&I-related research. The purpose of this toolkit is to 1) provide an introduction to commonly-measured organization-level constructs (e.g., culture, climate, readiness for change) and 2) guide the selection of organizational measures to include in your D&I-related study.

What's Inside? This toolkit contains the following:

- 1) **Definitions** of organizational constructs important for D&I research;
- 2) **Examples** of assessment tools used to evaluate organization-level constructs shown to affect implementation; and
- 3) **Additional resources** from the literature that conceptualize organization-level factors relevant to D&I research.

While the assessment tools are organized into broad categories (e.g., organizational culture, implementation climate), each measure presented below includes multiple subscales which assess more granular aspects of the organization (e.g., change commitment, resources) that influence implementation.

For information on measures of Inner Setting constructs, see the Instrument Review Project by the Society for Implementation Research Collaboration: <https://societyforimplementationresearchcollaboration.org/>.

Definitions

Organizational Readiness for Change: Organizational members' shared commitment to implement a change and belief in their collective capability to do so.²

Organizational Culture: The set of expectations and norms that influence behavior within an organization; it includes the historical values and collective experiences of the organization, and is often viewed as “the way things are done around here.”^{3,4}

Organizational Climate: Employees' collective perceptions of the psychological impact of their work environment on their own functioning and well-being. This involves the perceived meaning of organizational practices and procedures, as well as perceptions of the kinds of behaviors that are rewarded or expected, aggregated at the organization level.^{3,4}

Implementation Climate: The extent to which employees collectively perceive that the adoption, implementation, and use of an innovation such as an evidence-based program or practice is expected, rewarded, and supported by the organization. This refers to employees' shared perceptions of the importance of implementing a particular innovation within the organization.⁵

References

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5. Weiner, B. J., Belden, C. M., Bergmire, D. M., Johnston, M. (2011). The meaning and measurement of implementation climate. *Implement Sci*, 6, 78-89.

What's this?: The following table presents an array of measures that can be used to assess the elements of an organization that impact implementation efforts. Measures of reliability for each scale and subscale are provided, when available in the literature. The table provides exemplar settings in which the scales have been tested, the original source of each measure, and a sample study that has used the given measure to guide conceptualizing and selection of measures.

Tool Name	Psychometric Properties and Subscales	Settings/Samples	Original Source	Study Using Tool
Organizational Readiness for Change				
Organizational Readiness for Implementing Change (ORIC)	<u>Total scale:</u> N/A <u>Subscales:</u> Change commitment scale ($\alpha = .91-.92$) Change efficacy scale ($\alpha = .88-.89$)	Hospitals, international non-governmental organizations	Shea, C. M., Jacobs, S. R., Esserman, D. A., Bruce, K., & Weiner, B. J. (2014).	Wu, R. R., Kinsinger, L. S., Provenzale, D., King, H. A., Akerly, P., Barnes, L. K., ... & Jackson, G. L. (2014).
Texas Christian University Organizational Readiness for Change (TCU ORC)	<u>Total scale:</u> N/A <u>Subscales:</u> Motivation for change ($\alpha = .68-.88$), Adequacy of resources ($\alpha = .57-.84$), Staff attributes ($\alpha = .51-.79$), Organizational climate ($\alpha = .49-.92$)	Substance use disorder treatment centers	Lehman, W. E., Greener, J. M., & Simpson, D. D. (2002).	Lundgren, L., Chassler, D., Amodeo, M., D'Ippolito, M., & Sullivan, L. (2012).
Measuring Organisational Readiness for Patient Engagement (MORE)	<u>Total scale:</u> <i>(Authors state that psychometrics are forthcoming)</i> <u>Subscales:</u> Stakeholders, Willingness to implement, Ability to implement patient engagement in healthcare, Resources, Situational factors <i>(Authors state that psychometrics are forthcoming)</i>	Healthcare managers, administrators, medical clinicians, nurses, policy makers, patients	Oostendorp, L. J., Durand, M. A., Lloyd, A., & Elwyn, G. (2015).	Gagliardi, A. R., Légaré, F., Brouwers, M. C., Webster, F., Badley, E., & Straus, S. (2016).
Organizational Readiness for Change Assessment (ORCA)	<u>Total scales:</u> Evidence ($\alpha = 0.74$), Context ($\alpha = 0.85$), and Facilitation ($\alpha = 0.95$) <u>Subscales:</u> Research evidence ($\alpha = 0.74$), Clinical experience ($\alpha = 0.68$), Patient preferences ($\alpha = 0.77$), Leader culture ($\alpha = 0.92$), Staff culture ($\alpha = 0.90$), Leadership behavior ($\alpha = 0.93$), Measurement ($\alpha = 0.88$), Opinion leaders ($\alpha = 0.91$), General resources ($\alpha = 0.86$), Leader practices ($\alpha = 0.87$), Clinical champion ($\alpha = 0.94$), Leadership implementation ($\alpha = 0.87$), Implementation team roles ($\alpha = 0.86$), Implementation plan ($\alpha = 0.95$), Project communication ($\alpha = 0.92$), Project progress tracking ($\alpha = 0.82$), Project resources and context ($\alpha = 0.87$), Project evaluation ($\alpha = 0.87$)	Hospitals, Veterans Health Administration	Helfrich, C. D., Li, Y. F., Sharp, N. D., & Sales, A. E. (2009).	Hagedorn, H. J., Stetler, C. B., Bangerter, A., Nooraloochi, S., Stitzer, M. L., & Kivlahan, D. (2014).

Tool Name	Psychometric Properties and Subscales	Settings/Samples	Original Source	Study Using Tool
Organizational Culture				
Organizational Culture Domain from the Organizational Social Context (OSC) Scale	<u>Total scale:</u> $\alpha = .71-.90$ <u>Subscales:</u> Rigidity ($\alpha = .81$), Proficiency ($\alpha = .94$), Resistance ($\alpha = .81$)	Medical clinics, mental health agencies	Glisson, C. (2007).	Aarons, G. A., Glisson, C., Green, P. D., Hoagwood, K., Kelleher, K. J., & Landsverk, J. A. (2012).
Subscales of the Competing Values Framework (CVF)	<u>Total scale:</u> N/A <u>Subscales:</u> Hierarchical ($\alpha = 0.69$), Rational ($\alpha = 0.80$), Team ($\alpha = 0.82$), Entrepreneurial ($\alpha = 0.85$)	Hospitals	Helfrich, C. D., Li, Y. F., Mohr, D. C., Meterko, M., & Sales, A. E. (2007).	Acar, A. Z., & Acar, P. (2012).
Alberta Context Tool	<u>Total scale:</u> N/A <u>Subscales:</u> Structural & electronic resources ($\alpha = 0.54-0.71$), Formal interactions ($\alpha = 0.60$), Organizational slack ($\alpha = 0.63-0.83$), Informal interactions ($\alpha = 0.70-0.75$), Culture ($\alpha = 0.72$), Social capital ($\alpha = 0.77$), Evaluation ($\alpha = 0.91$), Leadership ($\alpha = 0.91$),	Hospitals	Estabrooks, C. A., Squires, J. E., Cummings, G. G., Birdsell, J. M., & Norton, P. G. (2009).	Cummings, G. G., Hutchinson, A. M., Scott, S. D., Norton, P. G., & Estabrooks, C. A. (2010).
Organizational Climate				
Organizational Climate Domain from the Organizational Social Context (OSC) Scale	<u>Total scale:</u> $\alpha = .72-.91$ <u>Subscales:</u> Stress ($\alpha = .94$), Engagement ($\alpha = .78$), Functionality ($\alpha = .90$)	Medical clinics, mental health agencies	Glisson, C. (2007).	Aarons, G. A., Glisson, C., Green, P. D., Hoagwood, K., Kelleher, K. J., & Landsverk, J. A. (2012).
Organizational Climate Scale	<u>Total scale:</u> $\alpha = 0.93$ <u>Subscales:</u> Leadership ($\alpha = 0.87$), Professional development ($\alpha = 0.93$), Relationship and team spirit ($\alpha = 0.84$), Relationship with the community ($\alpha = 0.84$), Safety ($\alpha = 0.77$), Strategy to address issues ($\alpha = 0.81$), Renumeration ($\alpha = 0.83$)	Primary health care centers	Menezes, I. G., Sampaio, L. R., Gomes, A. C. P., Teixeira, F. S., & Santos, P. D. S. (2009).	Cruvinel, E., Richter, K. P., Bastos, R. R., & Ronzani, T. M. (2013).
Implementation Climate				
Implementation Climate Scale (ICS)	<u>Total scale:</u> $\alpha = 0.91$ <u>Subscales:</u> Selection for openness ($\alpha = 0.91$), Recognition for EBP ($\alpha = 0.88$), Selection for EBP ($\alpha = 0.89$), Focus on EBP ($\alpha =$	Mental health agencies	Ehrhart, M. G., Aarons, G. A., & Farahnak, L. R. (2014).	Beidas, R. S., Marcus, S., Wolk, C. B., Powell, B.,
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Tool Name	Psychometric Properties and Subscales	Settings/Samples	Original Source	Study Using Tool
	0.91), Educational support for EBP ($\alpha = 0.84$), Rewards for EBP ($\alpha = 0.81$)			Aarons, G. A., Evans, A. C., ... & Babbar, S. (2015).
Intervention Process Measure (IPM)	<u>Total scale:</u> N/A <u>Subscales:</u> Line manager attitudes & actions ($\alpha = 0.89$), Exposure to intended intervention ($\alpha = 0.85$), Employee involvement = 0.84), Employee readiness for change ($\alpha = 0.86$)	Elderly care services, schools	Randall, R., Nielsen, K., & Tvedt, S. D. (2009).	Schelvis, R. M., Hengel, K. M. O., Wiezer, N. M., Blatter, B. M., van Genabeek, J. A., Bohlmeijer, E. T., & van der Beek, A. J. (2013).
Leadership				
Implementation Leadership Scale (ILS)	<u>Total scale:</u> $\alpha = 0.98$ <u>Subscales:</u> Proactive leadership ($\alpha=0.95$), Knowledgeable leadership ($\alpha = 0.96$), Supportive leadership ($\alpha = 0.95$), Perseverant leadership ($\alpha = 0.96$)	Mental health agencies, child welfare, substance use disorder treatment centers, hospitals	Aarons, G. A., Ehrhart, M. G., & Farahnak, L. R. (2014).	Aarons, G. A., Ehrhart, M. G., Farahnak, L. R., Sklar, M., & Horowitz, J. (2015).
Other Organizational Context Factors				
Clinical Practice Guidelines Implementation Instrument	<u>Total scale:</u> N/A <u>Subscales:</u> Clinical experience ($\alpha = 0.75$), Patient experience ($\alpha = 0.79$), Context and facilitation ($\alpha = 0.89$)	Hospitals, physical therapy practices	Bahtsevani, C., Willman, A., Khalaf, A., & Östman, M. (2008).	Jansson, I., Bahtsevani, C., Pilhammar-Andersson, E., & Forsberg, A. (2010).
Team Organization and Support Conditions Questionnaire	<u>Total scale:</u> N/A <u>Subscales:</u> Organizational support ($\alpha = .91$), Team organization ($\alpha = .84$), External change agent support ($\alpha = .77$)	Hospitals	Dückers, M. L., Wagner, C., & Groenewegen, P. P. (2008).	Dückers, M., Makai, P., Vos, L., Groenewegen, P., & Wagner, C. (2009).
Implementation Citizenship Behavior Scale (ICBS)	<u>Total scale:</u> $\alpha = 0.93$ <u>Subscales:</u> Helping others ($\alpha = 0.93$), Keeping informed ($\alpha = 0.91$)	Medical clinics, mental health agencies	Ehrhart, M. G., Aarons, G. A., & Farahnak, L. R. (2015).	

Additional Resources: Systematic Reviews and Setting-Specific Tools

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- Aarons, G. A., Ehrhart, M. G., Farahnak, L. R., & Hurlburt, M. S. (2015). Leadership and organizational change for implementation (LOCI): a randomized mixed method pilot study of a leadership and organization development intervention for evidence-based practice implementation. *Implementation Science*, 10(1), 11.
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